SAFETY DATA SHEET

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Version: Rev. 2

Regulation: In accordance with Regulation (EU) 2015/830 (REACH), Annex II, and OSHA 29 CFR

1910.1200

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Name of product: HI-LUBE(BA,300P,500P)

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses:

Manufacture

Identified Use (IU) name	Process Category (PROC)	Environmental Release Category (ERC)	Substance supplied to that use in form of	Product Categor y (PC)	Sector of Use (SU)	Subseque nt service life relevant for that use		Technical function of the substance during formulatio n
Flaking, pelleting,	batch and other	ERC 1: Manufacture of substances	1	N/A	N/A	N/A	N/A	N/A
#71: Manufacturing: Spray cooling and packing	PROC 3: Use in closed batch process (synthesis or formulation)	ERC 1: Manufacture of substances		N/A	N/A	N/A	N/A	N/A
#70: Batch bulk manufacture	PROC 3: Use in closed batch process (synthesis or formulation)	ERC 1: Manufacture of substances		N/A	N/A	N/A	N/A	N/A
#68: General industrial formulation process		ERC 1: Manufacture of substances ERC 2:	N/A	N/A	N/A	N/A	N/A	N/A

formulation) PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises of blending in batch processes for formulation of preparations and articles (multistage and/or significant contact) PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) intermediates) ERC 6b: landustrial use of monomers for manufacture of thermoplastics ERC 6c: landustrial use of monomers for monomers for lidustrial use of monomers for lidustrial use of substance or production of resins, rubbers, polymers substances in elosed systems	PROC 4: Use in Industrial use
#66: Industrial PROC 1: Use in closed process, no Formulation of N/A N/A N/A N/A N/A N/A N/A	process (synthesis) where opportunity for exposure arises PROC 5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact) PROC 8a: Transfer of substance or preparation (charging/dischargi ng) from/to vessels/large containers at non- dedicated facilities PROC 8b: Transfer of substance or preparation (charging/dischargi ng) from/to vessels/large containers at dedicated facilities PROC 9: Transfer of substance or preparation (charging/dischargi ng) from/to vessels/large containers at dedicated facilities PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including

		1	ı	ı		ı		
production of	likelihood of	preparations						
fine chemicals	exposure PROC 2: Use in closed, continuous	ERC 1: Manufacture of substances						
	process with occasional	ERC 6a: Industrial use						
	controlled exposure	resulting in manufacture of						
	PROC 3: Use in closed batch process (synthesis or	another substance (use of intermediates)						
	formulation)	ERC 6b:						
	PROC 4: Use in batch and other process (synthesis)	Industrial use of reactive processing aids						
	for exposure arises	ERC 6c: Industrial use of monomers						
	PROC 5: Mixing or blending in batch processes for	for manufacture of thermoplastics						
	formulation of preparations and articles (multistage	ERC 6d:						
	and/or significant contact)	of process regulators for						
	PROC 9: Transfer of substance or preparation into	polymerisation processes in production of resins,						
	small containers (dedicated filling line, including	rubbers, polymers ERC 7:						
	weighing) PROC 14: Production of	Industrial use of substances in closed						
	preparations or articles by	systems						
	tabletting, compression, extrusion, pelletisation							
#62: General industrial production	PROC 1: Use in closed process, no likelihood of	ERC 1: Manufacture of substances	N/A	N/A	N/A	N/A	N/A	N/A
production	exposure	ERC 2:						
	PROC 2: Use in closed, continuous	Formulation of preparations						
	process with occasional	ERC 4: Industrial use						

		2 :	 1	-	-	-	
cc	ontrolled exposure						
PI	ROC 3: Use in	aids in					
		processes and					
1		products, not					
or		becoming part of					
fo	rmulation)						
PI	ROC 4: Use in	articles					
		ERC 5:					
pr	ocess (synthesis)						
w	hara annortunity	resulting in					
	r exposure arises	inclusion into or					
DI	ROC 5: Mixing or	OI					
	ending in batch	onto a matrix					
		ERC 6a:					
fo	rmulation of	Industrial use					
1		resulting in					
	ticles (multistage	manufacture of					
an	d/or granitionat	another					
	into at)	substance (use					
	, i	of					
	ROC 7: Industrial						
1		ERC 6b:					
	ROC 8a: Transfer	of reactive					
	bubbuilee of	processing aids					
	- F	_					
	harging/dischargi	ERC 6c: Industrial use					
	5) 11 0111/10	of monomers					
	obsers/ range	for					
co	ontainers at non- edicated facilities	manufacture of					
a de	edicated facilities	thermoplastics					
	ROC 8b: Transfer	-					
	baobtanee or	ERC 6d: Industrial use					
	eparation	of process					
	harging/dischargi	regulators for					
	g) from/to	polymerisation					
		processes in					
1	ontainers at	production of					
de	edicated facilities	resins,					
	ROC 9: Transfer	rubbers,					
	substance or	polymers					
pr	reparation into	ERC 7:					
	nall containers	Industrial use					
	ledicated filling	of substances					
lir	ne, including	in closed					
w	eighing)	systems					
pi	ROC 13:						
	reatment of						
	ticles by dipping						
an	nd						

	I	I	1	1	1			
	pouring							
	PROC 14: Production of preparations or articles by							
	tabletting, compression, extrusion, pelletisation							
	PROC 17: Lubrication at high energy conditions							
	and in partly open process							
	PROC 21: Low energy manipulation of substances							
	bound in materials and/or articles							
	PROC 24: High (mechanical) energy work-up of							
	substances bound in materials and/or articles							
#43: Manufacture of bulk substance	closed batch process (synthesis	ERC 1: Manufacture of substances	N/A	N/A	N/A	N/A	N/A	N/A
(batch	formulation)							
process)	PROC 4: Use in batch and other process (synthesis)							
	where opportunity for exposure arises							
manufacturing	10004	ERC 1: Manufacture of substances	N/A	N/A	N/A	N/A	N/A	N/A
process	exposure							
	PROC 2: Use in closed, continuous process with							
	occasional controlled exposure							
	PROC 3: Use in closed batch process (synthesis							

	or							
	formulation)							
	PROC 4: Use in batch and other process (synthesis)							
	where opportunity for exposure arises							
	PROC 8a: Transfer of substance or preparation							
	(charging/dischargi ng) from/to vessels/large							
	containers at non- dedicated facilities							
	PROC 8b: Transfer of substance or preparation							
	(charging/dischargi ng) from/to vessels/large containers at dedicated facilities							
	PROC 9: Transfer of substance or preparation into							
	small containers (dedicated filling line, including							
	weighing)							
	1 1		N/A	N/A	N/A	N/A	N/A	N/A
formulation	controlled exposure							
procedures	PROC 3: Use in closed batch process (synthesis or	substances						
	formulation)							
	PROC 8b: Transfer of substance or preparation							
	(charging/dischargi ng) from/to vessels/large							
	containers at dedicated facilities							

	PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing)							
#19: General manufacturing process	closed batch process (synthesis or formulation)	ERC 2: Formulation of preparations ERC 1: Manufacture of substances	N/A	N/A	N/A	N/A	N/A	N/A
#1: Industrial manufacture of bulk chemicals	closed batch	Manufacture of substances	N/A	N/A	N/A	N/A	N/A	N/A

Formulation

Identified Use (IU) name	Process Category (PROC)	tal Release	Substan ce supplied to that use in	Product	or of	Subseque nt service life relevant for that	Catego	
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			form of			use		formulation
#73: Blending use of chemicals to prepare in-house formulations ready to use	or blending in batch processes for	Formulation	N/A	PC 24: Lubricants, greases, release products PC 34: Textile dyes, finishing and impregnating products; including bleaches and other processing aids	N/A	N/A	N/A	Lubricants and lubricant additives Process regulators, used in vulcanisatio n or polymerisati on processes Processing aid, not otherwise listed slip additive; mold release, flow modifier
#69: Recycling processes	closed process, no likelihood of exposure PROC 2: Use in closed, continuous process with occasional controlled exposure PROC 3: Use in	Formulation of preparations ERC 8a: Wide dispersive indoor use of processing aids in open systems	N/A	PC 29: Pharmaceutic als PC 39: Cosmetics, personal care products	N/A	N/A	N/A	Lubricants and lubricant additives Process regulators, used in vulcanisatio n or polymerisati on processes Processing aid, not otherwise listed slip additive; mold release, flow modifier

	(charging/discharging) from/to vessels/large containers at non- dedicated facilities PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 15: Use as laboratory reagent						
#68: General industrial formulation process	closed process, no likelihood of exposure PROC 2: Use in closed, continuous process with occasional controlled exposure PROC 3: Use in closed batch process (synthesis or formulation) PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises PROC 5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact) PROC 8a: Transfer of substance or	Manufacture of substances ERC 2: Formulation of preparations ERC 6a: Industrial use resulting in manufacture of another substance (use of intermediate s) ERC 6b: Industrial use of reactive processing aids ERC 6c: Industrial use of monomers for manufacture	N/A	N/A	N/A	N/A	Lubricants and lubricant additives Process regulators, used in vulcanisatio n or polymerisati on processes Processing aid, not otherwise listed slip additive; mold release, flow modifier

	ng) from/to vessels/large containers at non-	cs ERC 6d:						
	dedicated facilities PROC 8b: Transfer of substance or preparation (charging/dischargi ng) from/to vessels/large containers at dedicated facilities PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing)	regulators for polymerisati on processes in production	1					
#67: Industrial formulation	PROC 1: Use in closed process, no likelihood of exposure PROC 2: Use in closed, continuous process with occasional controlled exposure PROC 3: Use in closed batch process (synthesis or formulation) PROC 5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)	dispersive indoor use of processing aids in open systems		PC 29: Pharmaceutic als PC 39: Cosmetics, personal care products	N/A	N/A	N/A	Lubricants and lubricant additives Process regulators, used in vulcanisatio n or polymerisati on processes Processing aid, not otherwise listed slip additive; mold release, flow modifier
	PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 8b: Transfer of substance or preparation (charging/discharging/							

#66: Industrial production of fine closed process, and inkelihood of exposure process with occasional process (synthesis or formulation) process (synthesis or formulation) process (synthesis) where opportunity for exposure arises processing and articles (multistage and/or significant contact) processing and articles (multistage and/or significant contact		ng) from/to vessels/large containers at dedicated facilities PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing)						
of resins,	production of fine	closed process, no likelihood of exposure PROC 2: Use in closed, continuous process with occasional controlled exposure PROC 3: Use in closed batch process (synthesis or formulation) PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises PROC 5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact) PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 14: Production of preparations or articles by tabletting, compression, extrusion,	Formulation of preparations ERC 1: Manufacture of substances ERC 6a: Industrial use resulting in manufacture of another substance (use of intermediate s) ERC 6b: Industrial use of reactive processing aids ERC 6c: Industrial use of monomers for manufacture of thermoplastics ERC 6d: Industrial use of process for manufacture of thermoplastics ERC 6d: Industrial use of process regulators for polymerisation processes in production	N/A	N/A	N/A	N/A	and lubricant additives Process regulators, used in vulcanisatio n or polymerisati on processes Processing aid, not otherwise listed slip additive; mold release, flow

		rubbers, polymers ERC 7: Industrial use of substances in closed systems					
#62: General industrial production	likelihood of exposure PROC 2: Use in closed, continuous process with occasional controlled exposure PROC 3: Use in closed batch process (synthesis or formulation) PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises PROC 5: Mixing or blending in batch processes for formulation of preparations and	Manufacture of substances ERC 2: Formulation of preparations ERC 4: Industrial use of processing aids in processes and products, not becoming part of articles ERC 5: Industrial use resulting in inclusion into or onto a matrix ERC 6a: Industrial use resulting in manufacture of another substance (use of intermediate s) ERC 6b: Industrial use of reactive processing	N/A	N/A	N/A	N/A	Lubricants and lubricant additives Process regulators, used in vulcanisatio n or polymerisati on processes Processing aid, not otherwise listed slip additive; mold release, flow modifier

	preparation into small containers (dedicated filling line, including weighing) PROC 13: Treatment of articles by dipping and pouring PROC 14: Production of preparations or articles by tabletting, compression, extrusion, pelletisation PROC 17: Lubrication at high energy conditions	for manufacture of thermoplastics ERC 6d: Industrial use of process regulators for polymerisation processes in production of resins, rubbers, polymers ERC 7: Industrial use of substances in closed systems					
#61: Formulating physically bonded (e.g. additive in a polymer)	PROC 3: Use in closed batch	ERC 3: Formulation in materials	N/A	N/A	N/A	N/A	Lubricants and lubricant additives
	PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises						Process regulators, used in vulcanisatio n or
	PROC 5: Mixing or blending in						polymerisati on processes
	batch processes for formulation of preparations and articles (multistage and/or significant						Processing aid, not otherwise listed
	contact)						slip

