

MATERIAL SAFETY DATA SHEET

1. Identification of the substance or mixture and of the supplier

A. GHS product identifier CAREJAM LEATHER LOTION

B. Recommended use of the chemical and restrictions on use

Recommended use detergents of car leather surface

Restrictions on use Limitation of use for other purpose

C. Manufacturers

Company name Bullsone

Address 7F, Dabong Tower, 418, Teheran-ro Gangnam-gu, Seoul, 135-839, Korea

Emergency phone number 822-2106-7777

Respondent Han Dong Jin

Fax 822-2106-7911

2. Hazards identification

A. GHS classification of the substance/mixture

Carcinogenicity : Category 1B

Specific target organ toxicity (single exposure) : Category 3 (respiratory irritation)

B. GHS label elements, including precautionary statements

Pictogram and symbol :



Signal word : Danger

Hazard statements :

H335 May cause respiratory irritation.

H350 May cause cancer.

Precautionary statements

Precaution

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P271 Use only outdoors or in a well-ventilated area.

P281 Use personal protective equipment as required.

Treatment

P304+P340 If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P308+P313 If exposed or concerned: Get medical advice/ attention.

P312 Call a poison center or doctor/physician if you feel unwell.

Storage

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

Disposal

P501 Dispose the contents/container in accordance with local/regional/national/international regulations.

C. Other hazard information not included in hazard classification (NFPA)

Health 2

Flammability 1

Reactivity Not available

3. Composition/information on ingredients

Chemical Name	Common Name(Synonyms)	CAS number	EC number	Content (%)
Water		7732-18-5	231-791-2	60-70 %
Polysiloxane	Silicone oil	63148-62-9	613-156-5	1~10 %
White Mineral Oil Liquid Paraffin	White Mineral Oil	8042-47-5	232-455-8	10-20 %
Propane-1,2-diol	Propylene glycol	57-55-6	200-338-0	1~10 %
C08-10 alkyl polyglucoside				1~10 %
GLYCEROL	Glycerine	56-81-5	200-289-5	1~10 %
Distillates (petroleum), hydrotreated light paraffinic		64742-55-8	265-158-7	10-20 %

4. First aid measures

A. Eye contact

- Call emergency medical service.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.

B. Skin contact

- Call a poison center or doctor/physician if you feel unwell.
- Call emergency medical service.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- For minor skin contact, avoid spreading material on unaffected skin.

C. Inhalation

- If exposed or concerned: Get medical advice/ attention.
- If exposed to excessive levels of dusts or fumes, remove to fresh air and get medical attention if cough or other symptoms develop.

D. Ingestion

- If exposed or concerned: Get medical advice/ attention.
- Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

E. Indication of immediate medical attention and notes for physician

- Exposures require specialized first aid with contact and medical follow-up .
- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

5. Fire fighting measures

A. Suitable (and unsuitable) extinguishing media

- Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.
- Use dry sand or earth to smother fire.

B. Specific hazards arising from the chemical

- May decompose at high temperatures into forming toxic gases.
- Containers may explode when heated.
- Some of these materials may burn, but none ignite readily.

- Non-combustible, substance itself does not burn but may decompose upon heating, then produce corrosive and/or toxic fumes.

C. Special protective equipment and precautions for fire-fighters

- Rescuers should put on appropriate protective gear.
- Evacuate area and fight fire from a safe distance.
- Substance may be transported in a molten form.
- Dike fire-control water for later disposal; do not scatter the material.
- Move containers from fire area if you can do it without risk.
- Fire involving Tanks; Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Fire involving Tanks; Cool containers with flooding quantities of water until well after fire is out.
- Fire involving Tanks; 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.
- Fire involving Tanks; For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

6. Accidental release measures

A. Personal precautions, protective equipment and emergency procedures

- Avoid breathing dust/fume/gas/mist/vapours/spray.
- Clean up spills immediately, observing precautions in Protective Equipment section.
- Isolate hazard area.
- Keep unnecessary and unprotected personnel from entering.
- Eliminate all ignition sources.
- Stop leak if you can do it without risk.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Cover with plastic sheet to prevent spreading.
- Please note that there are materials and conditions to avoid.

