To Our Customers:

The attached Safety Data Sheet (SDS) was prepared by the vendor of the product you purchased through one of our divisions. We used the manufacturer's electronic document directly or scanned a paper copy and generated a file for our automated SDS delivery system.

All statements, technical information, and recommendations contained therein are solely that of the manufacturer of the product. We at Zep Inc. did not verify the accuracy and completeness of the statements and do not warrantee or guarantee the information. We provide vendor SDSs to assist our customers in their compliance efforts. The attached document is in compliance with one of the respective country regulatory requirements noted below:

The OSHA Hazard Communication Standard (in the United States)
The Hazardous Products Regulations (in Canada)

We made every effort to deliver all of the information prepared by the manufacturer. We cannot anticipate all conditions under which this information will be used. If you have any questions about the statements on the SDS, please contact the company shown on the document.

Zep Inc. assumes no liability or responsibility for loss or damage resulting from the improper use or handling of this product, from incompatible product combinations, or from the failure to follow instructions, warnings, and advisories in the manufacturer's product label and Safety Data Sheet.

Sincerely,

Product Stewardship Team
Zep Inc.

Safety Data Sheet (SDS)

According to US regulation OSHA Hazard Communication Standard 29 CFR 1910.1200

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade Name : BRAKE FLUID Premium DOT-4 (BF6)

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

Relevant identified uses: Brake fluid & Clutch Fluid, hydraulic fluid

1.3. Details of the supplier of the safety data sheet

Supplier : KD Finechem Co., Ltd (☎ +82-31-680-0505)

Address : 286, Pyeongtaekhang-ro, Poseung-eup, Pyeongtaek-si, Gyeonggi-do, Korea

Competent person responsible for the safety data sheet

Name : Jaejune Yoon

E-mail : yc0103@kdrnd.co.kr

1.4. Emergency telephone number

Opening hours: KST 09:00 ~ 17:00

TEL. +82-31-680-0505 / FAX. +82-31-680-0507 or European emergency number: 112

SECTION 2 Hazards identification

2.1 Classification of the substance or mixture

According to US regulation OSHA Hazard Communication Standard 29 CFR 1910.1200 (GHS-US)

1) Physicochemcal : Not Classified

2) Health hazards :

Skin corrosion/irritation : Category 2 (H315)

Serious eye damage/eye irritation : Category 2 (H319)

Reproductive toxicity : Category 2 (H361)

3) Environmental hazards : Not Classified

2.2 Label elements

According to US regulation OSHA Hazard Communication Standard 29 CFR 1910.1200 (GHS-US)

1) Pictogram

2) Signal Word : Warning

3) Hazard Statement(s)

H315: Causes skin irritation

H319 - Causes serious eye irritation.

H361 - Suspected of damaging fertility or the unborn child.

4) Precautionary Statement(s)

■ Precautionary

P201 : Obtain special instructions before use.

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

P264 : Wash … thoroughly after handling.

P280 : Wear protective gloves/protective clothing/eye protection/face protection.

P281: Use personal protective equipment as required.

■ Response

P302 + P352: IF ON SKIN: Wash with plenty of soap and water.

P305+P351+P338 : IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses if present and easy to do - continue rinsing.

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

P321: Specific treatment (see ... on this label).

P332 + P313: If skin irritation occurs: Get medical advice/attention.

P337+P313 : IF eye irritation persists: Get medical advice/attention.

P362: Take off contaminated clothing and wash before reuse.

■ Storage

P405 : Store locked up.

■ Disposal

P501 : Dispose of contents and container in accordance with applicable regulations.

2.3 Other hazards.

No Data available

SECTION 3 Composition/information on ingredients

3.2. Mixtures

Substance name	Product identifier	Content in % weight	Classifaction
1. Tris[2-[2-(2-methoxyethoxy)ethoxy] ethyl] orthoborate	CAS no. : 30989-05-0 EC List no: 250-418-4 REACH Registration No. : 01-2119462824-33	50 ~ 60 %	H361 / Repr. 2
2. Methoxy Triglycol	CAS no. : 112-35-6 EC List no: 203-962-1 REACH Registration No. : 01-2119475101-50	30 ~ 35 %	Not Classified
3. Tetraethyleneglycol monomethyl ether	CAS no. : 23783-42-8 EC List no: 245-883-5 REACH Registration No. : 01-2119777928-13	5 ~ 10 %	Not Classified
4. Tetraetylene glycol monobutyl ether	CAS no. : 1559-34-8 EC List no: 216-322-1 REACH Registration No. : 01-2120768763-41	2 ~ 5 %	H319 / Eye Irrit. 2
5. N-Butyldiethanolamine	CAS no. : 102-79-4 EC List no: 203-055-0 REACH Registration No. : 01-2120124239-60	1 ~ 2 %	H318 / Eye Dam. 1 H314 / Skin Corr. 1B