	PROC 6: Calendering operations PROC 14: Production of preparations or articles by tabletting, compression, extrusion, pelletisation							additive; mold release, flow modifier
#60: Formulation of chemicals	PROC 3: Use in closed batch process (synthesis or formulation)	ERC 2: Formulation of preparations		N/A	N/A	N/A	N/A	Lubricants and lubricant additives
	PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises						1	Process regulators, used in vulcanisatio n or
	PROC 5: Mixing or blending in							polymerisati on processes
	batch processes for formulation of preparations and articles (multistage and/or significant							Processing aid, not otherwise listed
	contact) PROC 14: Production of preparations or articles by tabletting, compression, extrusion, pelletisation							slip additive; mold release, flow modifier
#58: Distribution: Sampling	closed, continuous process with occasional	ERC 2: Formulation of preparations	N/A	N/A	N/A	N/A	N/A	Lubricants and lubricant additives
	controlled exposure						1	Process regulators, used in vulcanisatio n or
								polymerisati on processes
								Processing aid, not otherwise listed
								slip

								additive; mold release, flow modifier
#57: Distribution: Repacking	preparation into small containers	ERC 2: Formulation of preparations	N/A	N/A	N/A	N/A	N/A	Lubricants and lubricant additives
	(dedicated filling line, including weighing)							Process regulators, used in vulcanisatio n or
								polymerisati on processes
								Processing aid, not otherwise listed
								slip additive; mold release, flow modifier
#56: Distribution: Storing and Forwarding (closed system)	closed process, no likelihood of	ERC 2: Formulation of preparations	N/A	N/A	N/A	N/A	N/A	Lubricants and lubricant additives
								Process regulators, used in vulcanisatio n or
								polymerisati on processes
								Processing aid, not otherwise listed
								slip additive; mold release, flow modifier
#55: Chemical distribution: Uploading/unload ing	PROC 8a: Transfer of substance or preparation (charging/dischargi ng) from/to	Formulation of	N/A	N/A	N/A	N/A	N/A	Lubricants and lubricant additives
	vessels/large containers at non-							Process regulators, used in

	dedicated facilities PROC 8b: Transfer of substance or preparation (charging/dischargi ng) from/to vessels/large containers at dedicated facilities							vulcanisatio n or polymerisati on processes Processing aid, not otherwise listed slip additive; mold release, flow modifier
#53: Mixing of solids and liquids in batch process	batch processes for	ERC 2: Formulation of preparations ERC 3: Formulation in materials	N/A	PC 24: Lubricants, greases, release products PC 32: Polymer preparations and compounds	N/A	N/A	N/A	Lubricants and lubricant additives Process regulators, used in vulcanisatio n or polymerisati on processes Processing aid, not otherwise listed slip additive; mold release, flow modifier
#51: Use of additve in a plastic masterbatch or compound	PROC 1: Use in closed process, no likelihood of exposure PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at		N/A	N/A	N/A	N/A	N/A	Lubricants and lubricant additives Process regulators, used in vulcanisatio n or polymerisati on processes Processing aid, not otherwise listed slip additive; mold

	dedicated facilities							release, flow
	PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing)							modifier
	PROC 2: Use in closed, continuous process with occasional controlled exposure							
	PROC 3: Use in closed batch process (synthesis or formulation)							
	PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises							
	PROC 5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)							
	PROC 14: Production of preparations or articles by tabletting, compression, extrusion, pelletisation							
#47: Filling lubricants/metal working fluids	PROC 3: Use in closed batch process (synthesis or formulation)	ERC 2: Formulation of preparations	N/A	PC 25: Metal working fluids	N/A	N/A	N/A	Lubricants and lubricant additives
	PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises							Process regulators, used in vulcanisatio n or
	PROC 5: Mixing or blending in batch processes for formulation of preparations and							polymerisati on processes Processing aid, not otherwise

	articles (multistage							listed
	and/or significant contact)							slip additive;
	PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities							mold release, flow modifier
	PROC 8b: Transfer of substance or preparation (charging/dischargi ng) from/to vessels/large containers at dedicated facilities							
	PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing)							
#46: Formulation of lubricants	closed batch process (synthesis	ERC 2: Formulation of preparations	N/A	PC 24: Lubricants, greases, release	N/A	N/A	N/A	Lubricants and lubricant additives
	PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises			products				Process regulators, used in vulcanisatio n or
	PROC 5: Mixing or blending in batch processes for formulation of							polymerisati on processes Processing aid, not
	preparations and articles (multistage and/or significant							otherwise listed
	contact)							slip additive; mold release, flow modifier
#44: Manufacture of food preparation	closed batch process (synthesis	ERC 2: Formulation of preparations	N/A	N/A	N/A	N/A	N/A	Lubricants and lubricant additives
	PROC 4: Use in batch and other process (synthesis)							Process regulators, used in

	where opportunity for exposure arises							vulcanisatio n or polymerisati on processes Processing aid, not otherwise listed slip additive; mold release, flow modifier
mixing and blendig process	likelihood of	Formulation of preparations	N/A	N/A	N/A	N/A	N/A	modifier Lubricants and lubricant additives Process regulators, used in vulcanisatio n or polymerisati on processes Processing aid, not otherwise listed slip additive; mold release, flow modifier

	vessels/large containers at dedicated facilities PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 14: Production of preparations or articles by tabletting, compression, extrusion, pelletisation PROC 15: Use as laboratory reagent							
manufacturing and formulation procedures	PROC 2: Use in closed, continuous process with occasional controlled exposure PROC 3: Use in closed batch process (synthesis or formulation) PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing)	Formulation of preparations ERC 1: Manufacture of substances	N/A	N/A	N/A	N/A		Lubricants and lubricant additives Process regulators, used in vulcanisatio n or polymerisati on processes Processing aid, not otherwise listed slip additive; mold release, flow modifier
products (General Rubber Goods): Others	or blending in batch processes for formulation of preparations and articles (multistage	Formulation	N/A	PC 32: Polymer preparations and compounds	N/A	N/A	N/A	Lubricants and lubricant additives Process regulators, used in

	DDOC 7 I I I I I	aids in						vulcanisatio
	PROC 7: Industrial spraying	processes						n or
	PROC 8b: Transfer	and						polymerisati
	of substance or	products, not						on processes
		becoming						Processing
	(charging/dischargi	*						aid, not
	ng) from/to	articles						otherwise
	vessels/large containers at	ERC 6d:						listed
	dedicated facilities	Industrial						slip
	PROC 9: Transfer	use of process						additive; mold
		regulators						release, flow
	preparation into	for						modifier
	small containers (dedicated filling	polymerisati on processes	1					
	line, including	in						
	weighing)	production						
	PROC 10: Roller	of resins,						
	application or	rubbers, polymers						
	brushing	porymers						
	PROC 12: Use of							
	blowing agents in							
	manufacture of foam							
	PROC 13: Treatment of							
	articles by dipping							
	and pouring							
	PROC 14:							
	Production of							
	preparations or articles by							
	tabletting,							
	compression,							
	extrusion,							
	pelletisation							
	PROC 21: Low							
	energy manipulation of							
	substances bound							
	in materials and/or							
	articles							
#37: Manufacture	PROC 8b: Transfer	ERC 3:	N/A	PC 32:	N/A	N/A	N/A	Lubricants
of rubber	of substance or	Formulation		Polymer				and
products (General Rubber Goods):	preparation (charging/dischargi	in materials		preparations and				lubricant additives
Latex chemicals	ng) from/to	ERC 4:		compounds				
	vessels/large	Industrial use of		P O WING				Process
	containers at	processing						regulators, used in
		aids in						vulcanisatio
	PROC 5: Mixing	processes						n or
	or blending in	and						polymerisati
	batch processes for	products,		<u> </u>				-

	contact) PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 10: Roller application or brushing PROC 12: Use of blowing agents in manufacture of foam	not becoming part of articles ERC 6d: Industrial use of process regulators for polymerisati on processes in production of resins, rubbers, polymers					on processes Processing aid, not otherwise listed slip additive; mold release, flow modifier
	PROC 13: Treatment of articles by dipping and pouring PROC 14: Production of preparations or articles by tabletting, compression, extrusion, pelletisation						
	PROC 21: Low energy manipulation of substances bound in materials and/or articles						
#36: Manufacture of rubber products (General Rubber Goods): Other Agents (solvents, emulsifiers, reinforcing agents)	PROC 5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact) PROC 7: Industrial spraying PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large	ERC 4: Industrial use of processing aids in processes and products, not becoming	PC 9a: Coatings and paints, thinners, paint removes PC 18: Ink and toners PC 32: Polymer preparations and compounds	N/A	N/A	N/A	Lubricants and lubricant additives Process regulators, used in vulcanisatio n or polymerisati on processes Processing aid, not otherwise listed

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	dedicated facilities	Industrial use of process						slip additive; mold
	of substance or preparation into small containers (dedicated filling line, including weighing)	regulators for polymerisati on processes in production of resins,						release, flow modifier
	PROC 10: Roller application or brushing	rubbers, polymers						
	PROC 12: Use of blowing agents in manufacture of foam							
	PROC 13: Treatment of articles by dipping and pouring							
	PROC 14: Production of preparations or articles by tabletting, compression, extrusion, pelletisation							
	PROC 21: Low energy manipulation of substances bound in materials and/or articles							
Rubber Goods):	or blending in batch processes for formulation of	ERC 3: Formulation in materials	N/A	PC 24: Lubricants, greases, release	N/A	N/A	N/A	Lubricants and lubricant additives
Processing aids	preparations and articles (multistage and/or significant contact)			products PC 32: Polymer preparations				Process regulators, used in vulcanisatio
	PROC 7: Industrial spraying			and compounds				n or polymerisati
	PROC 8b: Transfer of substance or preparation (charging/dischargi ng) from/to vessels/large							on processes Processing aid, not otherwise listed
	containers at dedicated facilities PROC 9: Transfer							slip additive; mold
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	of substance or preparation into small containers							release, flow modifier
	(dedicated filling line, including weighing)							
	PROC 10: Roller application or brushing							
	PROC 12: Use of blowing agents in manufacture of foam							
	PROC 13: Treatment of articles by dipping and pouring							
	PROC 14: Production of preparations or articles by tabletting, compression, extrusion, pelletisation							
	PROC 21: Low energy manipulation of substances bound in materials and/or articles							
		Formulation	N/A	PC 32: Polymer preparations and compounds	N/A	N/A	N/A	Lubricants and lubricant additives
Fillers & Pigments and Plasticisers	articles (multistage and/or significant contact)			•				Process regulators, used in vulcanisatio
	PROC 7: Industrial spraying							n or polymerisati
	PROC 8b: Transfer of substance or preparation (charging/dischargi ng) from/to vessels/large containers at							on processes Processing aid, not otherwise listed
	dedicated facilities							slip additive; mold
	PROC 9: Transfer of substance or preparation into small containers							release, flow modifier

	(dedicated filling line, including weighing)					
	PROC 10: Roller application or brushing					
	PROC 12: Use of blowing agents in manufacture of foam					
	PROC 13: Treatment of articles by dipping and pouring					
	PROC 14: Production of preparations or articles by tabletting, compression, extrusion, pelletisation					
	PROC 21: Low energy manipulation of substances bound in materials and/or articles					
#28: Manufacture of rubber products (Tyres): Filter Activator and Bonding Agents			PC 32: Polymer preparations and compounds	N/A	N/A	Lubricants and lubricant additives Process regulators, used in vulcanisatio
	PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities					n or polymerisation processes Processing aid, not otherwise listed
	PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing)					slip additive; mold release, flow modifier
	PROC 14: Production of					

	preparations or articles by tabletting, compression, extrusion, pelletisation PROC 21: Low energy manipulation of substances bound in materials and/or articles					
#27: Manufacture of rubber products (Tyres): Tackifier	PROC 5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact) PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 14: Production of preparations or articles by tabletting, compression, extrusion, pelletisation PROC 21: Low energy manipulation of substances bound in materials and/or articles	Formulation in materials ERC 10b: Wide dispersive outdoor use of long-life articles and materials with high or intended release (including abrasive	PC 32: Polymer preparations and compounds	N/A	N/A	Lubricants and lubricant additives Process regulators, used in vulcanisatio n or polymerisati on processes Processing aid, not otherwise listed slip additive; mold release, flow modifier
of rubber	PROC 9: Transfer of substance or preparation into small containers (dedicated filling	ERC 3: Formulation in materials ERC 10b: Wide	PC 24: Lubricants, greases, release products	N/A	N/A	Lubricants and lubricant additives Process

	line, including weighing) PROC 10: Roller application or brushing PROC 14: Production of preparations or articles by tabletting, compression, extrusion, pelletisation	dispersive outdoor use of long-life articles and materials with high or intended release (including abrasive processing)		PC 32: Polymer preparations and compounds				regulators, used in vulcanisatio n or polymerisati on processes Processing aid, not otherwise listed slip additive; mold release, flow modifier
#25: Manufacture of rubber products (Tyres): Antidegradants, Fillers&Pigments Plasticisers and Reinforcing Agents	or blending in batch processes for formulation of	Formulation in materials ERC 10b: Wide dispersive outdoor use of long-life articles and materials with high or intended release (including abrasive	N/A	PC 32: Polymer preparations and compounds	N/A	N/A	N/A	Lubricants and lubricant additives Process regulators, used in vulcanisatio n or polymerisati on processes Processing aid, not otherwise listed slip additive; mold release, flow modifier

	application or brushing						
#20: Adhesive and sealants manufacture	PROC 2: Use in closed, continuous process with occasional controlled exposure	ERC 2: Formulation of preparations	PC 1: Adhesives, sealants	N/A	N/A	N/A	Lubricants and lubricant additives Process
	PROC 3: Use in closed batch process (synthesis or formulation)						regulators, used in vulcanisatio n or
	PROC 4: Use in batch and other process (synthesis)						polymerisati on processes Processing
	where opportunity for exposure arises	7					aid, not otherwise listed
	PROC 5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)						slip additive; mold release, flow modifier
	PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities						
	PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing)						
	PROC 10: Roller application or brushing						
	PROC 14: Production of preparations or articles by tabletting, compression, extrusion, pelletisation						
	PROC 8a: Transfer of substance or						

	preparation (charging/dischargi ng) from/to vessels/large containers at non- dedicated facilities							
#19: General manufacturing process	process (synthesis	ERC 2: Formulation of preparations	N/A	N/A	N/A	N/A	N/A	Lubricants and lubricant additives
	(charging/discharging) from/to	Manufacture of						Process regulators, used in vulcanisatio n or
	vessels/large containers at dedicated facilities							polymerisati on processes
	dedicated facilities							Processing aid, not otherwise listed
								slip additive; mold release, flow modifier
#18: Formulating & Converting of thermoplastics additives	batch and other process (synthesis) where opportunity for exposure arises	Formulation	N/A	PC 32: Polymer preparations and compounds	N/A	N/A	N/A	Lubricants and lubricant additives
	PROC 5: Mixing or blending in batch processes for formulation of	use resulting in inclusion						Process regulators, used in vulcanisatio n or
	preparations and articles (multistage and/or significant							polymerisati on processes
	contact) PROC 6: Calendering operations							Processing aid, not otherwise listed
	PROC 8a: Transfer of substance or preparation (charging/dischargi ng) from/to vessels/large containers at non- dedicated facilities							slip additive; mold release, flow modifier
	PROC 8b: Transfer of substance or preparation							