B. Environmental precautions and protective procedures

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

C. The methods of purification and removal

- Absorb spills with inert material (e.g., dry sand or earth), then place in a chemical waste container.
- Absorb the liquid and scrub the area with detergent and water.

7. Handling and storage

A. Precautions for safe handling

- Do not handle until all safety precautions have been read and understood.
- Avoid breathing dust/fume/gas/mist/vapours/spray.
- Use only outdoors or in a well-ventilated area.
- Follow all MSDS/label precautions even after container is emptied because they may retain product residues.
- Use carefully in handling/storage.
- Loosen closure cautiously before opening.
- Please note that there are materials and conditions to avoid.

B. Conditions for safe storage

- Store in a well-ventilated place. Keep container tightly closed.
- Empty drums should be completely drained, properly bunged, and promptly returned to a drum reconditioner, or properly disposed of.

8. Exposure controls/personal protection

A. Occupational Exposure limits

Korea regulation

C08-10 alkyl polyglucoside TWA = 10 mg/m³

GLYCEROL TWA = 10 mg/m³

ACGIH regulation

C08-10 alkyl polyglucoside TWA 10 mg/m³

GLYCEROL TWA 10 mg/m³ (mist)

Distillates (petroleum), hydrotreated light paraffinic TWA 5 mg/m³ Mineral oil, excluding metal

Biological exposure index : Not available

OSHA regulation

GLYCEROL TWA = 15 mg/m³(mist, total particulate), 5 mg/m³(mist, respirable fraction)

Distillates (petroleum), hydrotreated light paraffinic TWA = 5 mg/m³(Oil mist(mineral)/ CAS No. 8012-95-1)

NIOSH regulation

GLYCEROL TWA = 10 mg/m³ (mist, as an 8-hour TWA)

Distillates (petroleum), hydrotreated light paraffinic TWA = 5 mg/m³, STEL = 10 mg/m³(Oil mist(mineral)/ CAS No. 8012-95-1)

EU regulation : Not available

Other

Propane-1,2-diol Latvia: TWA = 7 mg/m³ Canada: TWA = 10 mg/m³ TWA = 50 ppm (aerosol and vapor), TWA = 155 mg/m³(aerosol and vapor) Ireland: TWA =150ppm(mg/m³), TWA = 10mg/m³(particulate), TWA = 10mg/m³ (particulate).

GLYCEROL Australia : TWA=10 mg/m³ Canada : TWA=10 mg/m³ France : TWA=10 mg/m³ Germany : TWA=100 mg/m³ Greece : TWA=10 mg/m³

B. Appropriate engineering controls

- Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.
- If user operations generate dust, fume, or mist, use ventilation to keep exposure to airborne contaminants below the recommended exposure limit.

C. Personal protective equipment

Respiratory protection

- Wear NIOSH or European Standard EN 149 approved full or half face piece (with goggles) respiratory protective equipment when necessary.
- In case exposed to gaseous/liquid material, the respiratory protective equipments as follow are recommended. escape full facepiece gas mask (of use for acid gas, in case of acid gas for organic compounds) or escape half facepiece gas mask (of use for acid gas, in case of acid gas for organic compounds) or direct full facepiece gas mask (of use for acid gas, in case of acid gas for organic compounds) half facepiece gas mask (of use for acid gas, in case of acid gas for organic compounds) or powered air-purifying gas mask.
- In lack of oxygen(< 19.5%), wear the supplied-air respirator or self-contained breathing apparatus.oxygen

Eye protection

- Wear enclosed safety goggles to protect from gaseous state organic material causing eye irritation or other disorder.
- An eye wash unit and safety shower station should be available nearby work place.

Hand protection

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

Body protection

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

9. Physical and chemical properties

A. Appearance

Description Liquid

Color

B. Odor

C. Odor threshold Not available

D. pH

- E. Melting point/freezing point** Not available
- F. Initial boiling point and boiling range** Not available
- G. Flash point** Not available
- H. Evaporation rate** Not available
- I. Flammability (solid, gas)** Not applicable
- J. Upper/lower flammability or explosive limits** Not available
- K. Vapor pressure** Not available
- L. Solubility (ies)** Not available
- M. Vapor density** Not available
- N. Specific gravity**
- O. Partition coefficient: n-octanol/water** Not available
- P. Auto ignition temperature** Not available
- Q. Decomposition temperature** Not available
- R. Viscosity**
- S. Molecular weight** Not available

10. Stability and reactivity

A. Chemical stability and Possibility of hazardous reactions:

- May decompose at high temperatures into forming toxic gases.
- Containers may explode when heated.
- Some of these materials may burn, but none ignite readily.
- Non-combustible, substance itself does not burn but may decompose upon heating, then produce corrosive and/or toxic fumes.