For the classifications not written out in full in this section, including the hazard classes and the hazard statements, the full text is listed in section 16.

SECTION 4 First aid measures

4.1 Description of first aid measures

4.1.1. General notes

Consult a physician. Show this safety data sheet to the doctor in attendance.

Immediately remove contaminated clothing.

4.1.2. Following inhalation

If breathed in, move person into fresh air.

If not breathing, give artificial respiration.

Consult a physician.

4.1.3. Following skin contact

Wash off with soap and plenty of water.

Consult a physician.

4.1.4 Following eye contact

Flush eyes with water as a precaution.

4.1.5 Following injestion

Never give anything by mouth to an unconscious person.

Rinse mouth with water.

Consult a physician.

4.1.6 Self-protection of the first aider

First aider : Payattention to self-protection

4.2 Most important symptoms and effects, both acute and delayed

No data available

4.3 Indication of any immediate medical attention and special treatment needed

No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient

SECTION 5 Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Use Water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media: Do not use a heavy water stream. Use of heavy stream of water may spread fire

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products:

Carbon oxides, harmful vapours, In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise.

5.3. Advice for firefighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

5.4 Further information

The degree of risk is governed by the burning substance and the fire conditions.

Contaminated extinguishing water must be disposed of in accordance with local regulations.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

Protective equipment: When the risk of skin exposure is high (e.g. when cleaning up spillages or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required.

Use protective clothing.

Emergency procedures : Consider evacuation

6.1.2 For emergency responders

Protective equipment : When the risk of skin exposure is high (e.g. when cleaning up spillages or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required.

Emergency procedures : No specific measures are necessary.

6.2. Environmental precautions

Dike for recovery or absorb with appropriate material. Notify authorities if product enters sewers or public waters.

Prevent soil and water pollution.

Prevent liquid from entering sewers, watercourses, underground or low areas.

Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

6.3. Methods and material for containment and cleaning up

6.3.1 For containment

Impound and recover large spill by mixing it with inert granular solids.

6.3.2 For cleaning up:

Detergent. Take up liquid spill into absorbent material sand, saw dust, kieselguhr.

6.3.3 Other information:

Spill: Stop leak if without risk. Contain and collect spillage with non-combustible, absorbent material e. g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

6.4. Reference to other sections

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Protective measures

Use only with adequate ventilation. Put on appropriate personal protective equipment (see Section 8).

Wear appropriate respirator when ventilation is inadequate.

Avoid exposure - obtain special instructions before use.

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

Do not get in eyes or on skin or clothing.

Do not breathe vapour or mist.

Empty containers retain product residue and can be hazardous.

Do not reuse container.

Do not ingest.

Wash thoroughly after handling. Avoid exposure during pregnancy.

Do not eat, drink or smoke when using this product.

Advice on general occupational hygiene

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Do not store in unlabelled containers. Keep container tightly closed. Keep container in a cool, well-ventilated area.

Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Storage class (TRGS 510): Combustible liquids

Storage temperature : < 40 °C

Storage area : Store in dry, cool, well-ventilated area.

7.3 Specific end uses

Recommendations : Brake Fluid

Industrial sector specific solutions : Not available

SECTION 8 Exposure controls/personal protection

8.1 Control parameters

Exposure limit value

1. Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate

Occupational exposure limit values (Workplace Exposure Limits)

KOREA OEL : No Data available

ACGIH : No Data available

OSHA : No Data available

NIOSH : No Data available

DNELs (Derived no effect levels) :

Application Area	Health effect	Routes of exposure	Value
Worker DNEL longterm	Systemic effects	dermal	8.3 mg/kg bw/day
Worker DNEL longterm	Systemic effects	inhalation	29.1 mg/m³
Consumer DNEL, longterm	Systemic effects	Oral	4.1 mg/kg bw/day