			1				
	(charging/discharging) from/to vessels/large containers at dedicated facilities						
	PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing)						
	PROC 10: Roller application or brushing						
	PROC 12: Use of blowing agents in manufacture of foam						
	PROC 13: Treatment of articles by dipping and pouring						
	PROC 14: Production of preparations or articles by tabletting, compression, extrusion, pelletisation						
	PROC 21: Low energy manipulation of substances bound in materials and/or articles						
	PROC 24: High (mechanical) energy work-up of substances bound in materials and/or articles						
cleaning and Maintenance	PROC 1: Use in closed process, no likelihood of exposure	ERC 2: Formulation of preparations	N/A	Washing and cleaning products	N/A	N/A	Lubricants and lubricant additives
Products	PROC 2: Use in closed, continuous process with occasional controlled exposure			(including solvent based products)			Process regulators, used in vulcanisatio n or
	-						polymerisati

	PD 0 C 2 II :						on processes
	PROC 3: Use in closed batch process (synthesis or formulation)						Processing aid, not otherwise
	PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises						slip additive; mold release, flow
	PROC 5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)						modifier
	PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities						
	PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing)						
	PROC 14: Production of preparations or articles by tabletting, compression, extrusion, pelletisation						
	PROC 15: Use as laboratory reagent						
#6: (Industrial) Handling and dilution of metalworking	preparation (charging/dischargi	Formulation of	PC 25: Metal working fluids	N/A	N/A	N/A	Lubricants and lubricant additives
fluid concentrates	vessels/large containers at dedicated facilities						Process regulators, used in vulcanisatio
	PROC 5: Mixing or blending in batch processes for formulation of						n or polymerisati on processes

	preparations and articles (multistage and/or significant contact)							Processing aid, not otherwise listed slip additive; mold release, flow modifier
#2: Industrial formulation of lubricant additives, lubricants and greases	process (synthesis	Formulation of preparations	N/A	PC 17: Hydraulic fluids PC 24: Lubricants, greases, release products PC 25: Metal working fluids	N/A	N/A	N/A	Lubricants and lubricant additives Process regulators, used in vulcanisatio n or polymerisati on processes Processing aid, not otherwise listed slip additive; mold release, flow modifier

Use at industrial sites

Use at industr	iai sites							
Identified Use (IU) name	Process Category (PROC)		Substan ce supplie d to that use in form of	Product Category (PC)	Sector of Use (SU)	Subsequ ent service life relevant for that use	Article Catego ry (AC)	Technical function of the substance during formulation
#79: Manufacture of paper	or blending in batch processes for formulation of preparations and	Industrial use resulting in inclusion into or onto	N/A		SU 6b: Manufactur e of pulp, paper and paper products	no		Lubricants and lubricant additives Process regulators, used in vulcanisation or polymerisation processes Processing aid, not otherwise listed slip additive; mold release, flow modifier
#78: Leather finishing	brushing	ERC 4: Industrial use of processing aids in processes and products, not becoming part of articles ERC 5: Industrial use resulting in inclusion into or onto a matrix		Leather tanning, dye,	Manufactur e of textiles, leather, fur	no		Lubricants and lubricant additives Process regulators, used in vulcanisation or polymerisation processes Processing aid, not otherwise listed slip additive; mold release, flow modifier

#77: Application of processing aids application of spin finishes by spraying	PROC 7: Industrial spraying	ERC 4: Industrial use of processing aids in processes and products, not becoming part of articles	N/A	Lubricants, greases,		no	N/A	Lubricants and lubricant additives Process regulators, used in vulcanisation or polymerisat ion processes Processing aid, not otherwise listed slip additive; mold release, flow modifier
Application of processing	articles by dipping and	ERC 4: Industrial use of processing aids in processes and products, not becoming part of articles	N/A	Lubricants, greases,	Manufactur e of textiles, leather, fur	no	N/A	Lubricants and lubricant additives Process regulators, used in vulcanisation or polymerisat ion processes Processing aid, not otherwise listed slip additive; mold release, flow modifier
Application of processing aids application of	high energy conditions and in	ERC 4: Industrial use of processing aids in processes and products,	N/A	Lubricants, greases,	SU 5: Manufactur e of textiles, leather, fur	no	N/A	Lubricants and lubricant additives Process regulators, used in

e.g. lick rollers or nozzles in fiber lines; process temperature high		not becoming part of articles	finishing and impregnating products; including bleaches and other processing aids				vulcanisatio n or polymerisat ion processes Processing aid, not otherwise listed slip additive; mold release, flow modifier
#74: Handling transfer of processing aids from/to vessels at dedicated facilities	Transfer of substance or preparation (charging/dischar ging) from/to vessels/large containers at dedicated facilities	ERC 4: Industrial use of processing aids in processes and products, not becoming part of articles	Lubricants, greases,	Manufactur e of textiles, leather, fur	no	N/A	Lubricants and lubricant additives Process regulators, used in vulcanisatio n or polymerisat ion processes Processing aid, not otherwise listed slip additive; mold release, flow modifier
#69: Recycling processes	closed process, no likelihood of	Formulation of preparations ERC 8a: Wide dispersive indoor use of processing aids in open systems	Pharmaceuti cals PC 39:	Electricity, steam, gas water supply and	N/A	N/A	Lubricants and lubricant additives Process regulators, used in vulcanisation or polymerisat ion processes Processing aid, not

	PROC 4: Use in						otherwise listed
	batch and other process (synthesis) where opportunity for exposure arises						slip additive; mold release,
	PROC 5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)						flow modifier
	PROC 8a: Transfer of substance or preparation (charging/dischar ging) from/to vessels/large containers at non- dedicated facilities						
	PROC 8b: Transfer of substance or preparation (charging/dischar ging) from/to vessels/large containers at dedicated facilities						
	PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing)						
	PROC 15: Use as laboratory reagent						
#68: General industrial formulation process	closed process, no likelihood of	ERC 1: Manufactur e of substances	N/A	N/A	SU 10: Formulation [mixing] of preparations	N/A	Lubricants and lubricant additives
	closed, continuous	ERC 2: Formulatio n of preparation s			and/or re- packaging (excluding alloys)		Process regulators, used in vulcanisatio n or
	Controlled	ERC 6a:					polymerisat

	exposure	Industrial					ion
	PROC 3: Use in	use					processes
	closed batch	resulting in					Processing
	process (synthesis	manufactur					aid, not
	or formulation)	e of another					otherwise
		substance (use of					listed
	PROC 4: Use in	intermediat					
	batch and other						slip
	process	es)					additive;
	(synthesis) where	ERC 6b:					mold
	opportunity for	Industrial					release,
	exposure arises	use of					flow
	PROC 5: Mixing	reactive					modifier
	or blending in	processing					
	hatch processes	aids					
	for formulation of	EPC 60:					
	preparations and	Industrial					
	articles	use of					
	(multistage and/or	monomers					
	significant	for					
	contact)	manufactur					
	PROC 8a:	e of					
	Transfer of	thermoplast					
	substance or	ics					
	preparation						
	(charging/dischar	ERC 6d:					
	ging) from/to	Industrial					
	vessels/large	use of					
	containers at non-	process					
	dedicated	regulators					
	facilities	for					
		polymerisat					
	PROC 8b:	ion .					
	Transfer of	processes in					
	substance or	production					
	preparation	of resins,					
	(direct Siris areas	rubbers,					
	ging) from/to	polymers					
	vessels/large	ERC 7:					
	containers at	Industrial					
	dedicated	use of					
	facilities	substances					
	PROC 9: Transfer						
	of substance or	systems					
	preparation into						
	small containers						
	(dedicated filling						
	line, including						
	weighing)						
	0 0						
	PROC 1: Use in		N/A	PC 29:	SU 10:	N/A	Lubricants
formulation	closed process, no			Pharmaceuti			and
	likelihood of	n of		cals	[mixing] of		lubricant
	exposure	preparation		PC 39:	preparations		additives
	PROC 2: Use in	S		Cosmetics,	and/or re-		Process
	closed,	ERC 8a:		personal care	packaging		regulators,
	continuous	Wide		products	(excluding		used in
		•		F 1 C G G G G G			

	aa xxiith	diamanairia		a11 azza)			vulcanisatio
proce		dispersive indoor use		alloys)			n or
contro		of					
expos		processing					polymerisat ion
PROC		aids in open					processes
	i batch	systems					
	ss (synthesis						Processing aid, not
or for	mulation)						otherwise
	C 5: Mixing						listed
	nding in						slip
	processes rmulation of						additive;
	rations and						mold
article	es						release, flow
	istage and/or						modifier
signif conta							
	,						
PROC	C 8a: fer of						
	ance or						
	ration						
	ging/dischar						
	from/to						
	ls/large iners at non-						
dedic							
facilit	ies						
PROC	C 8b:						
1	fer of						
1	ance or						
	ration ging/dischar						
	from/to						
vesse	ls/large						
	iners at						
dedic facilit							
	C 9: Transfer						
	ostance or ration into						
	containers						
	cated filling						
	ncluding						
weigh	ung)						
#66: Industrial PROC			N/A		N/A	N/A	Lubricants
production of closed fine chemicals likelil		Formulatio n of		Manufactur e of fine			and lubricant
expos		preparation		chemicals			additives
		S		711011110415			
closed	C 2: Use in	ERC 1:					Process regulators,
contir		Manufactur					used in
proce	ss with	e of					vulcanisatio
occas		substances					n or
contro	onea	ERC 6a:					polymerisat

	I	T 1			I		ı	ļ.
	exposure	Industrial use						ion
	PROC 3: Use in	resulting in						processes
	closed batch	manufactur						Processing
	process (synthesis	e of another						aid, not
	or formulation)	substance						otherwise listed
	PROC 4: Use in	(use of						
	batch and other	intermediat						slip
	1	es)						additive;
	(synthesis) where	ERC 6b:						mold
	opportunity for exposure arises	Industrial						release, flow
	_	use of						modifier
	7 110 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	reactive						
		processing aids						
	batch processes for formulation of	urus						
	preparations and	ERC 6c:						
	articles	Industrial use of						
	(multistage and/or	monomers						
	significant	for						
	contact)	manufactur						
	PROC 9: Transfer	e of						
	of substance or	thermoplast						
	preparation into	ics						
	small containers	ERC 6d:						
	(dedicated filling line, including	Industrial						
	weighing)	use of						
		process						
	PROC 14: Production of	regulators for						
		polymerisat						
	articles by	ion						
	tabletting,	processes in						
	compression,	production						
	extrusion,	of resins,						
	pelletisation	rubbers, polymers						
		[·						
		ERC 7:						
		Industrial use of						
		substances						
		in closed						
		systems						
ш <i>с</i> . т. 1	DDOC 4 II :		N T / A	DC 21	CITC	NT/A	NT/A	T1
	PROC 4: Use in	ERC 6a: Industrial		PC 21: Laboratory	SU 8: Manufactur	N/A	N/A	Lubricants and
of laboratory	batch and other process	use		chemicals	e of bulk,			lubricant
chemicals	1	resulting in		Circinicais	large scale			additives
	opportunity for	manufactur			chemicals			
	exposure arises	e of another			(including			Process regulators,
		substance			petroleum			used in
		(use of			products)			vulcanisatio
		intermediat es)						n or
								polymerisat
								ion
	<u> </u>	1			1			

								processes
								Processing aid, not otherwise listed
								slip additive; mold release, flow modifier
industrial	PROC 3: Use in closed batch process (synthesis or formulation)	N/A		Intermediate		N/A	N/A	Lubricants and lubricant additives Process regulators, used in vulcanisation or polymerisation processes Processing aid, not otherwise listed slip additive; mold release, flow modifier
	PROC 1: Use in closed process, no likelihood of exposure PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 8b: Transfer of substance or preparation (charging/discharging) from/to	N/A	N/A	release products	SU 0: Other: Industrial uses: Industrial use as such or in preparations at industrial sites	N/A	N/A	Lubricants and lubricant additives Process regulators, used in vulcanisation or polymerisation processes Processing aid, not otherwise listed slip additive;

	vessels/large containers at dedicated facilities							mold release, flow modifier
#62: General industrial production	PROC 1: Use in closed process, no likelihood of exposure	ERC 1: Manufactur e of substances	N/A	N/A	Other: Industrial uses:	N/A	N/A	Lubricants and lubricant additives
cl cc pi	PROC 2: Use in closed, continuous process with occasional controlled	ERC 2: Formulation of preparations			Industrial use as such or in preparations at industrial sites			Process regulators, used in vulcanisatio n or
	exposure PROC 3: Use in closed batch	ERC 4: Industrial use of processing						polymerisat ion processes
	process (synthesis or formulation) PROC 4: Use in	aids in processes and						Processing aid, not otherwise listed
	batch and other process (synthesis) where opportunity for exposure arises	products, not becoming part of articles						slip additive; mold release,
	PROC 5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant	ERC 5: Industrial use resulting in inclusion into or onto a matrix ERC 6a:						flow modifier
	contact) PROC 7: Industrial spraying	Industrial use resulting in manufactur e of another						
	PROC 8a: Transfer of substance or preparation	substance (use of intermediat es)						
	(charging/dischar ging) from/to vessels/large containers at non- dedicated facilities	ERC 6b: Industrial use of reactive processing aids						
	PROC 8b: Transfer of substance or preparation (charging/dischar	ERC 6c: Industrial use of monomers for						
	ging) from/to vessels/large	manufactur e of						