B. Conditions to avoid:

- Heat, sparks or flames

C. Incompatible materials:

- Combustibles, reducing agents

D. Hazardous decomposition products:

- Corrosive and/or toxic fume
- Irritating, corrosive and/or toxic gases

11. Toxicological information

A. Information of Health Hazardous:

Acute toxicity

Oral [Not classified] (ATEmix = 1,216,260.16 mg/kg bw)

- **Polysiloxane** : Rat LD₅₀ > 5,000 mg/kg
- **White Mineral Oil Liquid Paraffin** : Rat LD₅₀ > 5,000 mg/kg (OECD TG 401, GLP)
- **Propane-1,2-diol** : Rat LD₅₀ = 22,000 mg/kg
- **GLYCEROL** : Rat LD₅₀ = 27,200 mg/kg (female)
- **Distillates (petroleum), hydrotreated light paraffinic** : Rat LD₅₀ > 5,000 mg/kg (OECD TG 401, GLP)

Dermal [Not classified] (ATEmix = 5,675,000 mg/kg bw)

- **Polysiloxane** : Rabbit LD₅₀ > 10,000 mg/kg Acute toxicity is very low
- **White Mineral Oil Liquid Paraffin** : Rabbit LD₅₀ > 2,000 mg/kg (OECD TG 402, GLP)
- **Propane-1,2-diol** : Rabbit LD₅₀ > 2,000 mg/kg
- **GLYCEROL** : Guinea pig LD₅₀ = 56,750 mg/kg
- **Distillates (petroleum), hydrotreated light paraffinic** : Rabbit LD₅₀ > 2,000 mg/kg (OECD TG 402, GLP)

Inhalation [Not classified]

- **Polysiloxane** : Rat LC₅₀ > 535 mg/L Acute toxicity is very low
- **White Mineral Oil Liquid Paraffin** : Rat LC₅₀ > 5 mg/L/4hr (OECD TG 403, GLP)
- **Propane-1,2-diol** : Rabbit LC₅₀ > 158.5 mg/m³/4hr (LC50 > 317042 mg/m³ air/2h)

- **GLYCEROL** : Rat LC₅₀ > 2.75 mg/L/4hr (male)
- **Distillates (petroleum), hydrotreated light paraffinic** : Rat LC₅₀ > 5.53 mg/L/4hr (OECD TG 403)

Skin corrosion/ irritation [Not available]

- **Polysiloxane** : In test on skin irritation with rabbits, skin irritations were not observed.
- **White Mineral Oil Liquid Paraffin** : In test on skin irritation with rabbits, skin irritations were not observed.(OECD TG 404, GLP)
- **Propane-1,2-diol** : In skin irritation test with rabbits, skin irritations were not observed(OECD TG 404).
- **C08-10 alkyl polyglucoside** : In mild irritation on contact with the skin.
- **GLYCEROL** : In test on skin irritation with rabbits, skin irritations were not observed.
- **Distillates (petroleum), hydrotreated light paraffinic** : In skin irritation test with rabbits, skin irritants were not observed (GLP).

Serious eye damage/ irritation [Not available]

- **Polysiloxane** : In test on eyes irritation with rabbits, eyes irritations were not observed.
- **White Mineral Oil Liquid Paraffin** : In test on eyes irritation with rabbits, eyes irritations were not observed.
- **Propane-1,2-diol** : In eyes irritation test with rabbits, eyes irritations were not observed(OECD TG 405).
- **GLYCEROL** : In test on eyes irritation with rabbits, eyes irritations were not observed.
- **Distillates (petroleum), hydrotreated light paraffinic** : In eyes irritation test with rabbits, irritations were not observed (OECD TG 405, GLP).