Consumer DNEL, longterm	Systemic effects	dermal	4.1 mg/kg bw/day
Consumer DNEL, longterm	Systemic effects	inhalation	7.2 mg/m³

PNECs (Predicted no effect concentrations) :

Compartment	Value
PNEC Fresh water	0.211 mg/l
PNEC Marine water	0.021 mg/l
PNEC Fresh water sediment	0.76 mg/kg dwt
PNEC Marine Water sediment	0.076 mg/kg dwt
PNEC Soil	0.028 mg/kg dw
PNEC Sewage treatment plant	100 mg/l

2. Methoxy Triglycol

Occupational exposure limit values (Workplace Exposure Limits)

KOREA OEL : No Data available

ACGIH : No Data available

OSHA : No Data available

NIOSH : No Data available

DNELs (Derived no effect levels) :

No data available

PNECs (Predicted no effect concentrations) :

No data available

3. Tetraethyleneglycol monomethyl

Occupational exposure limit values (Workplace Exposure Limits)

KOREA OEL : No Data available

ACGIH : No Data available

OSHA : No Data available

NIOSH : No Data available

DNELs (Derived no effect levels) :

No data available

PNECs (Predicted no effect concentrations) :

No data available

4. Tetraetylene glycol monobutyl ether

Occupational exposure limit values (Workplace Exposure Limits)

KOREA OEL : No Data available

ACGIH : No Data available

OSHA : No Data available

NIOSH : No Data available

DNELs (Derived no effect levels) :

No data available

PNECs (Predicted no effect concentrations) :

No data available

5. N-Butyldiethanolamine

Occupational exposure limit values (Workplace Exposure Limits)

KOREA OEL : No Data available

ACGIH : No Data available

OSHA : No Data available

NIOSH : No Data available

DNELs (Derived no effect levels) :

No data available

PNECs (Predicted no effect concentrations) :

No data available

8.2 Exposure controls

8.2.1. Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice.

Wash hands before breaks and at the end of workday.

8.2.2. Personal protective equipment

8.2.2.1. Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

8.2.2.2. Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product.

Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

butyl rubber (butyl) - 0.7 mm coating thickness

nitrile rubber (NBR) - 0.4 mm coating thickness

Body protection: Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

8.2.2.3. Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls.

If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

8.2.2.4. Thermal hazards

No specific measures.

8.2.3. Environmental exposure controls

Prevent further leakage or spillage if safe to do so.

Do not let product enter drains.

Discharge into the environment must be avoided.

SECTION 9 Physical and chemical properties

9.1. Information on basic physical and chemical properties

A. Physical state	Liquid
B. Color	Amber
C Odor	product specific
D. Melting Point / Freezing Point	< -50°C
E. Boiling point or initial boiling point and boiling rang	> 265°C
F. Flammability	No data available
G. Lower and upper explosion limit	3.0% / 15%
H. Flash point	135°C (c.c)
I. Auto-ignition temperature	> 200°C
J. Decomposition temperature	No data available
K. pH	7.0 ~ 9.0
L. Kinematic viscosity	< 750 cst (-40°C)
M. Solubility (in water)	Complete.
N. Partition coefficient n-octanol/water (log value)	No data available
O. Vapour pressure	No data available
P. Density and/or relative density	1.060 ~ 1.080
Q. Relative vapour density	No data available
R. Particle characteristics	No data available

9.2. Other information

No additional information available

SECTION 10 Stability and reactivity

10.1 Reactivity : No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals: No corrosive effect on metal

Formation of flammable gases: Forms no flammable gases in the presence of water

10.2 Chemical stability : Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions : No hazardous reactions when stored and handled according to instructions.

10.4 Conditions to avoid : Avoid open flames.

10.5 Incompatible materials : Strong acids, Strong oxidizing agents, Strong bases, Aldehydes, Aluminum

10.6 Hazardous decomposition products

In the event of fire: see section 5

Hazardous decomposition products: No hazardous decomposition products known.