	dedicated facilities PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 13: Treatment of articles by dipping and pouring PROC 14: Production of preparations or articles by tabletting, compression, extrusion, pelletisation PROC 17: Lubrication at high energy conditions and in partly open process PROC 21: Low energy manipulation of substances bound in materials and/or articles PROC 24: High (mechanical) energy work-up of substances bound in	thermoplast ics ERC 6d: Industrial use of process regulators for polymerisat ion processes in production of resins, rubbers, polymers ERC 7: Industrial use of substances in closed systems						
450	materials and/or articles	ED C O	27/4	27/4		> T / A	D.T./A	.
#59: Distribution: Q Controlling	PROC 15: Use as laboratory reagent		N/A	N/A	SU 0: Other: Industrial use: Industrial uses as such or in preparations at industrial sites			Lubricants and lubricant additives Process regulators, used in vulcanisation or polymerisat ion

							processes
							Processing aid, not otherwise listed
							slip additive; mold release, flow modifier
#54: Polymer industry: plastic	PROC 3: Use in closed batch process (synthesis or formulation) PROC 5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact) PROC 6: Calendering operations PROC 14: Production of preparations or articles by tabletting, compression, extrusion, pelletisation		Polymer preparations and	SU 23: Electricity, steam, gas water supply and sewage treatment	N/A	N/A	Lubricants and lubricant additives Process regulators, used in vulcanisation or polymerisat ion processes Processing aid, not otherwise listed slip additive; mold release, flow modifier
#52: Use of additve in a plastic masterbatch or compound		N/A		SU 10: Formulation [mixing] of preparations and/or re- packaging (excluding alloys)		N/A	Lubricants and lubricant additives Process regulators, used in vulcanisatio n or polymerisat ion processes Processing aid, not otherwise listed slip

								additive; mold release, flow modifier
#50: General manufacture of lubricants and greases	PROC 17: Lubrication at high energy conditions and in partly open process	ERC 7: Industrial use of substances in closed systems	N/A	Lubricants, greases, release products	SU 17: General manufacturi ng, e.g. machinery, equipment, vehicles, other transport equipment	N/A	N/A	Lubricants and lubricant additives Process regulators, used in vulcanisation or polymerisat ion processes Processing aid, not otherwise listed slip additive; mold release, flow modifier
#49: General manufacture of lubricants and greases	PROC 7: Industrial spraying	ERC 4: Industrial use of processing aids in processes and products, not becoming part of articles	N/A	Lubricants, greases, release products	SU 17: General manufacturi ng, e.g. machinery, equipment, vehicles, other transport equipment	N/A	N/A	Lubricants and lubricant additives Process regulators, used in vulcanisation or polymerisat ion processes Processing aid, not otherwise listed slip additive; mold release, flow modifier
#48: General manufacture of metal	PROC 17: Lubrication at high energy	ERC 4: Industrial use of	N/A		SU 15: Manufactur e of	N/A	N/A	Lubricants and lubricant

working fluids	conditions and in partly open process	processing aids in processes and products, not becoming part of articles		fluids	fabricated metal products, except machinery and equipment			additives Process regulators, used in vulcanisatio n or polymerisat ion processes Processing aid, not otherwise listed slip additive; mold release, flow modifier
#45: Release agent/lubrican t in food manufacture	PROC 7: Industrial spraying	ERC 4: Industrial use of processing aids in processes and products, not becoming part of articles	N/A	PC 24: Lubricants, greases, release products	SU 4: Manufactur e of food products	N/A	N/A	Lubricants and lubricant additives Process regulators, used in vulcanisatio n or polymerisat ion processes Processing aid, not otherwise listed slip additive; mold release, flow modifier
#39: Manufacture of rubber products (General Rubber Goods): Others	PROC 5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact) PROC 7: Industrial	ERC 4:	N/A	PC 32: Polymer preparations and compounds	SU 11: Manufactur e of rubber products	N/A	N/A	Lubricants and lubricant additives Process regulators, used in vulcanisatio n or polymerisat

	spraying	products,						ion
	PROC 8b:	not						processes
	Transfer of	becoming part of						Processing
	substance or	articles						aid, not
	preparation							otherwise
		ERC 6d:						listed
	ging) from/to	Industrial						slip
	vessels/large	use of						additive;
	containers at	process						mold
	dedicated facilities	regulators for						release,
	lacilities	polymerisat						flow
	PROC 9: Transfer	ion						modifier
	of substance or	processes in						
	preparation into	production						
	small containers (dedicated filling	of resins,						
	line, including	rubbers,						
	weighing)	polymers						
	PROC 10: Roller							
	application or							
	brushing							
	PROC 12: Use of							
	blowing agents in							
	manufacture of							
	foam							
	PROC 13:							
	Treatment of							
	articles by							
	dipping and							
	pouring							
	PROC 14:							
	Production of							
	preparations or							
	articles by							
	tabletting,							
	compression,							
	extrusion,							
	pelletisation							
	PROC 21: Low							
	energy							
	manipulation of							
	substances bound							
	in materials							
	and/or articles							
#38:	PROC 7:	ERC 4:	N/A	PC 24:	SU 11:	N/A	N/A	Lubricants
Manufacture	Industrial	Industrial			Manufactur			and
of rubber	spraying	use of			e of rubber			lubricant
products	PROC 8b:	processing		release	products			additives
(General	Transfer of	aids in		products				Process
Rubber	substance or	processes		PC 32:				regulators,
Goods):	preparation	and		Polymer				used in
Release	(charging/dischar	products,		preparations				vulcanisatio
Agents	ging) from/to	not becoming		and				n or
		occoming						

	ryoggalg/1ama -	nort of					
	vessels/large containers at dedicated	part of articles	compounds				polymerisat ion
	facilities						processes
	PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing)						Processing aid, not otherwise listed slip additive; mold
	PROC 10: Roller application or brushing						release, flow modifier
	PROC 12: Use of blowing agents in manufacture of foam						
	PROC 13: Treatment of articles by dipping and pouring						
	PROC 14: Production of preparations or articles by tabletting, compression, extrusion, pelletisation						
	PROC 21: Low energy manipulation of substances bound in materials and/or articles						
#37: Manufacture of rubber products (General Rubber Goods): Latex chemicals	containers at dedicated facilities PROC 5: Mixing or blending in batch processes	Formulation in materials ERC 4: Industrial use of processing aids in processes and products, not	Polymer preparations	SU 11: Manufactur e of rubber products	N/A	N/A	Lubricants and lubricant additives Process regulators, used in vulcanisatio n or polymerisat ion processes
	for formulation of preparations and articles (multistage and/or	part of articles					Processing aid, not otherwise listed

			ı					
	significant	ERC 6d:						slip
	contact)	Industrial						additive;
	PROC 9: Transfer	use of						mold
	of substance or	process						release,
	r -r	regulators						flow
	Siliuli Colituliicis	for						modifier
	(40410410411111111111111111111111111111	polymerisat ion						
	line, including	processes in						
	weighing)	production						
	PROC 10: Roller	of resins,						
	application or	rubbers,						
	brushing	polymers						
	PROC 12: Use of							
	blowing agents in							
	manufacture of							
	foam							
	PROC 13:							
	Treatment of							
	articles by							
	dipping and							
	pouring							
	PROC 14:							
	Production of							
	preparations or							
	articles by							
	tabletting,							
	compression,							
	extrusion, pelletisation							
	Ī							
	PROC 21: Low							
	energy							
	manipulation of substances bound							
	in materials							
	and/or articles							
#36:			N/A		SU 11:	N/A	N/A	Lubricants
Manufacture	or blending in	Formulatio		Coatings and				and
of rubber	batch processes for formulation of	n in		μ /	e of rubber products			lubricant additives
products (General	preparations and	materiais		thinners, paint	products			additives
Rubber	articles	ERC 4:		removes				Process
	(multistage and/or	Industrial						regulators,
Agents	significant	use of		PC 18: Ink				used in
(solvents,	contact)	processing		and toners				vulcanisatio
emulsifiers,	PROC 7:	aids in processes		PC 32:				n or
reinforcing		and		Polymer				polymerisat
agents)		products,		preparations				ion
		not		and				processes
	PROC 8b: Transfer of	becoming		compounds				Processing
	aubatan aa ar	part of						aid, not
	preparation	articles						otherwise
		ERC 6d:						listed
	ging) from/to	Industrial						slip
	1							

	vessels/large containers at dedicated facilities PROC 9: Transfer of substance or preparation into small containers	processes in production					additive; mold release, flow modifier
	(dedicated filling line, including weighing) PROC 10: Roller	of resins, rubbers, polymers					
	application or brushing PROC 12: Use of blowing agents in manufacture of foam						
	PROC 13: Treatment of articles by dipping and pouring						
	PROC 14: Production of preparations or articles by tabletting, compression, extrusion, pelletisation						
	PROC 21: Low energy manipulation of substances bound in materials and/or articles						
#33: Manufacture of rubber products (General Rubber Goods): Vulcanisation Agents	or blending in batch processes for formulation of	Industrial use of process regulators for polymerisat ion processes in	PC 32: Polymer preparations and compounds	SU 11: Manufactur e of rubber products	N/A	N/A	Lubricants and lubricant additives Process regulators, used in vulcanisatio n or
	PROC 7: Industrial spraying PROC 8b:	production of resins, rubbers, polymers					polymerisat ion processes
	Transfer of substance or preparation						Processing aid, not otherwise listed

	(charging/dischar						slip
	ging) from/to vessels/large containers at dedicated facilities						additive; mold release, flow modifier
	PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing)						
	PROC 10: Roller application or brushing						
	PROC 12: Use of blowing agents in manufacture of foam						
	PROC 13: Treatment of articles by dipping and pouring						
	PROC 14: Production of preparations or articles by tabletting, compression, extrusion, pelletisation						
	PROC 21: Low energy manipulation of substances bound in materials and/or articles						
#32: Manufacture of rubber products (General Rubber Goods): Mastication Agents	or blending in batch processes for formulation of preparations and	Industrial use of process regulators for	N/A	SU 11: Manufactur e of rubber products	N/A	N/A	Lubricants and lubricant additives Process regulators, used in vulcanisation or polymerisat
	spraying PROC 8b: Transfer of	rubbers, polymers					ion processes Processing aid, not

	substance or preparation (charging/dischar ging) from/to vessels/large containers at dedicated facilities PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing)							otherwise listed slip additive; mold release, flow modifier
#31: Manufacture of rubber products (Tyres): Release Agents	PROC 7: Industrial spraying PROC 8b: Transfer of substance or	ERC 4: Industrial use of processing aids in processes and products, not becoming part of articles	N/A	PC 24: Lubricants, greases, release products	SU 11: Manufactur e of rubber products	N/A	N/A	Lubricants and lubricant additives Process regulators, used in vulcanisation or polymerisat ion processes Processing aid, not otherwise listed slip additive; mold release, flow modifier
#30: Manufacture of rubber products (Tyres): Solvents	PROC 7: Industrial spraying PROC 8b: Transfer of substance or preparation (charging/dischar	ERC 4: Industrial use of processing aids in processes and products,	N/A	PC 9a: Coatings and paints, thinners, paint removes PC 18: Ink and toners		N/A	N/A	Lubricants and lubricant additives Process regulators, used in vulcanisatio

	vessels/large containers at	not becoming part of articles						n or polymerisat ion processes Processing aid, not otherwise listed slip additive; mold release, flow modifier
#29:	PROC 21: Low energy manipulation of substances bound in materials and/or articles PROC 7:	ERC 4:	N/A	PC 18: Ink		N/A	N/A	Lubricants
Manufacture of rubber products (Tyres): Emulsifiers	Industrial spraying PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 10: Roller application or brushing	Industrial use of processing aids in processes and products, not becoming part of articles		and toners	Manufactur e of rubber products			and lubricant additives Process regulators, used in vulcanisatio n or polymerisat ion processes Processing
	PROC 21: Low energy manipulation of substances bound in materials and/or articles							aid, not otherwise listed slip additive; mold release, flow modifier
#27: Manufacture of rubber products (Tyres): Tackifier	or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)	ERC 10b:	N/A	PC 32: Polymer preparations and compounds	SU 11: Manufactur e of rubber products	N/A	N/A	Lubricants and lubricant additives Process regulators, used in vulcanisatio n or

	Transfer of substance or preparation (charging/dischar ging) from/to vessels/large containers at dedicated facilities PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 14: Production of preparations or articles by tabletting, compression, extrusion, pelletisation PROC 21: Low energy manipulation of substances bound in materials and/or articles	materials with high or intended release (including abrasive processing)						polymerisat ion processes Processing aid, not otherwise listed slip additive; mold release, flow modifier
#26: Manufacture of rubber products (Tyres): Lubricants	PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 10: Roller application or brushing PROC 14: Production of preparations or articles by tabletting, compression, extrusion, pelletisation	ERC 3: Formulation in materials ERC 10b: Wide dispersive outdoor use of long-life articles and materials with high or intended release (including abrasive processing)			SU 11: Manufactur e of rubber products	N/A	N/A	Lubricants and lubricant additives Process regulators, used in vulcanisation or polymerisat ion processes Processing aid, not otherwise listed slip additive; mold release, flow modifier
#25:	PROC 5: Mixing	ERC 3:	N/A	PC 32:	SU 11:	N/A	N/A	Lubricants

