

MATERIAL SAFETY DATA SHEET

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

A. GHS product identifier FIRSTCLASS WASH AND WAX FOR COLOURED CAR

B. Recommended use of the chemical and restrictions on use

Recommended use car washing

Restrictions on use Limitation of use for other purpose

C. Manufacturers

Company name Bullstone

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

Specific target organ toxicity (single exposure) : Category 3 (narcotic effects)

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

Hazardous to the aquatic environment (acute hazard) : Category 1

Hazardous to the aquatic environment (chronic) : Category 1

B. GHS label elements, including precautionary statements

Pictogram and symbol :



Signal word : Warning

Hazard statements :

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

Precaution

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

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

P273 Avoid release to the environment.

Treatment

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

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

P391 Collect spillage.

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 (%)
Secret materials				1~5
Surfactant				1~5
1-butoxypropan-2-ol	Propylene glycol monobutyl ether	5131-66-8	225-878-4	17~25
Water		7732-18-5	231-791-2	70~80

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 to excessive levels of dusts or fumes, remove to fresh air and get medical attention if cough or other symptoms develop.
- Give artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.

D. Ingestion

- Call emergency medical service.

E. Indication of immediate medical attention and notes for physician

- 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

- Material may produce irritating and highly toxic gases from decomposition by heat and combustion during burning
- 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.
- Some may be transported hot.
- 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.
- 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.
- Prevent dust cloud.
- Please note that there are materials and conditions to avoid.

B. Environmental precautions and protective procedures

- Avoid release to the environment.
- Prevent entry into waterways, sewers, basements or confined areas.

C. The methods of purification and removal

- Collect spillage.
- Absorb 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.
- 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.
- Small Spill; Take up with sand or other non-combustible absorbent material and place into containers for later disposal.

7. Handling and storage

A. Precautions for safe handling

- Avoid breathing dust/fume/gas/mist/vapours/spray.
- Wash ... thoroughly after handling.
- 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.
- Avoid prolonged or repeated contact with skin.
- Please note that there are materials and conditions to avoid.
- Please work with reference to engineering controls and personal protective equipment.
- Be careful to high temperature.

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** : Not available**ACGIH regulation** : Not available**Biological exposure index** : Not available**OSHA regulation** : Not available**NIOSH regulation** : Not available**EU regulation** : Not available**Other****1-butoxypropan-2-ol** Czech Republic : TWA = 270 mg/m³ Ceiling = 550 mg/m³**B. Appropriate engineering controls**

- If user operations generate dust, fume, or mist, use ventilation to keep exposure to airborne contaminants below the recommended exposure limit.
- Facilities for storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

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** 8.7 ~ 9.5**E. Melting point/freezing point** 0 °C**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) g/100g
M. Vapor density Not available
N. Specific gravity 0.914
O. Partition coefficient: n-octanol/water Not available
P. Auto ignition temperature Not available
Q. Decomposition temperature Not available
R. Viscosity Not available
S. Molecular weight Not available

10. Stability and reactivity

A. Chemical stability and Possibility of hazardous reactions:

- 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.
- Fire will produce irritating, corrosive and/or toxic gases.

B. Conditions to avoid:

- Heat, sparks or flames

C. Incompatible materials:

- Combustibles, reducing agents

D. Hazardous decomposition products:

- Material may produce irritating and highly toxic gases from decomposition by heat and combustion during burning
- Corrosive and/or toxic fume
- Irritating and/or toxic gases

11. Toxicological information

A. Information of Health Hazardous:

Acute toxicity

Oral [Not classified] (ATEmix = 9,016.76 mg/kg bw)

- **Poyethylene glycol lauryl ether** : Rat LD₅₀ = 1,000 mg/kg (female)
- **Surfactant** : Rat LD₅₀ > 4,230 mg/kg
- **1-butoxypropan-2-ol** : Rat LD₅₀ = 3,300 mg/kg (OECD TG 401, GLP)

Dermal [Not classified] (ATEmix = 20,368.1 mg/kg bw)