SECTION 11 Toxicological information

11.1 Information on toxicological effects

1. Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate

Acute toxicity

Oral : LD50 > 2,000 mg/kg bw / Rat male, female / OECD Guideline 401 (Acute Oral Toxicity)

Inhalation : No data available

Dermal : LD50 > 2,000 mg/kg bw / Rat male, female / OECD Guideline 402 (Acute Dermal Toxicity)

Skin contact : No data available

Eye contact or Irritation : No data available

Sensitization : No data available

Carcinogenicity :

OSHA : Not listed

NTP : Not listed

IARC (GROUP) : Not listed

ACGIH : Not listed

EC : Not listed

Germ cell Mutagenicity : No data available

Reproductive toxicity : Suspected of damaging the unborn child.

Specified target organ general toxicity - single exposure : No data available

Specified target organ general toxicity - repetitive exposure : No data available

Aspiration respiratory organs hazard : No data available

Signs and Symptoms of Exposure : No data available

Additional Information : No data available

2. Methoxy tri glycol

Acute toxicity

Oral : LD50 >3980 mg/kg bw / Rat (IUCLID)

Inhalation : No data available

Dermal : LD50 7400 mg/kg bw / Rabbit (IUCLID)

Skin contact : Human - Slight irritation

Eye contact or Irritation : Rabbit - Slight irritation

Sensitization : No data available

Carcinogenicity :

KOSHA : Not listed

OSHA : Not listed

NTP : Not listed

IARC (GROUP) : Not listed

ACGIH : Not listed

EC : Not listed

Germ cell Mutagenicity : Invitro / Negative

Reproductive toxicity : Rat / patrilineal / matrilineal influence

Specified target organ general toxicity - single exposure : No data available

Specified target organ general toxicity - repetitive exposure : No data available

Aspiration respiratory organs hazard : No data available

Signs and Symptoms of Exposure : No data available

Additional Information : No data available

3. Tetraethyleneglycol monomethyl

Acute toxicity

Oral : LD50 2000 mg/kg bw / Rat (IUCLID)

Inhalation : No data available

Dermal : LD50 2000 ㎎/㎏ Rat (SIDS)

Skin contact : Not irritating (SIDS)

Eye contact or Irritation : Not irritating (SIDS)

Sensitization : No data available

Carcinogenicity :

KOSHA : Not listed

OSHA : Not listed

NTP : Not listed

IARC (GROUP) : Not listed

ACGIH : Not listed

EC : Not listed

Germ cell Mutagenicity : Invitro / Negative (SIDS)

Reproductive toxicity : NOAEL(maternal, teratogen) 1000 mg/kg bw (SIDS)

Specified target organ general toxicity - single exposure : No data available

Specified target organ general toxicity - repetitive exposure : No data available

Aspiration respiratory organs hazard : No data available

Signs and Symptoms of Exposure : No data available

Additional Information : No data available

4. Tetraetylene glycol monobutyl ether

Acute toxicity

Oral : LD50 2630 mg/kgbw Rat (ECHA)

Inhalation : No data available

Dermal : LD50 >4220 ㎎/㎏ / Rat (IUCLID)

Skin contact : Draize Dermal Irritation Scoring System:0(No erythema, No edema)

Eye contact or Irritation : Conjunctival hyperemia score: 2-3, iritis score: 1

Sensitization : No data available

Carcinogenicity :

KOSHA : Not listed

OSHA : Not listed

NTP : Not listed

IARC (GROUP) : Not listed

ACGIH : Not listed

EC : Not listed

Germ cell Mutagenicity : Invitro / Negative

Reproductive toxicity : No data available

Specified target organ general toxicity - single exposure : No data available

Specified target organ general toxicity - repetitive exposure : No data available

Aspiration respiratory organs hazard : No data available

Signs and Symptoms of Exposure : No data available

Additional Information : No data available

5. N-Butyldiethanolamine

Acute toxicity

Oral : LD50 Oral - Rat - male and female - 4,800 mg/kg

Inhalation : No data available

Dermal : LD50 >4220 ㎎/㎏ / Rat (IUCLID)

Skin contact : Skin - Rabbit - Corrosive - 20 h - OECD Test Guideline 404

Eye contact or Irritation : Eyes - Rabbit - Causes burns.