Manufacture	or blending in	Formulatio		Polymer	Manufactur			and
of rubber		n in		preparations				lubricant
products	for formulation of			and	products			additives
(Tyres):	nreparations and			compounds	products			
Antidegradant		ERC 10b:		Compounds				Process
s,	(multistage and/or	Wide						regulators,
Fillers&Pigme		dispersive						used in
nts,	contact)	outdoor use						vulcanisatio
Plasticisers		of long-life						n or
and		articles and						polymerisat
Reinforcing		materials						ion
Agents		with high or intended						processes
	(charging/dischar	1						.
		(including						Processing
		abrasive						aid, not otherwise
		processing)						listed
	dedicated	pro ce 55111 g)						listed
	facilities							slip
								additive;
	PROC 9: Transfer							mold
	of substance or							release,
	preparation into small containers							flow
	(dedicated filling							modifier
	line, including							
	weighing)							
	PROC 14:							
	Production of							
	preparations or							
	articles by							
	tabletting, compression,							
	extrusion,							
	pelletisation							
	Ī							
	PROC 21: Low							
	energy							
	manipulation of							
	substances bound							
	in materials							
	and/or articles							
	PROC 10: Roller							
	application or							
	brushing							
#24:	PROC 5: Mixing	ERC 6d:	N/A	PC 32:	SU 11:	N/A	N/A	Lubricants
Manufacture		Industrial		Polymer	Manufactur	1 1/ / 1	11/11	and
of rubber	batch processes	use of			e of rubber			lubricant
products	for formulation of	1		and	products			additives
(Tyres):		regulators		compounds	r			
	r -	for		1.				Process
Agents	(multistage and/or	polymerisat						regulators,
	significant	ion						used in
	contact)	processes in						vulcanisatio
	DD/W\Uk	production						n or
	Transfer of	of resins,						polymerisat
	substance or	rubbers,						ion
	preparation	polymers						processes
	µ -г	ı		I	I.	I	<u> </u>	

	(charging/dischar ging) from/to vessels/large containers at dedicated facilities PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 10: Roller application or brushing PROC 14: Production of preparations or articles by tabletting, compression, extrusion, pelletisation PROC 21: Low energy manipulation of substances bound in materials and/or articles	ERC 10b: Wide dispersive outdoor use of long-life articles and materials with high or intended release (including abrasive processing)					Processing aid, not otherwise listed slip additive; mold release, flow modifier
#23: Manufacture of rubber products (Tyres): Mastication Agents	PROC 5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact) PROC 8b: Transfer of substance or preparation (charging/dischar ging) from/to vessels/large containers at dedicated facilities PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including	Industrial use of process regulators for polymerisat ion processes in production of resins, rubbers, polymers	N/A	SU 11: Manufactur e of rubber products	N/A	N/A	Lubricants and lubricant additives Process regulators, used in vulcanisation or polymerisation processes Processing aid, not otherwise listed slip additive; mold release, flow modifier

weigh	ing)					
#22: Industrial application of closed likelih exposisions and inks PROC closed process or form PROC Transis substa prepar (charging) vessel contain dedica facilities. PROC Transis substa prepar (charging) vessel contain dedica facilities. PROC Transis substa prepar (charging) vessel contain dedica facilities. PROC Transis substa prepar (charging) vessel contain dedica facilities. PROC or blee batch for for prepar article (multissignific contact processoccasi control exposis praying processoccasi control exposis pra	E1: Use in process, no lood of use of process aids in process aids in process and product not become fer of process aids in process and product not become part of particles articles a	sing ses sts, ing ial ial ig in on onto	and toners PC 9a: Coatings and paints, thinners, paint removes	SU 0: Other: Industrial use: Industrial uses as such or in preparations at industrial sites		Lubricants and lubricant additives Process regulators, used in vulcanisation nor polymerisation processes Processing aid, not otherwise listed slip additive; mold release, flow modifier

	T	T	I	I	ı	I	I	
	PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises							
	PROC 10: Roller application or brushing							
#21: Adhesive and sealants industrial use	PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises	inclusion into or onto a matrix		PC 1: Adhesives, sealants	SU 0: Other: Industrial use: Industrial uses as such or in preparations at industrial sites		N/A	Lubricants and lubricant additives Process regulators, used in vulcanisatio n or polymerisat ion processes Processing aid, not otherwise listed slip additive; mold release, flow modifier
	facilities PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 10: Roller application or brushing PROC 13: Treatment of articles by dipping and pouring PROC 14:							

Converting of	batch and other process (synthesis) where opportunity for exposure arises PROC 5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact) PROC 6: Calendering operations PROC 8a: Transfer of substance or preparation	Formulation in in materials ERC 5: Industrial use resulting in inclusion into or onto a matrix	Polymer preparations and compounds	SU 10: Formulation [mixing] of preparations and/or re- packaging (excluding alloys) SU 12: Manufactur e of plastics products, including compoundi ng and conversion	N/A	Lubricants and lubricant additives Process regulators, used in vulcanisatio n or polymerisat ion processes Processing aid, not otherwise listed slip additive; mold release, flow modifier
	PROC 8a: Transfer of substance or					additive; mold release,

0 11	I	I	I	I	I	1	
facilities							
PROC 8b: Transfer of substance or preparation (charging/dischar ging) from/to vessels/large containers at dedicated facilities							
PROC 9: Transfer							
of substance or preparation into small containers (dedicated filling line, including weighing)							
PROC 10: Roller application or brushing							
PROC 12: Use of blowing agents in manufacture of foam							
PROC 13: Treatment of articles by dipping and pouring							
PROC 14: Production of preparations or articles by tabletting, compression, extrusion, pelletisation							
PROC 21: Low energy manipulation of substances bound in materials and/or articles							
PROC 24: High (mechanical) energy work-up of substances bound in materials and/or articles							
	ERC 4: Industrial	N/A	PC 14: Metal surface	SU 0: Other:	N/A	N/A	Lubricants and

treatment	continuous	use of		treatment	Industrial			lubricant
products:		processing		products,	use:			additives
Metal surface	occasional	aids in		including	Industrial			
treatment	controlled	processes		galvanic and				Process
products		and		electroplatin				regulators,
	1	products,		g products	preparations			used in
	PROC 4: Use in	not			at industrial			vulcanisatio
	batch and other	becoming			sites			n or
	process (synthesis) where	part of						polymerisat
	opportunity for	articles						ion
	exposure arises							processes
	1							Processing
	PROC 10: Roller							aid, not
	application or							otherwise
	brushing							listed
	PROC 8a:							
	Transfer of							slip
	substance or							additive; mold
	preparation							release,
	(charging/dischar							flow
	ging) from/to							modifier
	vessels/large containers at non-							
	dedicated							
	facilities							
	PROC 8b:							
	Transfer of							
	substance or							
	preparation							
	(charging/dischar ging) from/to							
	vessels/large							
	containers at							
	dedicated							
	facilities							
W1 C T 1 1	DD 0 C 15 II	EDG 4	NT/A	DC 21	CITO	NT/ 4	NT/A	T 1
	PROC 15: Use as		l	PC 21:		N/A	N/A	Lubricants
use of	laboratory reagent	use of		Laboratory chemicals	Other: Industrial			and lubricant
quality control		processing		Chemicais	use:			additives
		aids in			Industrial			
					uses as such			Process
		processes						regulators,
		and			or in			used in
		products,			preparations			vulcanisatio
		not becoming			at industrial sites			n or
		part of			21162			polymerisat
		Ī						ion
		articles						processes
								Processing
								aid, not
								otherwise
								listed
								slip additive;
								mold
		<u> </u>	l	<u> </u>			<u> </u>	mora

							release, flow modifier
#15: Industrial use of metal treatment products: Washing and cleaning products	Transfer of substance or preparation	ERC 4: Industrial use of processing aids in processes and products, not becoming part of articles	N/A	Washing and cleaning products (including solvent based products)		N/A	Lubricants and lubricant additives Process regulators, used in vulcanisatio n or polymerisat ion processes
	PROC 8b: Transfer of substance or preparation (charging/dischar ging) from/to vessels/large containers at dedicated facilities						Processing aid, not otherwise listed slip additive; mold release, flow modifier
	PROC 2: Use in closed, continuous process with occasional controlled exposure						
	PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises						
#14: Industrial use of metal treatment products: Metal working fluids	Transfer of substance or preparation (charging/dischar ging) from/to vessels/large containers at dedicated facilities PROC 17: Lubrication at	ERC 4: Industrial use of processing aids in processes and products, not becoming part of articles	N/A	fluids	SU 0: Other: Industrial use: Industrial uses as such or in preparations at industrial sites	N/A	Lubricants and lubricant additives Process regulators, used in vulcanisation or polymerisation processes
	high energy conditions and in partly open						Processing aid, not

	process PROC 24: High (mechanical) energy work-up of substances bound in materials and/or articles						otherwise listed slip additive; mold release, flow modifier
#13: Industrial use of metal treatment products: Metal surface treatment products		Industrial use resulting in	N/A	treatment products, including galvanic and electroplatin g products	Other: Industrial use: Industrial uses as such	N/A	Lubricants and lubricant additives Process regulators, used in vulcanisation or
	PROC 8a: Transfer of substance or preparation (charging/dischar ging) from/to vessels/large containers at non- dedicated facilities						polymerisat ion processes Processing aid, not otherwise listed slip additive;
	PROC 2: Use in closed, continuous process with occasional controlled exposure PROC 10: Roller						mold release, flow modifier
#12: Industrial use of Facade/Surfac e cleaning products	Transfer of substance or preparation	ERC 4: Industrial use of processing aids in processes and products, not becoming part of articles	N/A	Washing and cleaning products (including solvent based products)		N/A	Lubricants and lubricant additives Process regulators, used in vulcanisation or polymerisat
	Industrial spraying PROC 11: Non industrial spraying	articles					processes Processing aid, not otherwise

							listed
							slip additive; mold release, flow modifier
beverage and pharmacos products	Transfer of substance or preparation (charging/dischar ging) from/to vessels/large containers at dedicated facilities PROC 1: Use in closed process, no likelihood of exposure PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises PROC 8a: Transfer of substance or preparation (charging/dischar ging) from/to vessels/large containers at non-dedicated facilities PROC 7: Industrial spraying PROC 13: Treatment of articles by dipping and pouring PROC 10: Roller application or brushing PROC 11: Non industrial	Industrial use of processing		Washing and cleaning products (including solvent based products)		N/A	Lubricants and lubricant additives Process regulators, used in vulcanisation nor polymerisat ion processes Processing aid, not otherwise listed slip additive; mold release, flow modifier
#10: Industrial uses of vehicle		ERC 4: Industrial	N/A	PC 35: Washing and	N/A	N/A	Lubricants and

cleaning products	substance or preparation (charging/dischar ging) from/to vessels/large containers at non-dedicated facilities PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises PROC 10: Roller application or brushing PROC 11: Non industrial spraying	use of processing aids in processes and products, not becoming part of articles			Industrial use: Industrial uses as such or in preparations at industrial sites		lubricant additives Process regulators, used in vulcanisation or polymerisat ion processes Processing aid, not otherwise listed slip additive; mold release, flow modifier
#9: Industrial use of Laundry Products	PROC 2: Use in closed, continuous process with occasional controlled exposure PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities	ERC 4: Industrial use of processing aids in processes and products, not becoming part of articles ERC 6b: Industrial use of reactive processing aids ERC 8a: Wide dispersive indoor use of processing aids in open systems	N/A	Washing and cleaning products		N/A	Lubricants and lubricant additives Process regulators, used in vulcanisation processes Processing aid, not otherwise listed slip additive; mold release, flow modifier
#7: (Industrial) Use of lubricants in high energy open processes, e.g. in high speed	PROC 2: Use in closed, continuous process with occasional controlled exposure	ERC 4: Industrial use of processing aids in processes and products,	N/A	PC 25: Metal working fluids PC 24: Lubricants, greases, release	SU 0: Other: Industrial use: Industrial uses as such or in preparations	N/A	Lubricants and lubricant additives Process regulators, used in

machinery such as metal rolling / forming or metalworking fluids for machining and grinding	PROC 8b: Transfer of substance or preparation (charging/dischar ging) from/to vessels/large containers at dedicated facilities PROC 17: Lubrication at high energy conditions and in partly open process	not becoming part of articles		products	at industrial sites		vulcanisatio n or polymerisat ion processes Processing aid, not otherwise listed slip additive; mold release, flow modifier
#5: (Industrial) Use of lubricants in open high temperature processes, e.g. quenching fluids, glass release agents	(charging/dischar ging) from/to vessels/large containers at dedicated facilities	ERC 4: Industrial use of processing aids in processes and products, not becoming part of articles	N/A		Other: Industrial use: Industrial	N/A	Lubricants and lubricant additives Process regulators, used in vulcanisatio n or polymerisat ion processes Processing aid, not otherwise listed slip additive; mold release, flow modifier
#4: (Industrial) Application of lubricant to work pieces or equipment by dipping, brushing or spraying (without exposure to heat), e.g. mould releases, corrosion protection,	preparation (charging/dischar	ERC 4: Industrial use of processing aids in processes and products, not becoming part of articles		greases, release products	SU 0: Other: Industrial use: Industrial uses as such or in preparations at industrial sites	N/A	Lubricants and lubricant additives Process regulators, used in vulcanisation or polymerisation processes Processing aid, not

slideways	line, including weighing) PROC 7: Industrial spraying PROC 10: Roller application or brushing PROC 13: Treatment of articles by dipping and pouring						otherwise listed slip additive; mold release, flow modifier
#3: General industrial use of lubricants and greases in vehicles or machinery. Includes filling and draining of containers and enclosed machinery (including engines)	PROC 8b: Transfer of substance or preparation (charging/dischar ging) from/to vessels/large containers at dedicated facilities PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 2: Use in closed, continuous process with	products, not becoming part of articles ERC 7: Industrial use of substances in closed systems	N/A	PC 17: Hydraulic fluids PC 24: Lubricants, greases, release products	SU 0: Other: Industrial use: Industrial Uses as such or in preparations at industrial sites		Lubricants and lubricant additives Process regulators, used in vulcanisation nor polymerisation processes Processing aid, not otherwise listed slip additive; mold release, flow modifier

