

Safety Data Sheet

Section 1. Identification

Product name : ALPHA® EF-6000 NO CLEAN FLUX

Product code : 145413
Product type : Liquid.

Date of issue/Date of : March 14 2023.

revision

| Manufacturer - Supplier | Telephone no.: | Emergency phone: |
|--|---|--|
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Section 2. Hazard identification

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (oral) - Category 5

SKIN CORROSION/IRRITATION - Category 3

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A

SPECIFIC TARGET ORGAN TOXICITY (Narcotic effects) - Category 3

GHS label elements

Hazard pictograms





Signal word

Highly flammable liquid and vapor. **Hazard statements**

> May be harmful if swallowed. Causes mild skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness.

Precautionary statements

Prevention Wear protective gloves, protective clothing, eye protection, face protection, or

hearing protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only outdoors or in a well-ventilated area.

Avoid breathing vapor. Wash thoroughly after handling.

Response : IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call

a POISON CENTER or doctor if you feel unwell. IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. If skin irritation occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation

persists: Get medical advice or attention.

Storage : Store locked up. Store in a well-ventilated place. Keep container tightly closed.

: Dispose of contents and container in accordance with all local, regional, national **Disposal**

and international regulations.

result in classification

Other hazards which do not : Prolonged or repeated contact may dry skin and cause irritation.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

| Ingredient name | % | CAS number |
|------------------|--------|------------|
| sopropyl alcohol | 80-100 | 67-63-0 |
| Organic acid | 1-10 | - |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

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Section 4. First aid measures

Description of necessary first aid measures

Eye contact

: Check for and remove any contact lenses. Immediately flush eyes with running water for at least 30 minutes, keeping eyelids open. Get medical attention.

Inhalation

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that mists are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact

: Wash skin thoroughly with soap and water or use recognized skin cleanser.
Remove contaminated clothing and shoes. Continue to rinse for at least 15 minutes.
Get medical attention if adverse health effects persist or are severe. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

: Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness or

dizziness.

Skin contact: Causes mild skin irritation. Defatting to the skin.

Ingestion : May be harmful if swallowed. Can cause central nervous system (CNS) depression.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:

pain or irritation watering redness

Inhalation : Adverse symptoms may include the following:

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness

Skin contact: Adverse symptoms may include the following:

irritation redness dryness cracking

Ingestion : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

Specific treatments: No specific treatment.

Section 4. First aid measures

Protection of first-aiders

: No action shall be taken involving any personal risk or without suitable training. If it is suspected that mists are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

: Use dry chemical, CO2, water spray (fog) or foam.

Unsuitable extinguishing media

: Do not use water jet.

carbon monoxide

Specific hazards arising from the chemical

: Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.

Hazardous thermal decomposition products : Decomposition products may include the following materials: carbon dioxide

Special protective actions

for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

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

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 6. Accidental release measures

Large spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with noncombustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

including any incompatibilities

Conditions for safe storage, : Store between the following temperatures: 10 to 43°C (50 to 109.4°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

| Ingredient name | Exposure limits |
|-----------------|---|
| | ACGIH TLV (United States, 3/2017). Notes: Refers to Appendix A Carcinogens. ACGIH 2003 Adoption STEL: 400 ppm 15 minutes. TWA: 200 ppm 8 hours. |

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Section 8. Exposure controls/personal protection

Individual protection measures

Hygiene measures

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. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state : Liquid.

Color : Clear. Colorless. Odor : Alcohol-like. : Not available. **Odor threshold**

pН : 3 [Conc. (% w/w): 100%]

Melting point/freezing point Boiling point, initial boiling point, and boiling range

: Not available. : 82°C (179.6°F)

: Closed cup: 12°C (53.6°F) [Tag Closed Cup] Flash point

Evaporation rate Not available. **Flammability** : Not available. Lower and upper explosion : Not available.

limit/flammability limit

: Not available. Vapor pressure

Section 9. Physical and chemical properties and safety characteristics

Relative vapor density : 2.1 [Air = 1] : 0.791 **Relative density** : 0.791 g/cm³ **Density**

Solubility Soluble in the following materials: cold water and hot water.

