

Safety Data Sheet

Section 1. Identification

Product name : ALPHA® WS-898 Solder Paste 96.5SN/3.0AG/0.5CU 87.7-5-M25

Product code : 259915
Product type : Solid.

Date of issue/Date of : March 15 2023.

revision

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|--|---|--|
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Section 2. Hazard identification

Classification of the substance or mixture : SKIN SENSITIZATION - Category 1 AQUATIC HAZARD (ACUTE) - Category 3 AQUATIC HAZARD (LONG-TERM) - Category 3

GHS label elements

Hazard pictograms



Signal word

Warning

Hazard statements

: May cause an allergic skin reaction.

Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention

: Wear protective gloves. Avoid release to the environment. Avoid breathing dust.

Contaminated work clothing should not be allowed out of the workplace.

Response

: Take off contaminated clothing and wash it before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention.

Storage

Disposal

: Store locked up.

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

and international regulations.

Other hazards which do not : None known.

result in classification

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

| Ingredient name | % | CAS number |
|--------------------------------------|------------|------------|
| Įti n | 80-100 | 7440-31-5 |
| [(methylethylene)bis(oxy)]dipropanol | 1-10 | 24800-44-0 |
| silver | 1-10 | 7440-22-4 |
| polyalkylene glycol | 1-10 | - |
| Amine | 1-10 | - |
| Rosin/Resin | 0.1-1.0 | - |
| Alcohol | 0.1-1.0 | - |
| surfactant | 0.001-0.01 | - |

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.

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 if irritation occurs.

Section 4. First aid measures

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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 adverse health effects persist or are severe. 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. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact

: Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 15 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. 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 adverse health effects persist or are severe. 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 contactInhalationNo known significant effects or critical hazards.No known significant effects or critical hazards.

Skin contact : May cause an allergic skin reaction.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data. **Inhalation** : No specific data.

Skin contact: Adverse symptoms may include the following:

irritation redness

Ingestion : No specific data.

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

Notes to physician

: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments

: No specific treatment.

Protection of first-aiders

: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media

: None known.

metal oxide/oxides

Specific hazards arising from the chemical

: This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products

Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides

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.

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. 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). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up

Small spill

: Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill

: Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. 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). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. 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.

Conditions for safe storage, including any incompatibilities

: Store between the following temperatures: 0 to 10°C (32 to 50°F). Store in accordance with local regulations. 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. 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 |
|-----------------|--|
| lin . | ACGIH TLV (United States, 3/2017). |
| | TWA: 2 mg/m³, (as Sn) 8 hours. |
| silver | ACGIH TLV (United States, 3/2017). |
| | Notes: Substances for which the TLV is |
| | higher than the OSHA Permissible |
| | Exposure Limit (PEL) and/or the NIOSH |
| | Recommended Exposure Limit (REL). |
| | See CFR 58(124) :36338-33351, June 30, |
| | 1993, for revised OSHA PEL. |
| | TWA: 0.1 mg/m³ 8 hours. Form: Dust and |
| | fumes |
| Rosin/Resin | ACGIH TLV (United States, 3/2017). Skin sensitizer. Inhalation sensitizer. |

Appropriate engineering controls

Environmental exposure controls

- : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- : 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.

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. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

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Section 8. Exposure controls/personal protection

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: safety glasses with side-shields.

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.

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 : Solid. Color Gray. Odor Mild.

: Not available. **Odor threshold** pН : Not available. **Melting point/freezing point** : Not available. **Boiling point, initial boiling** : Not available.

point, and boiling range

Flash point : Closed cup: >93.333°C (>200°F)

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

limit/flammability limit

: Not available. Vapor pressure Relative vapor density : Not applicable. **Relative density** : Not available.

Solubility Partially soluble in the following materials: cold water and hot water.

VOC 25 g/l

Partition coefficient: n-

octanol/water

: Not applicable.

Auto-ignition temperature : Not applicable. **Decomposition temperature** : Not available.

Section 9. Physical and chemical properties and safety characteristics

: Not applicable. **Viscosity** : Not available. Flow time (ISO 2431)

Particle characteristics

: Not available. Median particle size

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 : No specific data.

Incompatibility with various : Slightly reactive or incompatible with the following materials: oxidizing materials, reducing materials, combustible materials, organic materials, metals, acids, alkalis substances

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

should not be produced.