- **Poyethylene glycol lauryl ether** : Rat LD₅₀ = 2,000 mg/kg (OECD TG 402)
- **Surfactant** : Rabbit LD₅₀ > 53,000 mg/kg
- **1-butoxypropan-2-ol** : Rat LD₅₀ > 2,000 mg/kg (OECD TG 402, GLP)

Inhalation [Not classified] (ATEmix = 330 mg/L)

- **Surfactant** : Rat LC₅₀ > 56.1 mg/L/4hr
- **1-butoxypropan-2-ol** : Rat LC₅₀ > 651 ppm/4hr (OECD TG 403, GLP)

Skin corrosion/ irritation [null]

- **Poyethylene glycol lauryl ether** : By administration of Dodecan-1-ol,ethoxylated at dose concentration of 75 mg for 24 hrs showed mild irritation to skin of rabbits by Standard draize test.
- **Surfactant** : - Cocoampho carboxyglycinate : Not available. - Sodium chloride : In skin irritation test with rabbits, skin irritations were slightly irritation observed. - Water : Not applicable.

- **1-butoxypropan-2-ol** : In skin irritation test with rabbits, moderate dermal irritations were observed.(erythema score = 2.7, edema score = 1.3)(OECD TG 404, GLP)

Serious eye damage/ irritation [null]

- **Poyethylene glycol lauryl ether** : By the Standard draize test administration of Dodecan-1-ol, ethoxylated in the dose of 100 mg was reported to be irritating to eye of rabbit.

- **Surfactant** : - Cocoampho carboxyglycinate : Not available. - Sodium chloride : In skin irritation test with rabbits, skin irritations were Severe irritation observed. - Water : Not applicable..

- **1-butoxypropan-2-ol** : In eye irraion test with rabbits, slightly eye irritations were observed. (cornea score=1, iris score=0.9, conjunctivae score=2.7, chemosis score=0.7)(OECD TG 405, GLP)

Respiratory sensitization [Not classified]

Skin sensitization [Not classified]

- **Poyethylene glycol lauryl ether** : Administartion of the test substance Dodecan-1-ol, ethoxylated for 24 hrs. in adult male guinea pigs when injected intracutaneously did not produced direct or delayed sensitization reactions.

- **1-butoxypropan-2-ol** : In Buehler test with guinea pigs, skin sensitisations were not observed. (OECD TG 406, GLP)

Carcinogenicity [Not classified]

KOREA-ISHL, IARC, NTP, OSHA, ACGIH, EU Regulation 1272/2008: not listed

Mutagenicity [Not classified]

- **Poyethylene glycol lauryl ether** : Negative reactions were observed in vitro test(mammalian chromosome aberration test and bacterial reverse mutation assay).

- **Surfactant** : - Cocoampho carboxyglycinate : Not available. - Sodium chloride : In vitro - Salmonella typhimurium/TA97, TA98, TA100, TA1535, TA1537, TA1538(Reverse mutation test; Ames test) (GLP): Negative regardless of having metabolic activation, Nonhuman/Chromosome aberration test: Negative, CHO Cells/Chromosome aberration test:Positive - Water : Not applicable.

- **1-butoxypropan-2-ol** : Negative reactions were observed in in vitro tests(bacterial reverse mutation assay(OECD TG 471, GLP), mammalian chromosome aberration test(OECD TG 473, GLP), and mammalian cell gene mutation test(OECD TG 476, GLP)).

Reproductive toxicity [Not classified]

- **Poyethylene glycol lauryl ether** : Human(female) was treated by endoscopic intravasal injection sclerotherapy using polidocanol. No adverse effects were detected in the newborn.

- **Surfactant** : - Cocoampho carboxyglycinate : Not available. - Sodium chloride : Female/Intraplacentar injection (27 mg/kg for 15W of pregnancy): Abortion, fetal toxicity, musculoskeletal disorder. - Water : Not applicable.

- **1-butoxypropan-2-ol** : In prenatal developmental toxicity study with rats, test material did not induce developmental effects up to 1.0 ml/kg bw/day(OECD TG 414, GLP).

Specific target organ toxicity (single exposure)

- **Poyethylene glycol lauryl ether** : No deaths or signs of toxicity were observed.(OECD TG 402)

- **Surfactant** : -Cocoampho carboxyglycinate : Not available. -Sodium chloride : Rat/Oral (1 mg/kg/24hr): Sodium-potassium emission affect. -Water : Not applicable.