Sensitization : Buehler Test - Guinea pig - negative - OECD Test Guideline 406

Carcinogenicity :

KOSHA : Not listed

OSHA : Not listed

NTP : Not listed

IARC (GROUP) : Not listed

ACGIH : Not listed

EC : Not listed

Germ cell Mutagenicity : Genotoxicity in vitro - Ames test - Escherichia coli/Salmonella typhimurium - with and without metabolic activation - negative

Genotoxicity in vitro - In vitro mammalian cell gene mutation test - Mouse lymphoma test activation - with and without metabolic - negative

Genotoxicity in vitro - Mutagenicity (mammal cell test): chromosome aberration. - Human lymphocytes without - with and metabolic activation - negative

Reproductive toxicity : No data available

Specified target organ general toxicity - single exposure : No data available

Specified target organ general toxicity - repetitive exposure : No data available

Aspiration respiratory organs hazard : No data available

Signs and Symptoms of Exposure : No data available

Additional Information : No data available

11.2 Further information

The product has not been tested.

The statements on toxicology have been derived from the properties of the individual components.

SECTION 12 Ecological information

12.1 Toxicity

1. Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate

Fishes : LC50 590 ㎎/L 96hr Salmo gairdneri (GLP)

Crustacea : EC50 MIN 1000 ㎎/L 48hr Daphnia magna

Seaweeds : EC50 430 ㎎/L 96hr Selenastrum capricornutum (GLP)

2. Methoxy Triglycol

Fishes : LC50 MIN 10000㎎/L 96hr Leuciscus idus

Crustacea : EC50 MIN 500㎎/L 48hr Daphnia magna

Seaweeds : ErC50 MIN 500㎎/L 72hr Scenedesmus subspicatus

3. Tetraethyleneglycol monomethyl

Fishes : LC50 > 10000 ㎎/L 96 hr Brachydanio rerio

Crustacea : No data available

Seaweeds : No data available

4. Tetraetylene glycol monobutyl ether

Fishes : LC50 2400 ㎎/L 96 hr Pimephales promelas

Crustacea : EC50 2210 ㎎/L 48 hr Daphnia magna

Seaweeds : EC50 > 1000 ㎎/L 96 hr Selenastrum capricornutum

5. N-Butyldiethanolamine

Fishes : LC50 884.484 ㎎/L 96 hr

Crustacea : LC50 50.235 ㎎/L 48 hr

Seaweeds : 47.045 ㎎/L 96

12.2 Persistence and Degradability

1. Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate

Persistence : 0.5 log Kow

Degradability : No data available

2. Methoxy Triglycol

Persistence : -1.46 log Kow

Degradability : No data available

3. Tetraethyleneglycol monomethyl

Persistence : -0.6 log Kow

Degradability : No data available

4. Tetraetylene glycol monobutyl ether

Persistence : -0.26 log Kow

Degradability : No data available

5. N-Butyldiethanolamine

Persistence : -0.03 log Kow

Degradability : No data available

12.3 Bioaccumulative potential

1. Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate

Accumulation : No data available

2. Methoxy Triglycol

Accumulation : 0.046

3. Tetraethyleneglycol monomethyl

Accumulation : 3.16

4. Tetraetylene glycol monobutyl ether

Accumulation : 1

5. N-Butyldiethanolamine

Accumulation : No data available

12.4 Mobility in Soil

1. Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate : 0.007477 (EPISUITE)
2. Methoxy Triglycol : No data available
3. Tetraethyleneglycol monomethyl : No data available
4. Tetraetylene glycol monobutyl ether : No data available
5. N-Butyldiethanolamine : No data available

12.5 Result of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.5 Result of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Endocrine disrupting properties

"This product does not have endocrine disrupting properties with respect to non-target organisms as it does not meet the criteria set out in section B of Regulation (EU) No 2017/2100.

12.7 Other adverse effects

The product does not contain substances that are listed in Annex I of Regulation (EC) 2037/2000 on substances that deplete the ozone layer.

12.8 Additional information

Adsorbable organically-bound halogen (AOX): This product contains no organically-bound halogen.

Other ecotoxicological advice: The product has not been tested. The statement has been derived from the properties of the individual components.

Do not release untreated into natural waters.

SECTION 13 Disposal considerations

13.1 Waste treatment methods

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

13.1.1. Product / Packaging disposal

Product

Hazardous waste: Yes

European waste catalogue (EWC)

Waste code : 16 01 13*

Waste designation : Brake fluids

Must be disposed of or incinerated in accordance with local regulations.

Packaging

Contaminated packaging: Uncontaminated packaging can be re-used.