Respiratory sensitization [Not classified]

Skin sensitization [Not classified]

- **Polysiloxane** : In skin sensitisation test with animals, skin sensitization were not observed.
- **White Mineral Oil Liquid Paraffin** : In Buehler test with guinea pig, skin sensitisation were not observed.(OECD TG 406, GLP)
- **Propane-1,2-diol** : In skin sensitisation test with guinea pigs, skin sensitisations were not observed(OECD TG 406).
- **C08-10 alkyl polyglucoside** : irritations were not observed.
- **Distillates (petroleum), hydrotreated light paraffinic** : In Buehler test on skin sensitization with guinea pigs, skin sensitizations were not observed(OECD TG 406, GLP).

Carcinogenicity [Category 1B]

EU

- **Distillates (petroleum), hydrotreated light paraffinic** : Carc. 1B (Note L)

GLYCEROL : In carcinogenicity test with rat, the result gave no evidence of a cancerogenic potential in rat.

Mutagenicity [Not classified]

- **Polysiloxane** : Ames test results negative
- **White Mineral Oil Liquid Paraffin** : Negative reactions were observed in vitro test(Bacterial Reverse Mutation Assay(OECD TG 471))and in vivo test(micronucleus assay(OECD TG 474)).
- **Propane-1,2-diol** : Negative reactions were observed in both in vitro-Mammalian Chromosome Aberration Test(OECD TG 473), bacterial reverse mutation assay and in vivo-mammalian bone marrow chromosome aberration test.
- **GLYCEROL** : Negative reactions were observed in in vitro test(Chromosomal aberrations test(OECD TG 473), unscheduled DNA synthesis test(OECD TG 482), Ames test(OECD TG 471, GLP)).
- **Distillates (petroleum), hydrotreated light paraffinic** : Mutagenic reactions were not observed in both In vitro test(mammalian chromosome aberration test)(OECD TG 473, GLP) and In vivo test(micronucleus assay)(OECD TG 473).

Reproductive toxicity [Not classified]

- **White Mineral Oil Liquid Paraffin** : In developmental toxicity study, No adverse effects were noted on reproductive parameters or on the in utero survival or development of the offspring.(OECD TG 414)
- **Propane-1,2-diol** : In reproductive/developmental toxicity study with mice, no test material-

related adverse effects were observed(OECD TG 414, GLP).

- **GLYCEROL** : In reproductive/developmental oral toxicity study, there were no significant adverse effects on reproductive parameters and no evidence of malformations at any doses.(NOAEL =8000-10000 mg/kg bw)

- **Distillates (petroleum), hydrotreated light paraffinic** : In reproductive(OECD TG 421, GLP)/developmental(OECD TG 414) toxicity with rats, there was no significant evidence for toxicity.

Specific target organ toxicity (single exposure)

- **White Mineral Oil Liquid Paraffin** : No mortality was observed during the study period.Clinical signs included labored breathing, rales, partial closing of the eyes, nasal discharge, recumbency, and incoordination. All animals appeared normal at day 5 after exposure and throughout the remainder of the study period.(OECD TG 403, GLP)

- **Propane-1,2-diol** : In acute oral toxicity study (doses: 15~25 mL/kg gw) with rats, hemorrhagic areas in the small intestine, microscopic changes in kidney and slight congestion of the liver were observed.

- **GLYCEROL** : In acute oral toxicity test with rats, Muscle spasms and clonic convulsions were observed.

- **Distillates (petroleum), hydrotreated light paraffinic** : In subacute inhalation toxicity study with rats, no systemic effects were observed.

Specific target organ toxicity (repeat exposure) [Not classified]

- **White Mineral Oil Liquid Paraffin** : In a 90-day dermal toxicity study, There were no other compound-related effects on mortality, clinical signs, food consumption, organ weights, clinical chemistry.(OECD TG 411, GLP)

- **Propane-1,2-diol** : In subchronic inhalation toxicity study with rats, nasal haemorrhagings were observed.

- **GLYCEROL** : In repeated oral toxicity test with rats, In the male rats was an increase in the final liver/body weight ratio and upon microscopic examination generalized cloudy swelling and hypertrophy of the parenchymal cells was observed. The only effect in the female rats on this level was some generalized cloudy selling upon microscopic examination of the liver.