Use by professional workers

Identified Use (IU) name	Process Category (PROC)	Environmen tal Release Category (ERC)	supplied	Categor	Sector of	Subsequent service life relevant for that use	Category (AC)	Technica 1 function of the substanc e during formulati on
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#1:	PROC 1: Use in	ERC 9b:	N/A	PC 17:	SU 0:	N/A	N/A	Lubrican
General	closed process, no likelihood of exposure PROC 8a: Transfer of	Wide		Hydrauli c fluids PC 24:	Other: Profession al use:			ts and lubricant additives
and greases in vehicles or machinery. Includes	substance or preparation (charging/discharging) from/to vessels/large containers at non-	substances in closed systems ERC 9a:		Lubrican ts, greases, release products	domain			Process regulator s, used in vulcanisa tion or
containers and enclosed	dedicated facilities PROC 8b: Transfer of substance or preparation (charging/discharging	Wide dispersive indoor use of substances in closed						polymeri sation processe s
machinery (including engines)) from/to vessels/large containers at dedicated facilities PROC 20: Heat and	systems						Processi ng aid, not otherwis e listed
	pressure transfer fluids in dispersive, professional use but closed systems							slip additive; mold release, flow modifier
al) Applicatio	PROC 10: Roller application or brushing PROC 11: Non	Wide dispersive indoor use	N/A	Lubrican ts, greases,	Profession al use:	N/A	N/A	Lubrican ts and lubricant additives
work pieces or	industrial spraying PROC 13: Treatment of articles by dipping and pouring	of processing aids in open systems ERC 8d:		release products	Public domain			Process regulator s, used in vulcanisa tion or
brushing or spraying (without exposure to heat),	PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large	dispersive outdoor use of processing						polymeri sation processe s
e.g. mould releases, corrosion protection, slideways	containers at non- dedicated facilities PROC 8b: Transfer of substance or	aids in open systems						Processi ng aid, not otherwis e listed
ond ways	preparation (charging/discharging) from/to vessels/large containers at dedicated facilities							slip additive; mold release, flow
								flow modifier

(Profession al) Use of lubricants in high energy open processes, e.g. in high speed	(charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 17: Lubrication at high energy conditions and in partly open process	Wide dispersive indoor use	N/A	Lubrican ts, greases,	Profession al use: Public	N/A	N/A	Lubrican ts and lubricant additives Process regulator s, used in vulcanisa tion or polymeri sation processe s Processi ng aid, not otherwis e listed slip additive; mold release, flow modifier
Profession al use of laundry products	(charging/discharging) from/to vessels/large containers at non-dedicated facilities	Wide dispersive indoor use of processing aids in open systems	N/A	Washing	Profession al uses: Public domain	N/A	N/A	Lubrican ts and lubricant additives Process regulator s, used in vulcanisa tion or polymeri sation processe s Processi ng aid, not otherwis e listed slip additive; mold release, flow modifier

#5: Profession al use of laundry products	PROC 1: Use in closed process, no likelihood of exposure PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities	ERC 8b: Wide dispersive indoor use of reactive substances in open systems	N/A	Washing	Profession al uses: Public domain	N/A	N/A	Lubrican ts and lubricant additives Process regulator s, used in vulcanisa tion or polymeri sation processe s Processi ng aid, not otherwis e listed slip additive; mold release, flow modifier
#6: Profession al use of dishwash products	preparation (charging/discharging) from/to vessels/large containers at non- dedicated facilities	Wide dispersive indoor use of processing aids in open systems	N/A	Washing	Profession al uses: Public domain	N/A	N/A	Lubrican ts and lubricant additives Process regulator s, used in vulcanisa tion or polymeri sation processe s Processi ng aid, not otherwis e listed slip additive; mold release, flow modifier
#7: Profession al use of	PROC 8a: Transfer of substance or preparation	ERC 8a: Wide dispersive	N/A	Washing	SU 0: Other: Profession	N/A	N/A	Lubrican ts and lubricant

general surface cleaning products	(charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 10: Roller application or brushing PROC 11: Non industrial spraying PROC 13: Treatment of articles by dipping and pouring			cleaning products (includin g solvent based products	Public domain			additives Process regulator s, used in vulcanisa tion or polymeri sation processe s Processi ng aid, not otherwis e listed slip additive;
#8: Profession	PROC 8a: Transfer of substance or	ERC 8a: Wide	N/A	PC 35: Washing	SU 0:	N/A	N/A	mold release, flow modifier Lubrican ts and
al use of floor care products	preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 10: Roller application or brushing	dispersive indoor use			Profession al uses: Public domain			lubricant additives Process regulator s, used in vulcanisa tion or
	PROC 11: Non industrial spraying							polymeri sation processe s Processi ng aid, not otherwis e listed
								slip additive; mold release, flow modifier
#9: Profession al use of floor care products: Polishes and wax	PROC 10: Roller application or brushing PROC 11: Non industrial spraying	ERC 8a: Wide dispersive indoor use of processing aids in open	N/A	Polishes and wax blends	SU 0: Other: Profession al uses: Public domain	N/A	N/A	Lubrican ts and lubricant additives Process regulator s, used in

blends		systems						vulcanisa tion or
								polymeri sation processe s Processi ng aid, not otherwis e listed
								slip additive; mold release, flow modifier
al use of maintenance e products: Polishes and wax blends	exposure	ERC 8a: Wide dispersive indoor use of processing aids in open systems	N/A	Polishes and wax blends	SU 0: Other: Profession al uses: Public domain	N/A	N/A	Lubrican ts and lubricant additives Process regulator s, used in vulcanisa tion or polymeri sation processe s Processi ng aid, not otherwis e listed slip additive; mold release, flow modifier
	PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non- dedicated facilities	Wide dispersive indoor use	N/A	Washing	Profession al uses: Public domain	N/A	N/A	Lubrican ts and lubricant additives Process regulator s, used in vulcanisa tion or polymeri sation

								processe s Processi ng aid, not otherwis e listed slip additive; mold release, flow modifier
#12: Profession al use of vehicle cleaning products	opportunity for exposure arises	ERC 8a: Wide dispersive indoor use of processing aids in open systems	N/A	Washing	Profession al uses: Public domain	N/A	N/A	Lubrican ts and lubricant additives Process regulator s, used in vulcanisa tion or polymeri sation processe s Processi ng aid, not otherwis e listed slip additive; mold release, flow modifier
al use of food beverage and	(charging/discharging) from/to vessels/large containers at non-dedicated facilities	Wide dispersive indoor use	N/A	Washing	Other: Profession al uses: Public domain	N/A	N/A	Lubrican ts and lubricant additives Process regulator s, used in vulcanisa tion or polymeri sation processe s Processi ng aid,

								not otherwis e listed slip additive; mold release, flow modifier
#14: Profession al use of Facade/Sur face cleaning products	DDOGO T C C	ERC 8d: Wide dispersive outdoor use of processing aids in open systems	N/A	Washing	Profession al uses: Public domain	N/A	N/A	Lubrican ts and lubricant additives Process regulator s, used in vulcanisa tion or
	PROC 11: Non industrial spraying							polymeri sation processe s Processi ng aid, not otherwis e listed
								slip additive; mold release, flow modifier
#15: Profession al use of medical devices	(synthesis) where opportunity for exposure arises	ERC 8a: Wide dispersive indoor use of processing aids in open systems	N/A	PC 35: Washing and cleaning products (includin g solvent based products)	Other: Profession al uses: Public domain	N/A	N/A	Lubrican ts and lubricant additives Process regulator s, used in vulcanisa tion or
	containers at non- dedicated facilities PROC 10: Roller application or							polymeri sation processe s
	brushing PROC 11: Non industrial spraying							Processi ng aid, not otherwis e listed
	PROC 13: Treatment of articles by dipping							slip

	and pouring							additive; mold release, flow modifier
#16: Profession al laboratory use	PROC 15: Use as laboratory reagent	ERC 8a: Wide dispersive indoor use of processing aids in open systems	N/A	PC 21: Laborato ry chemical s	Profession	N/A	N/A	Lubrican ts and lubricant additives Process regulator s, used in vulcanisa tion or
								polymeri sation processe s Processi ng aid, not otherwis e listed
								slip additive; mold release, flow modifier
#17: Adhesive and sealants professiona I use	PROC 5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact) PROC 8a: Transfer of	ERC 8c: Wide dispersive indoor use resulting in inclusion into or onto a matrix ERC 8f:	N/A	PC 1: Adhesiv es, sealants	Profession	N/A	N/A	Lubrican ts and lubricant additives Process regulator s, used in vulcanisa tion or
	substance or preparation (charging/discharging) from/to vessels/large containers at non- dedicated facilities PROC 10: Roller	Wide dispersive outdoor use						polymeri sation processe s Processi ng aid,
	application or brushing PROC 11: Non industrial spraying							not otherwis e listed slip
	PROC 13: Treatment of articles by dipping and pouring							additive; mold release, flow

	PROC 19: Hand- mixing with intimate							modifier
	contact and only PPE available.							
	PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing)							
Profession al application of coatings or inks	preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 19: Handmixing with intimate contact and only PPE available.	Wide dispersive outdoor use resulting in inclusion into or onto a matrix	N/A	Ink and toners	SU 0: Other: Profession al use: Public domain	N/A	N/A	Lubrican ts and lubricant additives Process regulator s, used in vulcanisa tion or polymeri sation processe s Processi ng aid, not otherwis e listed slip additive; mold release, flow modifier
#19:	exposure arises PROC 3: Use in	ERC 8c:	N/A	PC 9a:	SU 0:	N/A	N/A	Lubrican
Profession al application	closed batch process (synthesis or formulation)	Wide dispersive indoor use		Coatings and paints,	Other: Profession al use:			ts and lubricant additives
of coatings or inks	PROC 5: Mixing or blending in batch processes for formulation of preparations and	resulting in inclusion into or onto a matrix ERC 8a:		thinners, paint removes PC 18: Ink and	Public domain			Process regulator s, used in vulcanisa tion or

and/or significant	Wide dispersive	toners		polymeri sation
	indoor use of			processe
PROC 8a: Transfer of substance or preparation (charging/discharging	processing aids in open systems			Processi ng aid, not
) from/to vessels/large containers at non- dedicated facilities				otherwis e listed
PROC 2: Use in closed, continuous process with occasional controlled exposure				slip additive; mold release, flow modifier
PROC 11: Non industrial spraying				
PROC 10: Roller application or brushing				
PROC 19: Hand- mixing with intimate contact and only PPE available.				
PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises				

Consumer uses

Identified Use (IU) name	Process Category (PROC)	Environme ntal Release Category (ERC)	Substance supplied to that use in form of	Product	Sector of Use (SU)	Subsequent service life relevant for that use	Categor y (AC)	Technical function of the substance during Formulati on
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#1: General consumer use of lubricants and greases in vehicles or machinery. Includes filling and draining of containers and enclosed machinery (including engines)		ERC 9a: Wide dispersive indoor use of substances in closed systems ERC 9b: Wide dispersive outdoor use of substances in closed systems	N/A	PC 24: Lubrica nts, greases, release products	N/A	N/A	N/A	Lubricant s and lubricant additives Process regulators, used in vulcanisat ion or polymeris ation processes Processin g aid, not otherwise listed slip additive;
(Consumer) Application of lubricant to work pieces or equipment by dipping, brushing or		ERC 8a: Wide dispersive indoor use of processing aids in open systems ERC 8d:	N/A	PC 24: Lubrica nts, greases, release products	N/A	N/A	N/A	mold release, flow modifier Lubricant s and lubricant additives Process regulators , used in vulcanisat ion or
spraying (without exposure to heat), e.g. mould releases, corrosion protection, slideways		Wide dispersive outdoor use of processing aids in open systems						polymeris ation processes Processin g aid, not otherwise listed slip additive; mold release, flow modifier
#3: Consumer use of washing and cleaning products	N/A	ERC 8a: Wide dispersive indoor use of processing aids in open	N/A	PC 35: Washin g and cleaning products (includi ng solvent		N/A	N/A	Lubricant s and lubricant additives Process regulators , used in

		systems ERC 8b: Wide dispersive indoor use of reactive substances in open systems		based products)				vulcanisat ion or polymeris ation processes Processin g aid, not otherwise listed slip additive; mold release, flow modifier
#4: Consumer use of polishes	N/A	ERC 8a: Wide dispersive indoor use of processing aids in open systems	N/A	PC 31: Polishes and wax blends		N/A	N/A	Lubricant s and lubricant additives Process regulators, used in vulcanisat ion or polymeris ation processes Processin g aid, not otherwise listed slip additive; mold release, flow modifier
#5: Adhesive consumer use	N/A	ERC 8c: Wide dispersive indoor use resulting in inclusion into or onto a matrix ERC 8f: Wide dispersive outdoor use resulting in inclusion into or onto		PC 1: Adhesiv es, sealants	N/A	N/A	N/A	Lubricant s and lubricant additives Process regulators , used in vulcanisat ion or polymeris ation processes Processin g aid, not

		a matrix						otherwise listed
								slip additive; mold release, flow modifier
#6: Sealant consumer use	N/A	ERC 8c: Wide dispersive indoor use resulting in	N/A	PC 1: Adhesiv es, sealants	N/A	N/A	N/A	Lubricant s and lubricant additives
		inclusion into or onto a matrix						Process regulators , used in vulcanisat ion or
								polymeris ation processes
								Processin g aid, not otherwise listed
								slip additive; mold release, flow modifier
#7: Consumer application of coatings	N/A	Wide dispersive indoor use	N/A	Coating s and paints,		N/A	N/A	Lubricant s and lubricant additives
		of processing aids in open systems		thinners, paint removes				Process regulators , used in vulcanisat ion or
		ERC 8c: Wide dispersive indoor use						polymeris ation processes
		resulting in inclusion into or onto a matrix						Processin g aid, not otherwise listed
		ERC 8d: Wide dispersive outdoor use of processing						slip additive; mold release, flow modifier

		aids in open systems ERC 8f: Wide dispersive outdoor use resulting in inclusion into or onto a matrix						
#8: Consumer use of paper	N/A	ERC 11a: Wide dispersive indoor use of long-life articles and materials with low release	N/A	N/A	N/A	N/A	N/A	Lubricant s and lubricant additives Process regulators , used in vulcanisat ion or polymeris ation processes
								Processin g aid, not otherwise listed
								slip additive; mold release, flow modifier

