

SAFETY DATA SHEET

Date Printed : 25 April 2012

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Version : Rev. 4

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-TECA

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

Relevant identified uses : PVC resin lubricant, olefin resin, processing lubricant, rubber mold release agent, additive for painting, dispersion.

Uses advised against : Use for recommended use only.

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-TECA 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)
1592-23-0	216-472-8	Not available	98	Calcium distearate	See section 2
7732-18-5	231-791-2	Not available	2	Water	See section 2

SECTION 4 : FIRST-AID MEASURES

4.1 Description of first aid measures

General notes

- Not available

Following inhalation

- Do not let him/her eat anything, if unconscious.
- Get immediate medical advice/attention.

Following skin contact

- In case of contact with substance, immediately flush eyes with running water at least 20 minutes.
- Get immediate medical advice/attention.

Following eye contact

- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Remove and isolate contaminated clothing and shoes.
- Wash contaminated clothing and shoes before reuse.
- Get immediate medical advice/attention.

Following ingestion

- Specific medical treatment is urgent.
- Move victim to fresh air.
- Give artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.

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:
 - Small Fire: dry sand, dry chemical, alcohol-resistant foam, water spray, regular foam, CO₂
 - Large Fire: water spray/fog, regular foam
- Unsuitable extinguishing media: High pressure water streams

5.2 Special hazards arising from the substance or mixture

- May be ignited by heat, sparks or flames.
- Containers may explode when heated.
- Some of these materials may burn, but none ignite readily.
- Fire will produce irritating and/or toxic gases.
- If inhaled, may be harmful.
- Some liquids produce vapors that may cause dizziness or suffocation.

5.3 Advice for firefighters

- Move containers from fire area if you can do it without risk.
- Runoff from fire control may cause pollution.
- Contact with substance may cause severe burns to skin and eyes.
- Dike fire-control water for later disposal; do not scatter the material.
- Fire involving Tanks; Cool containers with flooding quantities of water until well after fire is out. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- Fire involving Tanks; Always stay away from tanks engulfed in fire.

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

- Eliminate all ignition sources.
- Stop leak if you can do it without risk.
- Please note that materials and conditions to avoid.
- Ventilate the area.
- Do not touch or walk through spilled material.
- Prevent dust cloud.

6.2 Environmental precautions

- Prevent entry into waterways, sewers, basements or confined areas.

6.3 Methods and material for containment and cleaning up

For containment

- Not available

For cleaning up

- Small Spill; Flush area with flooding quantities of water. Take up with sand or other non-combustible absorbent material and place into containers for later disposal.
- Large Spill; Dike far ahead of liquid spill for later disposal.
- With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.
- Powder Spill; Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry.

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 :

- Please note that materials and conditions to avoid.
- Wash thoroughly after handling.
- Please work with reference to engineering controls and personal protective equipment.
- Be careful to high temperature.

Measures to prevent fire : Not available

Measures to prevent aerosol and dust generation

- Not available

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

- Store in a closed container.
- Store in cool and dry place.
- Please note that materials and conditions to avoid.

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
Calcium distearate	Not available	Not available	Not available	Not available	Not available	Not available	Not available
Water	Not available	Not available	Not available	Not available	Not available	Not available	Not available

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: Not specific measures

Organisational measures to prevent exposure: Not specific measures

Technical measures to prevent exposure:

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

8.2.2 Individual protection measures, such as personal protective equipment :

Eye and face protection

- Wear breathable safety goggles to protect from particulate material causing eye irritation or other order.
- An eye wash unit and safety shower station should be available nearby work place.

Skin protection

Hand protection

Wear appropriate protective gloves by considering physical and chemical properties of chemicals.

Other skin protection

Wear appropriate protective clothing by considering physical and chemical properties of chemicals.

Respiratory protection

- Breathing protection if dusts are formed. Particle filter with low efficiency for solid particles (e.g. EN 143 or 149, Type P1 or FFP1).
- Respiratory protection: Wear NIOSH/MESA approved full or half face piece (with goggles) respiratory protective equipment.

Thermal hazards

Not available

8.2.3 Environmental exposure controls

Not available

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Description : Solid(powder)

Color : White

Odor : Not available

Odor threshold : Not available

pH : Not available

Melting point/freezing point : 155 °C

Initial boiling point and boiling range : Not available

Flash point : Not available

Evaporation rate : Not available

Flammability (solid, gas) : Not available

Upper/lower flammability or explosive limits : Not available

Vapor pressure : Not available

Solubility (ies) : 2 mg/L (35 °C)

Vapor density : Not available

Relative density : Not available

Partition coefficient: n-octanol/water : logKow = 14.34 (estimated)

Auto ignition temperature : 460°C

Decomposition temperature : 435°C

Viscosity : Not available

Explosive properties : Not available

Oxidizing properties : Not available

Molecular weight : 607

Specific gravity : 1.12

9.2 Other information

Not available

SECTION 10 : STABILITY AND REACTIVITY

10.1 Reactivity

- Containers may explode when heated.
- Some of these materials may burn, but none ignite readily.
- Fire may produce irritating and/or toxic gases.

10.2 Chemical stability

- Stable under normal temperatures and pressures.

10.3 Possibility of hazardous reactions

- Some liquids produce vapors that may cause dizziness or suffocation.
- If inhaled, may be harmful.

10.4 Conditions to avoid

- Ignition sources (heat, sparks or flames).

10.5 Incompatible materials

- Combustibles

10.6 Hazardous decomposition products

- Irritating and/or toxic gases.

SECTION 11 : TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

- (a) Acute toxicity;
- | | |
|------------|-----------------|
| Oral | - Not available |
| Dermal | - Not available |
| Inhalation | - Not available |
- (b) Skin Corrosion/ Irritation; - Not available
- (c) Serious Eye Damage/ Irritation; - Not available
- (d) Respiratory sensitization; - Not available
- (e) Skin Sensitization; - Not available
- (f) Carcinogenicity; -ACGIH : A4 Stearates
-KOREA-ISHL, IARC, NTP, OSHA, EU Regulation
1272/2008 : not listed
- (g) Mutagenicity; - Not available
- (h) Reproductive toxicity; - Not available
- (i) Specific target organ toxicity - Not available
(single exposure);
- (j) Specific target organ toxicity - Not available
(repeat exposure);
- (k) Aspiration Hazard; - Not available

SECTION 12 : ECOLOGICAL INFORMATION

12.1 Toxicity

Acute toxicity	
Fish	- Not available
Invertebrates	- Not available
Algae	- Not available
Chronic toxicity	
Fish	Not available
Invertebrates	- Not available
Algae	- Not available
12.2 Persistence and Degradability	Persistence : Not available Degradability : Not available
12.3 Bioaccumulative potential	Bioaccumulation : Bioaccumulation is expected to be low according to the BCF < 500 (BCF =3.377) (estimated) Biodegradation : Not available
12.4 Mobility in soil	- High potency of mobility to soil. (Koc = 234,300,000) (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

Consider the required attentions in accordance with waste treatment management regulation.

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

Waste treatment-relevant information

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Sewage disposal-relevant information

Not available

Other disposal recommendations

Not available

SECTION 14 : TRANSPORT INFORMATION

14.1 UN Number : Not classified with dangerous goods

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 classified

Hazard statement codes : Not applicable

Precautionary statement codes : Not applicable

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 HI-TECA prepared in accordance with Regulation (EU) 2015/830 (REACH), Annex II, and OSHA 29 CFR 1910.1200

16.1 Indication of changes

Date Updated : 31 May 2016

Version : Rev. 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.