VOC 787.8 q/l Partition coefficient: n-: Not applicable.

octanol/water

Auto-ignition temperature Decomposition temperature

: 450°C (842°F) : Not available. : Not available. Flow time (ISO 2431) : Not available.

Particle characteristics

Viscosity

Median particle size : Not applicable.

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous

: Under normal conditions of storage and use, hazardous reactions will not occur.

reactions

Conditions to avoid : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not

allow vapor to accumulate in low or confined areas.

Incompatibility with various substances

Extremely reactive or incompatible with the following materials: oxidizing materials, reducing materials, organic materials, metals and alkalis. Reactive or incompatible with the following materials: acids.

: Under normal conditions of storage and use, hazardous decomposition products

Slightly reactive or incompatible with the following materials: moisture.

Hazardous decomposition products

should not be produced. : carbon oxides (CO, CO₂)

Other Hazardous decomposition products

Hazardous polymerization : Under normal conditions of storage and use, hazardous polymerization will not occur.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|-------------------------|-------------|---------|------------|----------|
| Isopropyl alcohol | LD50 Dermal | Rabbit | 6290 mg/kg | - |
| | LD50 Oral | Rat | 4.7 g/kg | - |
| Organic acid | LD50 Oral | Rat | 2260 mg/kg | - |

Irritation/Corrosion

Section 11. Toxicological information

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|-------------------------|--------------------------|---------|-------|----------------------------|-------------|
| Isopropyl alcohol | Eyes - Moderate irritant | Rabbit | - | 24 hours 100 milligrams | - |
| | Eyes - Moderate irritant | Rabbit | - | 10 milligrams | - |
| | Eyes - Severe irritant | Rabbit | - | 100 milligrams | - |
| | Skin - Mild irritant | Rabbit | - | 500 milligrams | - |
| Organic acid | Eyes - Severe irritant | Rabbit | - | 750 Micrograms | - |

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

| Product/ingredient name | 3.5 | Route of exposure | Target organs |
|-------------------------|------------|-------------------|------------------|
| Sopropyl alcohol | Category 3 | - | Narcotic effects |

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely

routes of exposure

: Eye contact. Inhalation. Ingestion.

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness or

dizziness.

Skin contact: Causes mild skin irritation. Defatting to the skin.

Ingestion : May be harmful if swallowed. Can cause central nervous system (CNS) depression.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:

pain or irritation watering

Inhalation : Adverse symptoms may include the following:

nausea or vomiting

headache

redness

drowsiness/fatigue dizziness/vertigo unconsciousness

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Section 11. Toxicological information

Skin contact: Adverse symptoms may include the following:

irritation redness dryness cracking

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not

: Not available.

Long term exposure

Potential immediate

: Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : Frolonged or repeated contact can defat the skin and lead to irritation, cracking and/

or dermatitis.

Carcinogenicity : No known significant effects or critical hazards.
 Mutagenicity : No known significant effects or critical hazards.
 Reproductive toxicity : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

| Route | ATE value |
|--------------|---------------|
| Ø ral | 4661.41 mg/kg |

Section 12. Ecological information

Toxicity

| Product/ingredient name | Result | Species | Exposure |
|-------------------------|------------------------------------|---|----------------------------------|
| Isopropyl alcohol | Acute LC50 4200 mg/l Fresh water | Daphnia - Daphnia magna Crustaceans - Crangon crangon Fish - Rasbora heteromorpha | 48 hours 48 hours 96 hours |
| Organic acid | Acute EC50 374200 μg/l Fresh water | Daphnia - Daphnia magna - Larvae | 48 hours |

Persistence and degradability

Not available.