Article service life

Identified Use (IU) name	Process Category (PROC)	Environme ntal Release Category (ERC)	Substance supplied to that use in form of	Product Categor y (PC)	Santar of	Subsequent service life relevant for that use	Afficie	Technical function of the substance during formulati on
#78: Leather finishing Article used by:		ERC 4: Industrial use of processing aids in processes and products, not	N/A	N/A	N/A		Leather articles	Lubricant s and lubricant additives Process regulators , used in vulcanisat ion or

workers		becoming part of articles ERC 5: Industrial use resulting in inclusion into or onto a matrix					polymeris ation processes Processin g aid, not otherwise listed slip additive; mold release, flow modifier
#77: Application of processing aids application of spin finishes by spraying Article used by: Workers	N/A	ERC 4: Industrial use of processing aids in processes and products, not becoming part of articles	N/A	N/A	N/A	AC 5: Fabrics, textiles and apparel	Lubricant s and lubricant additives Process regulators , used in vulcanisat ion or polymeris ation processes Processin g aid, not otherwise listed slip additive; mold release, flow modifier
#76: Application of processing aids application of spin finishes by various technologies e.g. dipping or pouring; process temperatur		ERC 4: Industrial use of processing aids in processes and products, not becoming part of articles	N/A	N/A	N/A	AC 5: Fabrics, textiles and apparel	Lubricant s and lubricant additives Process regulators , used in vulcanisat ion or polymeris ation processes Processin g aid, not otherwise listed

e low Article used by:						slip additive; mold release, flow modifier
Workers #75: Application of processing aids application of spin finishes by various technologie s e.g. lick rollers or nozzles in fiber lines; process temperatur e high	ERC 4: Industrial use of processing aids in processes and products, not becoming part of articles	N/A	N/A	N/A	Fabrics, textiles and apparel	Lubricant s and lubricant additives Process regulators , used in vulcanisat ion or polymeris ation processes Processin g aid, not otherwise listed
Article used by:						slip additive; mold release, flow modifier
#74: Handling transfer of processing aids from/to vessels at dedicated facilities Article used by:	ERC 4: Industrial use of processing aids in processes and products, not becoming part of articles	N/A	N/A	N/A	Fabrics, textiles and apparel	Lubricant s and lubricant additives Process regulators , used in vulcanisat ion or polymeris ation processes
Workers						Processes Processin g aid, not otherwise listed slip additive; mold release, flow

								modifier
#73: Blending use of chemicals to prepare in-house formulation s ready to use Article	N/A	ERC 2: Formulatio n of preparation s	N/A	N/A	N/A	N/A	AC 5: Fabrics, textiles and apparel	Lubricant s and lubricant additives Process regulators , used in vulcanisat ion or polymeris ation
used by:								processes
Workers								Processin g aid, not otherwise listed
								slip additive; mold release, flow modifier
#39: Manufactur e of rubber products (General	N/A	ERC 3: Formulation in materials ERC 4:	N/A	N/A	N/A	N/A	AC 10: Rubber articles	Lubricant s and lubricant additives Process
Rubber Goods): Others		Industrial use of processing aids in						regulators , used in vulcanisat ion or
Article used by:		processes and products, not						polymeris ation processes
Workers		becoming part of articles ERC 6d:						Processin g aid, not otherwise listed
		Industrial use of process regulators for polymerisa tion						slip additive; mold release, flow modifier
		processes in production						
		of resins, rubbers, polymers						

Manufactur e of rubber products (General Rubber Goods): Release Agents	PROC 14: Production of preparations or articles by tabletting, compression, extrusion, pelletisation PROC 21: Low energy manipulation of substances bound in materials and/or articles	ERC 4: Industrial use of processing aids in processes and products, not becoming part of articles	N/A	N/A	N/A	N/A	AC 10: Rubber articles	Lubricant s and lubricant additives Process regulators , used in vulcanisat ion or polymeris ation processes Processin g aid, not otherwise listed
								slip additive; mold release, flow modifier
Manufacture of rubber products (General Rubber Goods): Latex chemicals Article used by:	1 1 1	Formulation in materials ERC 4: Industrial use of processing aids in processes and products, not becoming part of articles ERC 6d: Industrial use of process regulators for polymerisation processes in production of resins, rubbers, polymers	N/A	N/A	N/A	N/A	Rubber articles	Lubricant s and lubricant additives Process regulators , used in vulcanisat ion or polymeris ation processes Processin g aid, not otherwise listed slip additive; mold release, flow modifier
#36:	PROC 14: Production	ERC 3:	N/A	N/A	N/A	N/A	AC 10:	Lubricant

	1 1	Formulatio n in					Rubber articles	s and lubricant
products	compression,	materials					110103	additives
Rubber Goods): Other Agents	pelletisation PROC 21: Low energy manipulation of substances bound	ERC 4: Industrial use of processing aids in						Process regulators , used in vulcanisat ion or
emulsifiers	articles	processes and products, not						polymeris ation processes
Article used by:		becoming part of articles						Processin g aid, not otherwise listed
workers		ERC 6d: Industrial use of process regulators for polymerisa tion processes						slip additive; mold release, flow modifier
		in production of resins, rubbers, polymers						
Manufactur e of rubber products	articles by tabletting, compression,	ERC 3: Formulatio n in materials	N/A	N/A	N/A	N/A	Rubber	Lubricant s and lubricant additives
Rubber Goods): Processing aids	extrusion, pelletisation PROC 21: Low energy manipulation of substances bound							Process regulators , used in vulcanisat ion or
	in materials and/or articles							polymeris ation processes
workers								Processin g aid, not otherwise listed
								slip additive; mold release, flow modifier
Manufactur	1 1	ERC 3: Formulation in	N/A	N/A	N/A	N/A	AC 10: Rubber articles	Lubricant s and lubricant

1 4				I	T T	1		1.157
	compression, extrusion,	materials						additives
	pelletisation							Process regulators
	PROC 21: Low							, used in
ants, Fillers	energy manipulation							vulcanisat
&	of substances bound in materials and/or							ion or
Proments	articles							polymeris
Plasticisers								ation processes
lasticiscis								Ī
								Processin g aid, not
Article								otherwise
used by:								listed
								slip
workers								additive;
								mold
								release, flow
								modifier
#33:	PROC 14: Production	ERC 6d·	N/A	N/A	N/A	N/A	AC 10:	Lubricant
	of preparations or	Industrial	1 1 1 1	1 1/1 1	1,71	14/11	Rubber	s and
	articles by tabletting,	use of					articles	lubricant
	compression, extrusion,	process regulators						additives
Rubber	pelletisation	for						Process
Goods):	PROC 21: Low	polymerisa						regulators , used in
TV IIICanigan	energy manipulation	tion processes						vulcanisat
	of substances bound	in						ion or
	in materials and/or articles	production						polymeris
Article	articies	of resins, rubbers,						ation
used by:		polymers						processes
								Processin
workers								g aid, not otherwise
								listed
								slip
								additive;
								mold
								release, flow
								modifier
#32:	N/A	ERC 6d:	N/A	N/A	N/A	N/A	AC 10:	Lubricant
#32. Manufactur		Industrial	1 V/ A	1 N/ /A	μ \/ Δ		Rubber	s and
e of rubber		use of					articles	lubricant
products		process						additives
(General Rubber		regulators for						Process
Goods):		polymerisa						regulators
Mastication		tion						, used in vulcanisat
Agents		processes in						ion or
		production						polymeris
		of resins,						pr = - J 1 - 2 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -

		rubbers,						ation
Article used by:		polymers						processes
workers								Processin g aid, not otherwise listed
								slip additive; mold release, flow modifier
Manufactur e of rubber products	articles by tabletting, compression,	Industrial use of processing	N/A	N/A	N/A	N/A	AC 10: Rubber articles	Lubricant s and lubricant additives
	pelletisation	aids in processes and products, not becoming						Process regulators , used in vulcanisat ion or
used by:		part of articles						polymeris ation processes
workers								Processin g aid, not otherwise listed
								slip additive; mold release, flow modifier
Manufactur e of rubber products	energy manipulation of substances bound in materials and/or	ERC 4: Industrial use of processing	N/A	N/A	N/A	N/A	AC 10: Rubber articles	Lubricant s and lubricant additives
(Tyres): Solvents Article		aids in processes and products, not						Process regulators , used in vulcanisat ion or
used by: workers		becoming part of articles						polymeris ation processes
								Processin g aid, not otherwise listed
								slip

								additive; mold release, flow modifier
Manufactur e of rubber products	energy manipulation of substances bound in materials and/or	Industrial use of processing	N/A	N/A	N/A	N/A	AC 10: Rubber articles	Lubricant s and lubricant additives
Emulsifiers Article		aids in processes and products, not becoming						Process regulators , used in vulcanisat ion or
used by: workers		part of articles						polymeris ation processes
								Processin g aid, not otherwise listed
								slip additive; mold release, flow modifier
Manufactur e of rubber products	articles by tabletting,	ERC 3: Formulatio n in materials	N/A	N/A	N/A	N/A	AC 10: Rubber articles	Lubricant s and lubricant additives
Filter Activator and Bonding	pelletisation PROC 21: Low energy manipulation of substances bound							Process regulators , used in vulcanisat ion or
Article	in materials and/or articles							polymeris ation processes
used by: workers								Processin g aid, not otherwise listed
								slip additive; mold release, flow modifier
Manufactur	PROC 14: Production of preparations or articles by tabletting,	Formulatio	N/A	N/A	N/A	N/A	AC 10: Rubber	Lubricant s and lubricant

1 .	· ·		I	T	I	I		
products (Tyres):	compression, extrusion,	materials					articles	additives
Tackifier	pelletisation PROC 21: Low	ERC 10b: Wide dispersive outdoor use						Process regulators , used in vulcanisat
Article used by:	of substances bound	of long-life						ion or
workers	in materials and/or articles	articles and materials with high or intended						polymeris ation processes
		release (including abrasive processing)						Processin g aid, not otherwise listed
								slip additive; mold release, flow modifier
e of rubber products	articles by tabletting, compression,	ERC 3: Formulation in materials	N/A	N/A	N/A	N/A	AC 10: Rubber articles	Lubricant s and lubricant additives
(Tyres): Lubricants Article used by:	extrusion, pelletisation	ERC 10b: Wide dispersive outdoor use of long-life						Process regulators , used in vulcanisat ion or
workers		articles and materials with high or intended						polymeris ation processes
		release (including abrasive processing)						Processin g aid, not otherwise listed
								slip additive; mold release, flow modifier
e of rubber products	articles by tabletting, compression,	ERC 3: Formulation in in materials	N/A	N/A	N/A	N/A	AC 10: Rubber articles	Lubricant s and lubricant additives
I	extrusion, pelletisation PROC 21: Low energy manipulation of substances bound	ERC 10b: Wide dispersive outdoor use of long-life						Process regulators , used in vulcanisat ion or
and Reinforcin	in materials and/or articles	articles and materials						polymeris

g Agents		with high or intended						ation processes
Article used by:		release (including abrasive processing)						Processin g aid, not otherwise listed
workers								slip additive; mold release, flow modifier
Manufactur e of rubber products	articles by tabletting, compression,	Industrial use of process	N/A	N/A	N/A	N/A	AC 10: Rubber articles	Lubricant s and lubricant additives
		regulators for polymerisa tion processes in						Process regulators , used in vulcanisat ion or
used by:	in materials and/or articles	production of resins, rubbers, polymers						polymeris ation processes
workers		ERC 10b: Wide dispersive						Processin g aid, not otherwise listed
		outdoor use of long-life articles and materials with high or intended release (including						slip additive; mold release, flow modifier
		abrasive processing)						
Manufactur e of rubber products		Industrial use of process	N/A	N/A	N/A	N/A	Rubber	Lubricant s and lubricant additives
(Tyres): Mastication Agents		regulators for polymerisa tion processes						Process regulators , used in vulcanisat ion or
Article used by:		n production of resins, rubbers,						polymeris ation processes
workers		polymers						Processin g aid, not otherwise

							listed slip additive; mold release, flow modifier
#8: Consumer use of paper	N/A	Wide dispersive indoor use	N/A	N/A	N/A	AC 8: Paper articles	Lubricant s and lubricant additives
Article used by:		of long-life articles and materials with low release					Process regulators , used in vulcanisat ion or
consumers							polymeris ation processes
							Processin g aid, not otherwise listed
							slip additive; mold release, flow modifier

Uses advised against: No information available

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: SINWON CHEMICAL CO., LTD.