Packs that cannot be cleaned should be disposed of in the same manner as the contents

13.1.2. Waste treatment-relevant information

Can be incinerated togetherwith household waste in compliance with applicable technical regulations following consultation with approved waste disposal management companies and authorities in charge.

13.1.3. Sewage disposal-relevant information

Release to the environment or sewage system is prohibied. Must be treated as hazardous waste.

13.1.4. Other disposal recommendations

Handle contaminated packages in the same way as the substance itself.

SECTION 14 Transport information

14.1 UN number or ID number

ADR/RID: Not regulated. IMDG: Not regulated. IATA: Not regulated.

14.2 UN proper shipping name

ADR/RID : Not regulated as dangerous goods

IMDG : Not regulated as dangerous goods

IATA : Not regulated as dangerous goods

14.3. Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

14.4. Packing group

ADR/RID: - IMDG: - IATA: -

14.5. Environmental hazards

ADR/RID: No IMDG: No IATA: No

14.6. Special precautions for user

No data available

14.7. . Maritime transport in bulk according to IMO instruments

No data available

SECTION 15 Regulatory Information

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

1. Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate

E.U

Harmonised Classification : -

Major Accident Hazard Legislation : SEVESO III(Directive 2012/18/EU) - Not regulated

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer :Not regulated

Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants(POPs) and amending Directive 79/117/EEC : Not regulated

Substances of very high concern (SVHC) : Not regulated

Annex XVII of Regulation (EC) No 1907/2006: Not regulated

Take note of Dir 94/33/EC on the protection of young people at work.

U.S & CANADA

OSHA regulation (29 CFR1910.119) : No

CERCLA 103 regulation(40 CFR 302.4) : No

EPCRA 302 regulation(40 CFR355.30) : No

EPCRA 304 regulation(40 CFR355.40) : No

EPCRA 313 regulation(40 CFR372.65) : No

US. Toxic Substances Control Act : Listed

CWA (Clean Water Act) : This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CALIFORNIA PROPOSITION 65 : Not Listed

U.S. State Right-to-Know Regulations

New Jersey: Not Listed

Massachusetts: Not Listed

Pennsylvania: Not Listed

CEPA - Domestic Substances List (DSL) : Listed

2. Methoxy Triglycol

E.U

Harmonised Classification : -

Major Accident Hazard Legislation : SEVESO III(Directive 2012/18/EU) - Not regulated

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer :Not regulated

Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants(POPs) and amending Directive 79/117/EEC : Not regulated

Substances of very high concern (SVHC) : Not regulated

Annex XVII of Regulation (EC) No 1907/2006: Not regulated

Take note of Dir 94/33/EC on the protection of young people at work.

U.S & CANADA

OSHA regulation (29 CFR1910.119) : Not Listed

CERCLA 103 regulation(40 CFR 302.4) : Not Listed

EPCRA 302 regulation(40 CFR355.30) : Not Listed

EPCRA 304 regulation(40 CFR355.40) : Not Listed

EPCRA 311 & 312 regulation(40 CFR370) : Not Listed

EPCRA 313 regulation(40 CFR372.65) : Not Listed

US. Toxic Substances Control Act : Listed

CWA (Clean Water Act) : This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CALIFORNIA PROPOSITION 65 : Not Listed

U.S. State Right-to-Know Regulations

New Jersey: Not Listed

Massachusetts: Not Listed

Pennsylvania: Not Listed

CEPA - Domestic Substances List (DSL) : Listed

3. Tetraethyleneglycol monomethyl

E.U

Harmonised Classification : -

Major Accident Hazard Legislation : SEVESO III(Directive 2012/18/EU) - Not regulated

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer :Not regulated

Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants(POPs) and amending Directive 79/117/EEC : Not regulated

Substances of very high concern (SVHC) : Not regulated

Annex XVII of Regulation (EC) No 1907/2006: Not regulated

Take note of Dir 94/33/EC on the protection of young people at work.