Bioaccumulative potential

| Product/ingredient name | LogPow | BCF | Potential |
|-------------------------|--------|-----|-----------|
| Isopropyl alcohol | 0.05 | - | low |
| Organic acid | -0.59 | | low |

Section 12. Ecological information

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

| | UN | IMDG | IATA |
|----------------------------|----------------------|----------------------|----------------------|
| UN number | UN1219 | UN1219 | UN1219 |
| UN proper shipping name | Isopropanol solution | Isopropanol solution | Isopropanol solution |
| Transport hazard class(es) | 3 | 3 | 3 |
| Packing group | II | II | II |
| Environmental hazards | No. | No. | No. |
| Additional information | - | - | - |

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15. Regulatory information

China

SDS complies with the General Rules for Classification and Hazardous Communication of Chemicals GB-13690-2009, GB-30000 series, and GB/T 16438-2008.

List of Goods banned for Importing

None of the components are listed.

Drug Precursors Requiring an Import/Export License

None of the components are listed.

Inventory of Hazardous Chemicals

| Ingredient name | Status |
|-----------------|--------|
| 2-Propanol | Listed |

List of Explosive Precursors

None of the components are listed.

List of Goods banned for Exporting

None of the components are listed.

List of Toxic Chemicals Severely Restricted for Importing & Exporting by China

None of the components are listed.

Catalogue and classification of drug precursor chemicals

None of the components are listed.

Inventory of Highly Toxic Articles

None of the components are listed.

Catalogue of Hazardous Chemicals of Priority Management

None of the components are listed.

Catalogue of Occupational Disease Hazard Factors - Dust

None of the components are listed.

Catalogue of Occupational Disease Hazard Factors - Chemical Factors

None of the components are listed.

Other China Regulations

Catalogue of Hazardous Chemicals (2015)

Classification & code of dangerous goods (GB 6944-2012)

Production Safety Law of the People's Republic of China

Law of the People's Republic of China on Prevention and Control of Occupational Diseases

Environmental Protection Law of the People's Republic of China

Regulation on Work Safety Licenses

Classification of transportation packing type of dangerous goods GB/T 15098-2008

General rules for classification and hazardous communication of chemicals GB 13690-2009

List of Dangerous Goods GB12268-2012

Occupational Exposure Limits (OELs) for hazardous chemicals GBZ 2.1-2007

Hazardous Chemicals Safety Management Ordinance China (2013 revised)

Safety data sheet for chemical products: content & order of sections GB/T 16483-2008

Rules for classification and labelling of chemicals GB30000-2013

Guidance on the compilation of safety data sheet for chemical products GB/T 17519-2013

<u>Japan</u>

Fire Service Law

None of the components are listed.

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Section 15. Regulatory information

ISHL

Ordinance on the prevention of the hazard due to specified chemical substances

None of the components are listed.

Special Organic Solvents, etc.

: Not applicable.

Organic solvents poisoning prevention : Class 2

Substances requiring labelling

| Ingredient name | % | Status |
|-----------------|-----|--------|
| Propyl alcohol | ≥90 | Listed |

Chemicals requiring notification

| Ingredient name | % | Status |
|-----------------|-----|--------|
| Propyl alcohol | ≥90 | Listed |

Guideline for Preventing Health Hazard by chemical substances (Carcinogenicity)

None of the components are listed.

Mutagen

None of the components are listed.

: Inflammable **Dangerous Substances Chemical Substances Control Law (CSCL)**

| Ingredient name | % | Status |
|------------------------------|--------|------------|
| sopropyl alcohol; 2-Propanol | 80-100 | Priority |
| | | assessment |

Poisonous and Deleterious Substances

None of the components are listed.

Pollutant Release and Transfer Registers (PRTR)

None of the components are listed.

Republic of Korea

A. Regulation according to ISHA

ISHA article 117 (Harmful substances prohibited from manufacture)

: None of the components are listed.

ISHA article 118 (Harmful substances : None of the components are listed.

requiring permission)

Article 2 of Youth : Not applicable.