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

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|----------------------------|-------------|------------|-------------|----------|
| tin | LD50 Oral | Rat | >2000 mg/kg | - |
| [(methylethylene)bis(oxy)] | LD50 Oral | Rat | 3000 mg/kg | - |
| dipropanol | | | | |
| silver | LD Oral | Guinea pig | >5 g/kg | - |
| | LD Oral | Mouse | >10 g/kg | - |
| | LD50 Oral | Mouse | 100 mg/kg | - |
| | LD50 Oral | Rat | >2000 mg/kg | - |
| polyalkylene glycol | LD50 Dermal | Rabbit | >2 g/kg | - |
| | LD50 Oral | Rat | >5 g/kg | - |
| Amine | LD50 Oral | Rat | 3.28 g/kg | - |
| | LD50 Oral | Rat | >500 mg/kg | - |
| Rosin/Resin | LD50 Oral | Mouse | 2.2 g/kg | - |
| | LD50 Oral | Rat | 3 g/kg | - |
| Alcohol | LD50 Oral | Rat | 1930 mg/kg | - |
| surfactant | LD50 Dermal | Rat | >10 g/kg | - |
| | LD50 Oral | Rat | 500 mg/kg | - |
| | LD50 Oral | Rat | 500 mg/kg | - |
| | LD50 Oral | Rat | 620 mg/kg | - |
| | LD50 Oral | Rat | 689 mg/kg | - |

Irritation/Corrosion

Section 11. Toxicological information

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|-------------------------|--------------------------|------------|-------|----------------------------|-------------|
| Alcohol | Skin - Moderate irritant | Guinea pig | - | 24 hours 100 milligrams | - |
| | Skin - Mild irritant | Human | - | 48 hours 40 milligrams | - |
| | Skin - Moderate irritant | Man | - | 48 hours 16 milligrams | - |
| | Skin - Mild irritant | Pig | - | 48 hours 50 milligrams | - |
| | Skin - Severe irritant | Rabbit | - | 24 hours 100 milligrams | - |
| surfactant | Eyes - Moderate irritant | Rabbit | - | 100 milligrams | - |
| | Eyes - Severe irritant | Rabbit | - | 24 hours 100 microliters | - |

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

<u>Specific target organ toxicity (single exposure)</u>

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely

routes of exposure

: Inhalation. Ingestion.

Potential acute health effects

Eye contactInhalationNo known significant effects or critical hazards.No known significant effects or critical hazards.

Skin contact: May cause an allergic skin reaction.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data. **Inhalation** : No specific data.

Skin contact: Adverse symptoms may include the following:

irritation redness

Ingestion : No specific data.

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Section 11. Toxicological information

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 available.

Long term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : Once sensitized, a severe allergic reaction may occur when subsequently exposed

to very low levels.

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 | 60409.86 mg/kg |
| Dermal | 116146.91 mg/kg |

Section 12. Ecological information

Toxicity

| Product/ingredient name | Result | Species | Exposure |
|---------------------------------------|-----------------------------------|--|----------|
| [(methylethylene)bis(oxy)] dipropanol | Acute EC50 >5000 mg/l | Algae | 72 hours |
| silver | Acute EC50 1.4 µg/l Marine water | Algae - Chroomonas sp. | 4 days |
| | Acute EC50 0.0092 mg/l | Daphnia | 48 hours |
| | Acute EC50 0.24 µg/l Fresh water | Daphnia - Daphnia magna | 48 hours |
| | Acute LC50 11 µg/l Fresh water | Crustaceans - Ceriodaphnia reticulata | 48 hours |
| | Acute LC50 0.00213 mg/l | Fish | 96 hours |
| | Acute LC50 0.00238 mg/l | Fish | 96 hours |
| | Acute LC50 0.00276 mg/l | Fish | 96 hours |
| | Acute LC50 0.00312 mg/l | Fish | 96 hours |
| | Acute LC50 0.00342 mg/l | Fish | 96 hours |
| | Chronic NOEC 5 mg/l Marine water | Algae - Glenodinium halli | 72 hours |
| Amine | Acute LC50 >1000 ppm | Fish | 96 hours |
| Alcohol | Acute LC50 24000 µg/l Fresh water | Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling) | 96 hours |
| surfactant | Acute LC50 2.6 μg/l Fresh water | Crustaceans - Thamnocephalus platyurus - Nauplii | 48 hours |
| | Acute LC50 2350 µg/l Fresh water | Daphnia - Daphnia pulex | 48 hours |
| | Acute LC50 650 μg/l Fresh water | Fish - Oncorhynchus mykiss | 96 hours |