U.S & CANADA

OSHA regulation (29 CFR1910.119) : Not Listed

CERCLA 103 regulation(40 CFR 302.4) : Not Listed

EPCRA 302 regulation(40 CFR355.30) : Not Listed

EPCRA 304 regulation(40 CFR355.40) : Not Listed

EPCRA 311 & 312 regulation(40 CFR370) : Not Listed

EPCRA 313 regulation(40 CFR372.65) : Not Listed

US. Toxic Substances Control Act : Listed

CWA (Clean Water Act) : This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CALIFORNIA PROPOSITION 65 : Not Listed

U.S. State Right-to-Know Regulations

New Jersey: Not Listed

Massachusetts: Not Listed

Pennsylvania: Not Listed

CEPA - Domestic Substances List (DSL) : Listed

4. Tetraetylene glycol monobutyl ether

E.U

Harmonised Classification : -

Major Accident Hazard Legislation : SEVESO III(Directive 2012/18/EU) - Not regulated

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer :Not regulated

Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants(POPs) and amending Directive 79/117/EEC : Not regulated

Substances of very high concern (SVHC) : Not regulated

Annex XVII of Regulation (EC) No 1907/2006: Not regulated

Take note of Dir 94/33/EC on the protection of young people at work.

U.S & CANADA

OSHA regulation (29 CFR1910.119) : Not Listed

CERCLA 103 regulation(40 CFR 302.4) : Not Listed

EPCRA 302 regulation(40 CFR355.30) : Not Listed

EPCRA 304 regulation(40 CFR355.40) : Not Listed

EPCRA 311 & 312 regulation(40 CFR370) : Not Listed

EPCRA 313 regulation(40 CFR372.65) : Not Listed

US. Toxic Substances Control Act : Listed

CWA (Clean Water Act) : This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CALIFORNIA PROPOSITION 65 : Not Listed

U.S. State Right-to-Know Regulations

New Jersey: Not Listed

Massachusetts: Not Listed

Pennsylvania: Not Listed

CEPA - Domestic Substances List (DSL) : Listed

5. N-Butyldiethanolamine

E.U

Harmonised Classification : -

Major Accident Hazard Legislation : SEVESO III(Directive 2012/18/EU) - Not regulated

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer :Not regulated

Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants(POPs) and amending Directive 79/117/EEC : Not regulated

Substances of very high concern (SVHC) : Not regulated

Annex XVII of Regulation (EC) No 1907/2006: Not regulated

Take note of Dir 94/33/EC on the protection of young people at work.

U.S & CANADA

OSHA regulation (29 CFR1910.119) : Not Listed

CERCLA 103 regulation(40 CFR 302.4) : Not Listed

EPCRA 302 regulation(40 CFR355.30) : Not Listed

EPCRA 304 regulation(40 CFR355.40) : Not Listed

EPCRA 311 & 312 regulation(40 CFR370) : Not Listed

EPCRA 313 regulation(40 CFR372.65) : Not Listed

US. Toxic Substances Control Act : Listed

CWA (Clean Water Act) : This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CALIFORNIA PROPOSITION 65 : Not Listed

U.S. State Right-to-Know Regulations

New Jersey: Not Listed

Massachusetts: Listed

Pennsylvania: Listed

CEPA - Domestic Substances List (DSL) : Listed

Other EU regulations

Product use : Consumer applications, Industrial applications, Professional applications

15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this product by the supplier.

SECTION 16 Other Information

Assessment of the hazard classes according to UN GHS criteria (most recent version)

Skin irr. Cat.2 - Skin corrosion/irritation Category 2

Eyes irr. Cat.2 - Serious eye damage/eye irritation Category 2A

Rep tox. Cat2 - Reproductive toxicity Category 2

Full text of the classifications, including the hazard classes and the hazard statements, if mentioned in section 2 or 3:

H314 : Causes severe skin burns and eye damage

H315 : Causes skin irritation

H318 : Causes serious eye damage

H319 : Causes serious eye irritation.

H361 : Suspected of damaging fertility or the unborn child.

Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended.

REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended.

Guidance on the compilation of safety data sheets Version 4.0 December 2020

The information presented herein is believed to be factual as it has been derived from the works from the works and opinions of persons believed to be qualified experts; however, nothing contained in this information is to be taken as a warrant or representation for which KD Finechem Co., LTD. Bears legal responsibility. The user should review any recommendation in the specific context of the intended use to determine whether they are appropriate.

(i) Indication of changes

A. Issue date : 27. APR. 2021(SDS Version 2.0)

B. Last revision : 18. Nov. 2022 (SDS Version 2.1)

(Version 2.0 replaces the SDS version Guidance on the compilation of safety data sheets Ver. 4.0)

(ii) NFPA Ratings

Health: 1

Flammability: 1

Instability: 0