- **Distillates (petroleum), hydrotreated light paraffinic** : In subchronic dermal toxicity study with rats, no systemic or local effects were considered significant and the NOAEL is ≥ 2000 mg/kg/day(OECD TG 411, GLP)

Aspiration Hazard [Not classified]

- **Distillates (petroleum), hydrotreated light paraffinic** : The test material(Sufficiently refined, IP 346

12. Ecological information

A. Ecological toxicity

- Acute toxicity : [Not classified] (ATEmix = 7066.70609mg/l)

- Chronic toxicity : [Not classified]

Fish

- **White Mineral Oil Liquid Paraffin** : 96hr-LC₅₀ (*Lepomis macrochirus*) > 10000 mg/L

- **Propane-1,2-diol** : 96hr-LC₅₀ = 40613 mg/L

- **GLYCEROL** : 96hr-LC₅₀ = 54000 mg/L

- **Distillates (petroleum), hydrotreated light paraffinic** : 96hr-LC₅₀ > 5000 mg/L (OECD TG 203)

crustacean

- **Propane-1,2-diol** : 48hr-LC₅₀ (*Ceriodaphnia dubia*) = 18340 mg/L ,7d-NOEC(*Ceriodaphnia* sp) = 13020 mg/L

- **GLYCEROL** : 48hr-EC₅₀ = 1955 mg/L

- **Distillates (petroleum), hydrotreated light paraffinic** : 48hr-EC₅₀ > 1000 mg/L (OECD TG 202, GLP, read across; CAS No. 64742-53-6), 7d-NOEC (*Ceriodaphnia* sp.) = 552 mg/L

Algae

- **Propane-1,2-diol** : 72hr-EC₅₀ (*Skeletonema costatum*) = 19300 mg/L (OECD TG 201, GLP)

B. Persistence and degradability

Persistence

- **White Mineral Oil Liquid Paraffin** : High persistency (log Kow is more than 4 estimated.) (Log Kow = 4.27) (estimated)
- **Propane-1,2-diol** : Low persistency (log Kow is less than 4 estimated.) (Log Kow = -1.07) (EU Method A.8, GLP)
- **GLYCEROL** : Low persistency (log Kow is less than 4 estimated.) (Log Kow = -1.75) (25 °C)(OECD TG 107)
- **Distillates (petroleum), hydrotreated light paraffinic** : High persistency (log Kow is more than 4 estimated.) (Log Kow = 3.9 ~ 6)

Degradability Not available

C. Bioaccumulative potential**Bioaccumulation**

- **White Mineral Oil Liquid Paraffin** : Bioaccumulation is expected to be high according to the BCF \geq 500 (BCF = 1216) (estimated)
- **Propane-1,2-diol** : Bioaccumulation is expected to be low according to the BCF < 500 (BCF = 0.09)
- **GLYCEROL** : Bioaccumulation is expected to be low according to the BCF < 500 (BCF = 3.162) (Estimated)

Biodegradation

- **Propane-1,2-diol** : As well-biodegraded, it is expected to have low accumulation potential in living organisms (= 106.8% biodegradation was observed after 28 days) (OECD TG 301F, GLP)
- **GLYCEROL** : As well-biodegraded, it is expected to have low accumulation potential in living organisms (= 60% biodegradation was observed after 2 hrs)
- **Distillates (petroleum), hydrotreated light paraffinic** : As not well-biodegraded, it is expected to have high accumulation potential in living organisms (= 31% biodegradation was observed after 28 days) (OECD TG 301F, GLP)

D. Mobility in soil

- **White Mineral Oil Liquid Paraffin** : High potency of mobility to soil. (Koc = 31280) (estimated)
- **Propane-1,2-diol** : Low potency of mobility to soil. (Koc = 2.9)
- **GLYCEROL** : Low potency of mobility to soil. (Koc = 0.1345) (estimated)

E. Other hazardous effect Not available

13. Disposal considerations**A. Disposal method**

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

B. Disposal precaution

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

14. Transport information

A. UN Number Not applicable

B. UN Proper shipping name Not applicable

C. Transport Hazard class Not applicable

D. Packing group Not applicable

E. Marine pollutant Not applicable

F. Special precautions

in case of fire Not applicable

in case of leakage Not applicable

15. Regulatory information**A. Occupational Safety and Health Regulation**

C08-10 alkyl polyglucoside : Occupational exposure limits listed

GLYCEROL : Occupational exposure limits listed

B. Toxic Chemical Control Act

Water : Existing Chemical Substance (KE-35400)