Protection Act on Substances Hazardous

to Youth

Exposure Limits of Chemical Substances and Physical Factors

The following components have an OEL:

Isopropyl alcohol

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Section 15. Regulatory information

ISHA Enforcement Regs : None of the components are listed.

Annex 19 (Exposure standards established for harmful factors)

: Mone of the components are listed. **ISHA Enforcement Regs**

Annex 21 (Harmful factors subject to Work

Environment Measurement)

ISHA Enforcement Regs: None of the components are listed.

Annex 22 (Harmful **Factors Subject to** Special Health Check-

up)

Standard of Industrial **Safety and Health Annex 12 (Hazardous** substances subject to : None of the components are listed.

control)

B. Regulation according to Chemicals Control Act

: Mone of the components are listed. **CCA Article 11 (TRI)** Article 18 Prohibited (K-: None of the components are listed.

: Not applicable

Reach Article 27)

Article 19 Subject to authorization (K-Reach

: None of the components are listed.

Article 25)

Article 20 Toxic

Chemicals (K-Reach

Article 20)

| Ingredient name | CAS number | % |
|------------------------------------|------------|---|
| None of the components are listed. | | |

Article 20 Restricted (K- : Mone of the components are listed.

Reach Article 27)

CCA Article 39 (Accident Precaution Chemicals)

| Ingredient name | CAS number | % |
|------------------------------------|------------|---|
| None of the components are listed. | | |

Existing Chemical Substances Subject to

Registration

| Ingredient name | CAS number | % |
|------------------------------------|------------|---|
| None of the components are listed. | | |

C. Dangerous Materials **Safety Management Act** : Class: Class 4 - Flammable Liquid

Item: 2. Class 1 petroleums - Water-insoluble liquid

Threshold: 200 L Danger category: II

Signal word: Contact with sources of ignition prohibited

D. Wastes regulation : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Malaysia

Poison Act, Poison List - Schedule 1

Not applicable.

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Section 15. Regulatory information

Poison Act, Poison List - Schedule 3

Not applicable.

Singapore

Singapore - hazardous chemicals under government control

None.

Taiwan

SDS complies with the Regulation of Labeling and Hazard Communication of Hazardous Chemicals

TCCSCA List of toxic chemicals

Not applicable.

TCCSCA List of concerned chemicals

Not applicable.

OSHA Enforcement Rules

Article 28

: This product contains substances "Specially hazardous to health": Isopropyl alcohol,

1,4-dioxane.

List of chemicals reputed to

be a "threat of imminent

danger"

: This product contains substances considered to be a "Threat of imminent danger":

Isopropyl alcohol.

OSHA Article 29 : None of the components are listed.

OSHA Article 30 : Employers shall not employ a pregnant female laborer to perform any potentially

dangerous or harmful work involving this product. (OSHA Art. 30 first part, par 5)

Regulation Governing Designation and Handling Permission of : Not applicable

Controlled Chemicals

International regulations

Inventory list

Australia : Not determined.

Canada : MI components are listed or exempted.

China : Not determined.

Japan : Not determined.

New Zealand : Not determined.

Philippines : Not determined.

 Republic of Korea
 : MI components are listed or exempted.

 Taiwan
 : All components are listed or exempted.

 United States
 : All components are listed or exempted.

Section 16. Other information

History

Date of issue/Date of

: 3/14/2023

revision

Date of previous issue : 1/23/2020

Version : 2.03

Regulatory Affairs Department

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Section 16. Other information

Key to abbreviations

: ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

N/A = Not available SGG = Segregation Group UN = United Nations

Procedure used to derive the classification

| Classification | Justification |
|--|-----------------------|
| AMMABLE LIQUIDS - Category 2 | On basis of test data |
| ACUTE TOXICITY (oral) - Category 5 | Calculation method |
| SKIN CORROSION/IRRITATION - Category 3 | Calculation method |
| SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A | Calculation method |
| SPECIFIC TARGET ORGAN TOXICITY (Narcotic effects) - Category 3 | Calculation method |

References : Not available.

Indicates information that has changed from previously issued version.

Notice to reader

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Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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