- **1-butoxypropan-2-ol** : In acute oral toxicity test with rats, signs of toxicity were lethargy, comatose, hypopnoea, gasping respiration and rough coat. For surviving animals these signs were reversible within 2 days.(OECD TG 401, GLP)

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

- **Poyethylene glycol lauryl ether** : The average systolic blood pressure of rats medicated at the top dose level was not significantly different from that of the controls 2 hours after the last medication. No gross or microscopic pathologic lesions attributable to medication were noted at autopsy.

- **Surfactant** : -Cocoampho carboxyglycinate : Not available -Sodium chloride : Causes kidney and arterial disorder, glomerulus and nephron loss in hypertensive rats medicated with salt. No effects in normotensive rats not medicated with salt. Rat/Oral (16800 mg/kg/28D): TOXIC EFFECTS: Endocrine - changes in adrenal weight - Water : Not applicable

- **1-butoxypropan-2-ol** : In 28/14day-repeated dose inhalation toxicity test with rats, there were no substance-related effects(OECD TG 412, GLP).
- Aspiration Hazard** [Not classified]

12. Ecological information

A. Ecological toxicity

- Acute toxicity : [Category 1] (ATEmix = 0.20118mg/ℓ)
- Chronic toxicity : [Category 1]

Fish

- **Poyethylene glycol lauryl ether** : 96hr-LC₅₀ (other) = 1.5 mg/L (Salmo salar)
- **Surfactant** : 96hr-LC₅₀ = 6.923 mg/L
- **1-butoxypropan-2-ol** : 96hr-LC₅₀ = 560 ~ 1000 mg/L (OECD TG 203, GLP)

crustacean

- **Poyethylene glycol lauryl ether** : 48hr-LC₅₀ (*Daphnia magna*) = 4.780 ~ 7.580 mg/L
- **Surfactant** : 48hr-EC₅₀ = 2153 mg/L
- **Sodium tripolyphosphate** : 48hr-EC₅₀ > 100 mg/L (TSCA guideline: 40 CFR 797.1930, GLP)
- **1-butoxypropan-2-ol** : 48hr-EC₅₀ > 1000 mg/L (OECD TG 202, GLP)

Algae

- **Sodium tripolyphosphate** : 96hr-EC₅₀ (*Scenedesmus subspicatus*) = 69.2 mg/L (surface under growth curve) (ISO/TC147/SC5/WG5 N84)
- **1-butoxypropan-2-ol** : 96hr-EC₅₀ > 1000 mg/L (GLP), 96h-NOEC (*Selenastrum capricornutum*) = 560 mg/L (GLP)

B. Persistence and degradability

Persistence

- **Poyethylene glycol lauryl ether** : Low persistency (log Kow is less than 4 estimated.) (Log Kow = 1.937) (23 °C)
- **Surfactant** : Cocoampho carboxyglycinate: Not available/ Sodium chloride: log Kow = -0.46/ Water: log Kow = -1.38
- **1-butoxypropan-2-ol** : Low persistency (log Kow is less than 4 estimated.) (Log Kow = 1.2)

Degradability

- **Sodium tripolyphosphate** :

C. Bioaccumulative potential

Bioaccumulation

- **Poyethylene glycol lauryl ether** : Bioaccumulation is expected to be low according to the BCF < 500 (BCF = 120) (estimated)
- **Surfactant** : Cocoampho carboxyglycinate; Not available/ Sodium chloride BCF = 3.162/ Water: Not available
- **1-butoxypropan-2-ol** : Bioaccumulation is expected to be low according to the BCF < 500 (BCF = 3.162) (estimated)

Biodegradation

- **Poyethylene glycol lauryl ether** : This substance is ready biodegradability.
- **Surfactant** : Cocoampho carboxyglycinate: 83%, 28days(OECD 302B)/ Sodium chloride: Not available/ Water: Not available
- **1-butoxypropan-2-ol** : As well-biodegraded, it is expected to have low accumulation potential in living organisms (= 90% biodegradation was observed after 28 days) (OECD TG 301 E, GLP)