Polysiloxane : Existing Chemical Substance (KE-31068)

White Mineral Oil Liquid Paraffin : Existing Chemical Substance (KE-35412)

Propane-1,2-diol : Existing Chemical Substance (KE-29267)

C08-10 alkyl polyglucoside : Existing Chemical Substance ; CAS No. (68515-73-1; 1610749-97-1); KE-17731/ CAS No. 7732-18-5: KE-35400

GLYCEROL : Existing Chemical Substance (KE-29297)

Distillates (petroleum), hydrotreated light paraffinic : Existing Chemical Substance (KE-12553)

C. Dangerous Material Safety Management Regulation

Propane-1,2-diol : Dangerous Material Safety Management Regulation 4000L

GLYCEROL : Dangerous Material Safety Management Regulation 4000l

D. Wastes Control Act

White Mineral Oil Liquid Paraffin : Wastes Control Act

Distillates (petroleum), hydrotreated light paraffinic : Wastes Control Act Controlled wastes

E. Other regulation (internal and external)

Internal information

Persistent Organic Pollutants Acts Not regulated

External information

EU classification(classification)

Water : Classification Not classified

Propane-1,2-diol : Classification Not classified

GLYCEROL : Classification Not classified

Distillates (petroleum), hydrotreated light paraffinic : Classification Carc. Cat. 2; R45 (Note L)

EU classification(risk phrases)

Water : Hazard statements Not applicable

Propane-1,2-diol : Hazard statements Not applicable

GLYCEROL : Hazard statements Not applicable

Distillates (petroleum), hydrotreated light paraffinic : Hazard statements R45

EU classification(safety phrases)

Water : Precautionary statements Not applicable

Propane-1,2-diol : Precautionary statements Not applicable

GLYCEROL : Precautionary statements Not applicable

Distillates (petroleum), hydrotreated light paraffinic : Precautionary statements S53 S45

EU SVHC list Not regulated

EU Authorisation List Not regulated

EU Restriction list

Distillates (petroleum), hydrotreated light paraffinic : EU Restriction list 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

Substance of Roterdame Protocol Not regulated

Substance of Stockholme Protocol Not regulated

Substance of Montreal Protocol Not regulated

Foreign Inventory Status

Water

U.S.A management information Section 8(b) Inventory (TSCA): Present

Japan management information Industrial Safety and Health Law Substances (ISHL): 2-(4)-1220

China management information Inventory of Existing Chemical Substances (IECSC): Present 32224

Canada management information Domestic Substances List (DSL): Present

Australia management information Inventory of Chemical Substances (AICS): Present

New Zealand management information Inventory of Chemicals (NZIoC): May be used as a single component chemical under an appropriate group standard.

Philippines management information Inventory of Chemicals and Chemical Substances (PICCS): Present

Polysiloxane

U.S.A management information Section 8(b) Inventory (TSCA): Present [XU]
 Japan management information Existing and New Chemical Substances (ENCS): (7)-476
 China management information Inventory of Existing Chemical Substances (IECSC): Present 08512
 Canada management information Domestic Substances List (DSL): Present
 Australia management information Inventory of Chemical Substances (AICS): Present
 New Zealand management information Inventory of Chemicals (NZIoC): Inventory of Chemicals (NZIoC): HSNO Approval: HSR003036
 Philippines management information Inventory of Chemicals and Chemical Substances (PICCS): Present

White Mineral Oil Liquid Paraffin

U.S.A management information Section 8(b) Inventory (TSCA): Present
 Japan management information Existing and New Chemical Substances (ENCS): (9)-1700
 China management information Inventory of Existing Chemical Substances (IECSC): Present 01379
 Canada management information Domestic Substances List (DSL): Present
 Australia management information Inventory of Chemical Substances (AICS): Present
 New Zealand management information Inventory of Chemicals (NZIoC): May be used as a single component chemical under an appropriate group standard.
 Philippines management information Inventory of Chemicals and Chemical Substances (PICCS): Present