Persistence and degradability

Not available.

| 04: | | 4 | |
|-----------|----|------|------|
| Continued | on | next | page |

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Section 12. Ecological information

Bioaccumulative potential

| Product/ingredient name | LogPow | BCF | Potential |
|---------------------------------------|------------|------|-----------|
| [(methylethylene)bis(oxy)] dipropanol | -0.379 | <5.7 | low |
| silver | - | 70 | low |
| Amine | -2.08 | - | low |
| Rosin/Resin | 1.9 to 7.7 | - | high |
| Alcohol | 2.27 | - | low |

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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

| | UN | IMDG | IATA |
|----------------------------|----------------|----------------|----------------|
| UN number | Not regulated. | Not regulated. | Not regulated. |
| UN proper shipping name | - | - | - |
| Transport hazard class(es) | - | - | - |
| Packing group | - | - | - |
| 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.

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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

None of the components are 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.

ISHL

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

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Section 15. Regulatory information

None of the components are listed.

Special Organic : Not applicable.

Solvents, etc.

Substances requiring labelling

| Ingredient name | % | Status |
|---|------------------|------------------|
| ☑n and its compounds Silver and its compounds (water-soluble) | ≥80 - ≤90 ≤10 | Listed Listed |

Chemicals requiring notification

| Ingredient name | % | Status |
|--|-----------|--------|
| √n and its compounds | ≥80 - ≤90 | Listed |
| Silver and its compounds (water-soluble) | ≤10 | Listed |
| Rosin/Resin | ≤10 | Listed |
| Triethanolamine | ≤10 | Listed |
| Copper and its compounds | ≤10 | Listed |

Guideline for Preventing Health Hazard by chemical substances (Carcinogenicity)

None of the components are listed.

Mutagen

None of the components are listed.

Chemical Substances Control Law (CSCL)

None of the components are listed.

Poisonous and Deleterious Substances

None of the components are listed.

Pollutant Release and Transfer Registers (PRTR)

| Ingredient name | % | Status |
|--|-----|---------|
| silver and its water-soluble compounds | ≤10 | Class 1 |

Republic of Korea

A. Regulation according to ISHA

ISHA article 117 : None of the components are listed.

(Harmful substances prohibited from manufacture)

ISHA article 118 : None of the components are listed.

(Harmful substances 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:

Tin silver ALPHA® WS-898 Solder Paste 96.5SN/3.0AG/0.5CU 87.7-5-M25 Page: 13/15 259915 March 15 2023.

Section 15. Regulatory information

ISHA Enforcement Regs : None of the components are listed.

Annex 19 (Exposure standards established for harmful factors)

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 control)

: Mone of the components are listed.

: None of the components are listed.

: None of the components are listed.

B. Regulation according to Chemicals Control Act

: None 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

Article 25)

Article 20 Toxic

Chemicals (K-Reach

Article 20)

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

Article 20 Restricted (K- : None 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** : Not available.

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

and international regulations.

<u>Malaysia</u>

Poison Act, Poison List - Schedule 1

Not applicable.

Poison Act, Poison List - Schedule 3

Not applicable.

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Section 15. Regulatory information

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": 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":

tin, silver.

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 : All components are listed or exempted.

Canada : At least one component is not listed in DSL but all such components are listed in

NDSL

China : All components are listed or exempted. : MI components are listed or exempted. **Japan New Zealand** : All components are listed or exempted. **Philippines** : All components are listed or exempted. Republic of Korea : All 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

revision

: 3/15/2023

: 1/26/2020 Date of previous issue

Version : 1.02

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 |
|---|--------------------|
| KIN SENSITIZATION - Category 1 | Calculation method |
| AQUATIC HAZARD (ACUTE) - Category 3 | Calculation method |
| AQUATIC HAZARD (LONG-TERM) - Category 3 | Calculation method |

References : Not available.

✓ Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

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 quarantee that these are the only hazards that exist.

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