Street address/P.O. Box: 92, Gongdan 1-daero 28beon-gil, Siheung-si, Gyeonggi-do, Korea

Country ID/Postcode/Place: Not available

Telephone number (if possible, indicate telefax): +82-31-432-6688

e-mail address of competent person responsible for the SDS: swc4@swchem.co.kr

National contact: Not available

1.4 Emergency Telephone

Emergency Telephone number: +82-31-432-6688

Opening hours: Not available

Other comments (e.g. language(s) of the phone service): Not available

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

HI-LUBE(BA,300P,500P) is not classified according to Regulation (EC) No 1272/2008 [CLP] and

OSHA 29 CFR 1910.1200: Not classified

2.2 Label elements

Hazard pictograms: Not applicable Signal word: Not applicable Hazard statement: Not applicable

Additional precautionary statements: Not applicable

2.3 Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixture

Description of the mixture: Not mixture

CAS No.	EC No.	REACH	%[weight]	Name	Classification
		Registration No.			according to
					Regulation(EC) No
					1278/2008(CLP)
110-30-5	203-	01-2119487304-	> 00	N,N'-	See section 2
110-30-3	755-6	36-0008	≥ 99	ethylenedi(stearamide)	See Section 2

SECTION 4: FIRST-AID MEASURES

4.1 Description of first aid measures

General notes

- Not available

Following inhalation

- Move to fresh air.
- If symptoms persist, call a physician.

Following skin contact

- Wash off with soap and plenty of water.

Following eye contact

- If in an eye, rinse with plenty of water.

Following ingestion

- Do not induce vomiting.
- Drink plenty of water.
- Seek medical advice.

Self-protection of the first aider

- Not available

4.2 Most important symptoms and effects, both acute and delayed

Acute effects

No acute effects are anticipated if first aid treatment is applied and is effective.

Delayed effects

No delayed effects are anticipated if first aid treatment is applied and is effective.

4.3 Indication of immediate medical attention and special treatment needed

- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media

- Suitable extinguishing media: Foam, Dry chemical, Carbon dioxide(CO₂)
- Unsuitable extinguishing media: Water

5.2 Special hazards arising from the substance or mixture

- Due to thermal decomposition and incomplete combustion gases such as black smoke, carbon monoxide and other toxic gases, danger based on inhalation of such gases may occur.

5.3 Advice for firefighters

- Wear self contained breathing apparatus for fire fighting if necessary.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures For non-emergency personnel

Protective equipment : Not available **Emergency procedures** : Not available

For emergency responders

- Avoid breathing dust
- Fine dust dispersed in air may ignite.
- Avoid dust formation.
- Take precautionary measures against static discharges.

6.2 Environmental precautions

- Try to prevent the material from entering drains or water courses.

6.3 Methods and material for containment and cleaning up

For containment

- Not available

For cleaning up

- Sweep up and shovel into suitable containers for disposal

Other information

- Not available

6.4 Reference to other sections

- See also sections 8 and 13 of the Safety Data Sheet.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Protective measures:

- Provide adequate ventilation.
- Avoid exceeding of the given occupational exposure limits.
- Take precautionary.

Measures to prevent fire: Not available

Measures to prevent aerosol and dust generation

- Avoid dust formation.

Measures to protect the environment:

- Not available

Advice on general occupational hygiene:

- Not available

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

- Keep tightly closed in a dry, cool and well-ventilated place.

Packaging materials: Not available

Requirements for storage rooms and vessels: Not available Further information on storage conditions: Not available

7.3 Specific end use(s)

Recommendations: Not available

Industrial sector specific solutions: Not available

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure limits

Name	Korea regulation	ACGIH regulation	Biological exposure index	OSHA regulation	NIOSH regulation	EU regulation	United Kingdom
N,N'-ethylenedi(stearamide)	Not available	Not available	Not available	Not available	Not available	Not available	4 mg/m³ UK EH40 respirable dust 10 mg/m³ UK EH40 Total dust

8.2 Exposure controls

8.2.1 Appropriate engineering controls:

Substance/mixture related measures to prevent exposure during identified uses: No specific measures

Structural measures to prevent exposure: No specific measures

Organisational measures to prevent exposure:

Do not breathe dust.

Technical measures to prevent exposure:

General industrial hygiene practice.

8.2.2 Individual protection measures, such as personal protective equipment:

The resistance of the protective clothing to chemicals should be ascertained with the manufacturer/supplier

Eve and face protection

Wear safety glasses.

Skin protection

Hand protection

Use protective gloves as required.

Other skin protection

Wear lightweight protective clothing.

Respiratory protection

Dust safety masks are recommended when the dust concentration is more than 10 mg/m³.

Thermal hazards

Not available

8.2.3 Environmental exposure controls

Prevent entry into waterways, sewers, basements or confined areas

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Description: Solid white powder to slightly yellow granules

Color: Slightly yellow **Odor:** Not available

Odor threshold: Not available

pH: Not available

Melting point/freezing point: 144.35 °C (101.3kPa) Initial boiling point and boiling range: Not available

Flash point: 302°C (open cup) Evaporation rate: Not available

Flammability (solid, gas): The substance has no pyrophoric properties and does not liberate flammable

gases on contact with water.

Upper/lower flammability or explosive limits: 10 mg/L (Lower limit of flammability)

Vapor pressure : 0.00000023 hPa (20 °C)

Solubility (ies): Not available **Vapor density:** Not available

Relative density: 1.0075 g/cm³ (23 °C)

Partition coefficient: n-octanol/water: Not available

Auto ignition temperature : 390°C **Decomposition temperature :** 260°C

Viscosity: 10cP(150°C)

Explosive properties: Not explosive

Oxidizing properties: No oxidizing properties

Molecular weight: Not available

9.2 Other information

Not available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

- Dust may form explosive mixture in air.

10.2 Chemical stability

- It is stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

- Not available

10.4 Conditions to avoid

- Direct sources of heat.

10.5 Incompatible materials

- Strong oxidizing agents

10.6 Hazardous decomposition products

- In case of fire hazardous decomposition products may be produced such as: Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NOx), dense black smoke.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

(a) Acute toxicity;

Oral - Rat, $LD_{50} > 5000 \text{ mg/kg bw (OECD TG 401)}$

Dermal - Rabbit, $LD_{50} > 2000$ mg/kg bw (OECD TG 402, GLP) Inhalation - Rat, $LC_{50} > 6.3$ mg/L air/4hr (OECD TG 403, GLP)

(b) Skin Corrosion/- In skin irritation study with rabbits, no skin irritation was caused by 24,

Irritation; 48, 72 hours of exposure to this substance (OECD TG 404).

(c) Serious Eye - This substance was considered mildly irritating to the rabbit eye. Changes Damage/ Irritation; were fully reversible within 3 days (conjunctivae score (redness) = 0.72,

chemosis score = 0, cornea score = 0.17, iris score = 0) (OECD TG 405).

(d) Respiratory - Not available

sensitization;

(e) Skin Sensitization; - In skin irritation study with female mouse, no skin sensitization was

caused by 3 days of exposure to this substance (OECD TG 429, GLP).

(f) Carcinogenicity; - KOREA-ISHL, IARC, NTP, OSHA, ACGIH, EU Regulation 1272/2008:

Not listed

(g) Mutagenicity; - Negative reactions were observed in vitro (Bacterial reverse mutation

assay, OECD TG 471; Mammalian chromosome aberration test, OECD

TG 473; Mammalian cell gene mutation assay, OECD TG 476).

(h) Reproductive - The information of effects on fertility is not available.

toxicity; - In developmental oral toxicity with rat, there were no significant adverse

effects on reproductive parameters and no evidence of malformations at any doses(NOAEL(maternal, developmental toxicity) $\geq 1000 \text{mg/kg bw/day}$)

(OECD TG 414, GLP)

(i) Specific target organ - In acute inhalation toxicity study with rats, labored breathing and/or rales, toxicity (single dark material around nose or mouth, decreased activity, urine stain, trashing

exposure); (in cage) were observed (OECD TG 403, GLP).

(j) Specific target organ - Not available

toxicity (repeat

exposure);

(k) Aspiration Hazard; - Not available

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Acute toxicity

Fish -96hr-LC_{50} (Oryzias latipes)> 0.0274 mg/L (OECD TG 203) Invertebrates -48hr-EC_{50} (Daphnia magna)> 0.00223 mg/L (OECD TG 202) Algae -72hr-NOEC_{50} (Pseudokirchnerella subcapitata) > 100 mg/L

(growth rate, OECD TG 201)

Chronic toxicity

Fish Not available

Invertebrates - 21d-NOEC (Daphnia magna)> 0.00224mg/L (OECD TG 211) - 72hr-NOEC (Pseudokirchnerella subcapitata)> 39.8mg/L Algae

(OECD TG 201)

12.2 Persistence and Persistence: Not available

Degradability Degradability: N-(2-Octadecanoylaminoethyl) octadecanamide is

expected to be stable in water and hydrolysis is not expected.

Bioaccumulation: 12.3 Bioaccumulative potential

- BCF is less than 500, predicted to be low bioaccumulative

(BCF < 6.2) (0.083 mg/L)(GLP)

Biodegradation:

- As not well-biodegraded, it is expected to have high accumulation potential in living organisms (15% biodegradation was observed

after 28 day) (10 mg/L)(OECD TG 301 B, GLP)

- High potency of mobility to soil. (Koc = $404300000 \sim$ 12.4 Mobility in soil

814300000) (estimated)

12.5 Results of PBT and vPvB Not available

assessment

12.6 Other adverse effects Not available

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product/Packaging disposal

Observe all regulations made by administration.

Waste codes / Waste designation according to LoW(2015): Not available

Waste treatment-relevant information

Observe all regulations made by administration.

Sewage disposal-relevant information

Observe all regulations made by administration.

Other disposal recommendations

Observe all regulations made by administration.

SECTION 14: TRANSPORT INFORMATION

14.1 UN Number : Not applicable

14.2 UN Proper shipping name: Not applicable 14.3 Transport Hazard class: Not applicable

14.4 Packing group: Not applicable

14.5 Environmental hazards: Not applicable

14.6 Special precautions for user in case of fire: Not applicable in case of leakage: Not applicable

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not Available

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulation/legislation specific for the substance or mixture

EU Regulatory Information

EU classification:

EU CLP 2008:

Classification: Not regulated

Hazard statement codes: Not regulated Precautionary statement codes: Not regulated

EU SVHC list: Not regulated

EU Authorisation List : Not regulated **EU Restriction list :** Not regulated

Foreign Regulatory Information

External information:

U.S.A management information (OSHA Regulation): Not regulated U.S.A management information (CERCLA Regulation): Not regulated

U.S.A management information (EPCRA 302 Regulation): Not regulated

U.S.A management information (EPCRA 304 Regulation): Not regulated

U.S.A management information (EPCRA 313 Regulation): Not regulated

Korea management information: Not regulated Substance of Roterdame Protocol: Not regulated Substance of Stockholme Protocol: Not regulated Substance of Montreal Protocol: Not regulated

15.2 Chemical safety assessment: In accordance with REACH Article 14, a Chemical Safety Assessment

has been carried out for this substance.

SECTION 16: OTHER INFORMATION

Product safety data sheet for H-LUBE(BA,300P,500P) prepared in accordance with Regulation (EU) 2015/830 (REACH), Annex II, and OSHA 29 CFR 1910.1200

16.1 Indication of changes

Date Updated: 7 June 2016

Version: Rev. 2

16.2 Abbreviations and acronyms

ACGIH = American Conference of Government Industrial Hygienists

CLP = Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008

CAS No. = Chemical Abstracts Service number

DMEL = Derived Minimal Effect Levels

DNEL = Derived No Effect Level

EC Number = EINECS and ELINCS Number (see also EINECS and ELINCS)

EU = European Union

IARC = International Agency for Research on Cancer

ISHL = Industrial Safety & Health Law

NIOSH = National Institute for Occupational Safety & Health

NTP = National Toxicology Program

OSHA = European Agency for Safety and Health at work

PBT = Persistent, Bioaccumulative and Toxic substance

PNEC(s) = Predicted No Effect Concentration(s)

REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 2015/830

STP = Sewage Treatment Plant

SVHC = Substances of Very High Concern

vPvB = Very Persistent and Very Bioaccumulative

UN = United Nations

MARPOL = International Convention for the Prevention of Pollution from Ships (IMO)

IBC = Intermediate Bulk Container

CERCLA = Comprehensive Environmental Response, Compensation & Liability Act (US)

EPCRA = Emergency Planning and Community Right-to-Know Act (US)

EINECS = European Inventory of Existing Commercial chemical Substances

ELINCS = European List of Notified Chemical Substances

16.3 Key literature reference and sources for data:

OECD SIDS; http://webnet.oecd.org/hpv/ui/Search.aspx

REACH information on registered substances; http://apps.echa.europa.eu/registered/registered-sub.aspx International Uniform Chemical Information Database(IUCLID); http://esis.jrc.ec.europa.eu/

European Union Risk Assessment Report (RAR); http://esis.jrc.ec.europa.eu/

U.S. National library of Medicine(NLM) Hazardous Substances Data Bank(HSDB);

http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB

TOMES-LOLI®; http://www.rightanswerknowledge.com/loginRA.asp

ECOTOX; http://cfpub.epa.gov/ecotox/

National Emergency Management Agency-Korea dangerous material inventory management system; http://www.nema.go.kr/hazmat/main/main.jsp

The Chemical Database -The Department of Chemistry at the University of Akron;

http://ull.chemistry.uakron.edu/erd/

Korea Maritime Dangerous Goods Inspection Center; http://www.komdi.or.kr/index.html

16.4 Classification and procedure used to derive the classification for mixtures according to Regulation(EC) 1272/2008(CLP):

Classification according to Regulation (EC) 1272/2008

Classification procedure

16.5 Relevant R-phrases and/or H-statements (number and full text) : Not available **16.6 Training advice :**

- Do not handle until all safety precautions have been read and understood.

16.7 Further information:

This safety data sheet (SDS) is based on the legal provisions of the REACH Regulation and OSHA 29 CFR 1910.1200, as amended. Its contents are intended as a guide to the appropriate precautionary handling of the material. It is the responsibility of recipients of this SDS to ensure that the information contained therein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. Information and instructions provided in this SDS are based on the current state of scientific and technical knowledge at the date of issue indicated. It should not be construed as any guarantee of technical performance, suitability for particular applications, and does not establish a legally valid contractual relationship. This version of the SDS supersedes all previous versions.