Propane-1,2-diol

New Zealand management information Inventory of Chemicals (NZIoC): May be used as a single component chemical under an appropriate group standard.
 Philippines management information Inventory of Chemicals and Chemical Substances (PICCS): Present
 U.S.A management information Section 8(b) Inventory (TSCA): Present
 Canada management information Domestic Substances List (DSL): Present
 Australia management information Inventory of Chemical Substances (AICS): Present
 Japan management information Existing and New Chemical Substances (ENCS) : (2)-234
 Japan management information Industrial Safety and Health Law Substances (ISHL): 2-(8)-321,2-(8)-323

GLYCEROL

U.S.A management information Section 8(b) Inventory (TSCA): Present
 Japan management information Existing and New Chemical Substances (ENCS): (2)-242
 China management information Inventory of Existing Chemical Substances (IECSC): Present
 Canada management information Domestic Substances List (DSL): Present
 Australia management information Inventory of Chemical Substances (AICS): Present
 New Zealand management information Inventory of Chemicals (NZIoC): May be used as a single component chemical under an appropriate group standard.
 Philippines management information Inventory of Chemicals and Chemical Substances (PICCS): Present

Distillates (petroleum), hydrotreated light paraffinic

U.S.A management information Section 8(b) Inventory (TSCA) : Present
 Japan management information Existing and New Chemical Substances (ENCS) : (9)-1692
 China management information Inventory of Existing Chemical Substances (IECSC): Present 16661
 Canada management information Domestic Substances List (DSL) : Present
 Australia management information Inventory of Chemical Substances (AICS) : Present
 New Zealand management information Inventory of Chemicals (NZIoC) : May be used as a single component chemical under an appropriate group standard
 Philippines management information Inventory of Chemicals and Chemical Substances (PICCS) : Present

16. Other information

A. Information source and references

EPISUITE v4.1; <http://www.epa.gov/opt/exposure/pubs/episuitedl.htm>
 National Emergency Management Agency-Korea dangerous material inventory management system;
<http://www.nema.go.kr/hazmat/main/main.jsp>
 Korea Occupational Health & Safety Agency; <http://www.kosha.net>
 OECD SIDS; <http://webnet.oecd.org/hpv/ui/Search.aspx>
 IARC Monographs on the Evaluation of Carcinogenic Risks to Humans; <http://monographs.iarc.fr>
 AKRON; <http://ull.chemistry.uakron.edu/erd>
 National Chemicals Information System; <http://ncis.nier.go.kr/ncis/>
 TOMES-LOLI®; <http://www.rightanswerknowledge.com/loginRA.asp>
 Waste Control Act enforcement regulation attached [1]
 The Chemical Database -The Department of Chemistry at the University of Akron;
<http://ull.chemistry.uakron.edu/erd/>
 LG care MSDS
 National Toxicology Program; http://ntp-apps.niehs.nih.gov/ntp_tox/index.cfm
 Kukdong Oil&Chemicals CO., LTD MSDS
 American Conference of Governmental Industrial Hygienists TLVs and BEIs.
 NIOSH Pocket Guide; <http://www.cdc.gov/niosh/npg/npgdcas.html>
 REACH information on registered substances; <http://apps.echa.europa.eu/registered/registered-sub.aspx>
 EU CLP; <http://esis.jrc.ec.europa.eu/index.php?PGM=cla>
 SEOJIN CHEMICAL CO., LTD MSDS
 International Uniform Chemical Information Database(IUCLID); <http://esis.jrc.ec.europa.eu/>
 Momentive Performance materials MSDS

B. Issuing date 2014.09.17.**C. Revision number and date****revision number****date of the latest revision****D. Others**

- Revised Material Safety Data Sheet based on the amendments made on the Ministry of Employment and Labor Public Notice on Standard for Classification Labeling of Chemical Substance and Material Safety Data Sheet.
- This MSDS is authored in pursuant to the Article 41 of the Occupational Safety and Health Act.
- The content is based on the latest information and knowledge that we currently possess.
- This MSDS was authored to aid buyer, processor or any other third person who handles the chemical of subject in the MSDS; additionally, it does not warrant suitability of the chemical for special purposes or the commercial use of statements that approves the use of it in combination with other chemicals as well as technical or legal liabilities.
- The content of the MSDS may vary depending on the country or the region and may not coincide with the actual regulations. Therefore, the buyer or the processor of the chemical is responsible for observing responsible government's or the region's regulations.