

SAFETY DATA SHEET

Date Printed : 23 April 2013

Date Updated : 27 February 2023

Version : Rev. 3.5

Regulation : In accordance with Regulation (EU) 2020/878 (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(BEAD,100P,300P,500P,600P)

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

Relevant identified uses :

Lubricant and releasing for plastic, synthetic resins

Slip agent

Pigment dispersing agent

Lubricant and additives for paints and rubbers.

Anti-blocking and tack agent

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(BEAD,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

No information available

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixture

Description of the mixture : Not mixture

CAS No.	EC No.	REACH Registration No.	%[weight]	Name	Classification according to Regulation(EC) No 1278/2008(CLP)
110-30-5	931- 299-4	01-2119487304- 36-0008	100	N,N'- 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/m ³ UK EH40 respirable dust 10 mg/m ³ 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

Eye 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 (NO_x), dense black smoke.

SECTION 11 : TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

(a) Acute toxicity;

Oral - Rat, LD₅₀ > 5000 mg/kg bw (OECD TG 401)

Dermal - Rabbit, LD₅₀ > 2000 mg/kg bw (OECD TG 402, GLP)

Inhalation - Rat, LC₅₀ > 6.3 mg/L air/4hr (OECD TG 403, GLP)

(b) Skin Corrosion/Irritation; - In skin irritation study with rabbits, no skin irritation was caused by 24, 48, 72 hours of exposure to this substance (OECD TG 404).

(c) Serious Eye Damage/Irritation; - This substance was considered mildly irritating to the rabbit eye. Changes 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 sensitization; - Not available

(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 toxicity; - The information of effects on fertility is not available.

- 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) ≥ 1000mg/kg bw/day) (OECD TG 414, GLP)

(i) Specific target organ toxicity (single exposure); - In acute inhalation toxicity study with rats, labored breathing and/or rales, dark material around nose or mouth, decreased activity, urine stain, trashing (in cage) were observed (OECD TG 403, GLP).

(j) Specific target organ toxicity (repeat exposure); - Not available

(k) Aspiration Hazard; - Not available

SECTION 12 : ECOLOGICAL INFORMATION

12.1 Toxicity

Acute toxicity

Fish - 96hr-LC₅₀ (*Oryzias latipes*) > 0.0274 mg/L (OECD TG 203)

Invertebrates - 48hr-EC₅₀ (*Daphnia magna*) > 0.00223 mg/L (OECD TG 202)

Algae - 72hr-NOEC₅₀ (*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)

Algae - 72hr-NOEC (*Pseudokirchnerella subcapitata*) > 39.8mg/L (OECD TG 201)

12.2 Persistence and Degradability

Persistence : Not available

Degradability : N-(2-Octadecanoylaminoethyl) octadecanamide is expected to be stable

	in water and hydrolysis is not expected.
12.3 Bioaccumulative potential	<p>Bioaccumulation :</p> <p>- BCF is less than 500, predicted to be low bioaccumulative (BCF<6.2) (0.083 mg/L)(GLP)</p> <p>Biodegradation :</p> <p>- 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)</p>
12.4 Mobility in soil	- High potency of mobility to soil. (Koc = 404300000 ~ 814300000) (estimated)
12.5 Results of PBT and vPvB assessment	Not available
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 Air transport(IATA) : Not dangerous goods

14.7 Special precautions for user

in case of fire : Not applicable

in case of leakage : Not applicable

14.8 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 Inventory (TSCA): Not regulated
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) 2020/878 (REACH), Annex II , and OSHA 29 CFR 1910.1200

16.1 Indication of changes

Date Updated : 13 January. 2023

Version : Rev. 3.4

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.