D. Mobility in soil

- **Poyethylene glycol lauryl ether** : Low potency of mobility to soil. (Koc = 87.36)
- **1-butoxypropan-2-ol** : Low potency of mobility to soil. (Koc = 9.228) (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 3082

B. UN Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

C. Transport Hazard class 9

D. Packing group III

E. Marine pollutant YSE

F. Special precautions

in case of fire F-A

in case of leakage S-F

15. Regulatory information

A. Occupational Safety and Health Regulation Not regulated

B. Toxic Chemical Control Act

Polyethylene glycol lauryl ether : Existing Chemical Substance (KE-12935)

Surfactant : Existing Chemical Substance ;CAS No.68650-39-5: KE-20947/ CAS No. 7647-14-5: KE-31387/ CAS No. 7732-18-5: KE-35400

1-butoxypropan-2-ol : Existing Chemical Substance (KE-04165)

Water : Existing Chemical Substance (KE-35400)

C. Dangerous Material Safety Management Regulation

Surfactant : Dangerous Material Safety Management Regulation

D. Wastes Control Act Not regulated

E. Other regulation (internal and external)

Internal information

Persistent Organic Pollutants Acts Not regulated

External information

EU classification(classification)

Polyethylene glycol lauryl ether : Classification Not classified

1-butoxypropan-2-ol : Classification Xi; R36/38

Water : Classification Not classified

EU classification(risk phrases)

Polyethylene glycol lauryl ether : Hazard statements Not applicable

1-butoxypropan-2-ol : Hazard statements R36/38

Water : Hazard statements Not applicable

EU classification(safety phrases)

Polyethylene glycol lauryl ether : Precautionary statements Not applicable

1-butoxypropan-2-ol : Precautionary statements S(2)

Water : Precautionary statements Not applicable

EU SVHC list Not regulated

EU Authorisation List Not regulated

EU Restriction list Not regulated

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

U.S.A management information (CERCLA Regulation)

Sodium tripolyphosphate : CERCLA RQ 5000 lb

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 Rotername Protocol Not regulated

Substance of Stockholm Protocol Not regulated

Substance of Montreal Protocol Not regulated

Foreign Inventory Status

Polyethylene glycol lauryl ether

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

Japan management information Existing and New Chemical Substances (ENCS): (7)-97

China management information Inventory of Existing Chemical Substances (IECSC): Present30614

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): HSNO

Approval: HSR003168

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

1-butoxypropan-2-ol

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

Japan management information Existing and New Chemical Substances (ENCS): (7)-97

China management information Inventory of Existing Chemical Substances (IECSC): Present 06478

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): HSNO

Approval: HSR001419

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

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

16. Other information

A. Information source and references

EPIWIN

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>

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

National Chemicals Information System; <http://ncis.nier.go.kr/ncis/>

Corporate Solution From Thomson Micromedex

American Conference of Governmental Industrial Hygienists TLVs and BEIs.

National Institute of Technology and Evaluation(NITE);

<http://www.safe.nite.go.jp/english/db.html>

EU CLP; <http://esis.jrc.ec.europa.eu/index.php?PGM=cla>

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

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

Emergency Response Guidebook 2008;

http://phmsa.dot.gov/staticfiles/PHMSA/DownloadableFiles/Files/erg2008_eng.pdf

National Library of Medicine/genetic toxicology(NLM/GENETOX)
 U.S. National library of Medicine(NLM) ChemIDplus; <http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?CHEM>
 IARC Monographs on the Evaluation of Carcinogenic Risks to Humans; <http://monographs.iarc.fr>
 AKRON; <http://ull.chemistry.uakron.edu/erd>
 Industrial biocide MSDS
 TOMES-LOLI®; <http://www.rightanswerknowledge.com/loginRA.asp>
 TaiDong C&S MSDS
 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/>
 National Toxicology Program; http://ntp-apps.niehs.nih.gov/ntp_tox/index.cfm
 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>
 UN Recommendations on the transport of dangerous goods 17th
 International Uniform Chemical Information Database(IUCLID); <http://esis.jrc.ec.europa.eu/>

B. Issuing date 2014.08.19.

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.