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# Safety Data Sheet

## Section 1. Identification

**Product name** : **5744 Solder Saver**

**Product code** : 4060075

**Product type** : Solid.

**Date of issue/Date of revision** : February 23 2025.

| Manufacturer - Supplier | Telephone no.: | Emergency phone: |
|---|---|---|
| Alpha Assembly Solutions Inc.<br>Global Headquarters<br>140 Centennial Avenue<br>Piscataway, NJ 08854 | Toll Free: (800) 367-5460<br>Main Phone: (908) 791-3000 | DOMESTIC NORTH AMERICA<br>202-464-2554 |
| Macdermid Performance Solution Hong Kong Limited／ Alpha Assembly Solutions<br>8/F., Paul Y. Centre, 51 Hung To Road,<br>Kwun Tong, Kowloon, Hong Kong | 852-31903100 | 852-31903100<br>INTERNATIONAL, CALL<br>Carechem 24: +65 3158 1074 |
| MacDermid Performance Solutions Japan K.K.<br>480-28 Higashitoyoda, Hiratsuka-shi,<br>Kanagawa, Japan | 81-463-53-3333 | 81-463-53-3333<br>INTERNATIONAL, CALL<br>Carechem 24: +65 3158 1074 |
| Assembly Solutions Korea Co., Ltd<br>111, Suwolam-gil, Seotan-myeon,<br>Pyeongtaek -si, Gyeonggi-do, Korea | 82-31-665-5093 (Ext 2) | 82-31-665-5093 (Ext 5)<br>INTERNATIONAL, CALL<br>Carechem 24: +65 3158 1074 |
| Alpha Assembly Solutions (Shanghai) Trading Co., Ltd.<br>2 floor, 5 Building, No.1151 Lianxi Road,<br>Pudong New Area Shanghai 201204<br>P.R.China | 86-21-63900600 | 86-532-83889090<br>INTERNATIONAL, CALL<br>Carechem 24: +65 3158 1074 |
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| Active Components (NZ) Ltd (Distributor)<br>2/14 Canaveral Drive<br>Rosedale (0632), Auckland<br>New Zealand | Tel: +64 9 443 9500 | National Poisons Centre<br>Free Phone: 0800 764 766 (0800 POISON)<br>INTERNATIONAL, CALL<br>Carechem 24: +65 3158 1074 |
| MacDermid Performance Solutions<br>A Division of MacDermid Performance Solutions Singapore Pte. Ltd.<br>26 Tuas West Road<br>Singapore 638382 | 65-6861 1773 | 65-6861 1773<br>INTERNATIONAL, CALL<br>Carechem 24: +65 3158 1074 |

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# Section 2. Hazard identification

**Classification of the substance or mixture** : SKIN CORROSION/IRRITATION - Category 1B
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A

**GHS label elements**

**Hazard pictograms** :



**Signal word** : Danger

**Hazard statements** : Causes severe skin burns and eye damage.

**Precautionary statements**

**General** : Read carefully and follow all instructions. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

**Prevention** : Wear protective gloves, protective clothing and eye or face protection. Wash thoroughly after handling.

**Response** : IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse. 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.

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

**Other hazards which do not result in classification** : Causes digestive tract burns.

# Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

| Ingredient name | % | CAS number |
|---|---|---|
| Activator | 50-60 | - |
| Fluoride salt. 1 | 30-40 | - |

**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** : Get medical attention immediately. Call a poison center or physician. Check for and remove any contact lenses. Immediately flush eyes with running water for at least 30 minutes, keeping eyelids open. Chemical burns must be treated promptly by a physician.

Washing eyes within several seconds of exposure is essential to minimize damage. Follow company first aid procedures for fluoride exposure which may include applying one or two drops of a 0.5% pontocaine hydrochloride solution into the affected eye(s) if a physician is not immediately available. Do not use any skin treatment preparations for burns to the eye(s).

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# Section 4. First aid measures

**Inhalation** : Get medical attention immediately. Call a poison center or physician. 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. 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** : Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of 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. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Follow company first aid procedures for fluoride exposure which may include soaking the affected area with iced 0.2% water solution of hyamine 1622 or iced 0.13% solution of zepharin. If soaking is not possible, compresses soaked in one of these solutions may be applied, changing them every 2 minutes. For sensitive areas (lips, mouth, etc.) A 2.5% calcium gluconate jelly may be used. Seek immediate medical attention.

**Ingestion** : Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a 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.

Follow company first aid procedures for fluoride exposure which may include having victim drink a 10% calcium gluconate solution with 8 to 10 oz. Of water for dilution of material in stomach.

## Most important symptoms/effects, acute and delayed

### Potential acute health effects

**Eye contact** : Causes serious eye irritation.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : Causes severe burns.

**Ingestion** : Corrosive to the digestive tract. Causes burns.

### Over-exposure signs/symptoms

**Eye contact** : Adverse symptoms may include the following:
pain
watering
redness

**Inhalation** : No specific data.

**Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur

**Ingestion** : Adverse symptoms may include the following:
stomach pains

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

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# Section 4. First aid measures

**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** : Fluoride Compounds: SYMPTOMS MAY BE DELAYED: Clinical signs and symptoms may not appear for up to 24 hours. Concentrations as low as 2% may cause symptoms with prolonged skin contact. When exposure is suspected, immediate medical attention is critical to minimize damage May be fatal if absorbed through the skin, inhaled or ingested. Immediately contact emergency response personnel. Get medical attention immediately. In addition to the basic first aid procedures outlined below, it is highly recommended that emergency procedures be established by your company's physician, to be used in case of fluorine poisoning. This procedures may include the administration by qualified personnel of antidotes such as Aqueous Hyamine, Zephiran Chloride, or Calcium Gluconate Solutions for treating affected skin, as well as use of Pontocaine Hydrochloride Solution for eye application.

**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. 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.

**Specific hazards arising from the chemical** : No specific fire or explosion hazard.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:
nitrogen oxides
halogenated compounds
metal oxide/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".

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# Section 6. Accidental release measures

**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** : 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). Do not get in eyes or on skin or clothing. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. 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 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. Store locked up. 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 |
|---|---|
| Activator | **ACGIH TLV (United States, 3/2007).**<br>TWA: 2.5 mg/m³, (fluorides)<br>**ACGIH TLV (United States, 3/2017).**<br>TWA: 2 mg/m³ 8 hours. Form: Inhalable fraction<br>STEL: 6 mg/m³ 15 minutes. Form: Inhalable fraction |
| Fluoride salt. 1 | **ACGIH TLV (United States, 3/2017).**<br>TWA: 2 mg/m³ 8 hours. Form: Inhalable fraction<br>STEL: 6 mg/m³ 15 minutes. Form: Inhalable fraction |

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## Section 8. Exposure controls/personal protection

**Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**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.

### 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 and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

### 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** : White.

**Odor** : Mild.

**Odor threshold** : Not available.

**pH** : Not available.

**Melting point/freezing point** : >300°C (>572°F)

**Boiling point, initial boiling point, and boiling range** : Not applicable.

**Flash point** : Not applicable.

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# Section 9. Physical and chemical properties and safety characteristics

**Evaporation rate** : Not available.

**Flammability** : Not available.

**Lower and upper explosion limit/flammability limit** : Not applicable.

**Vapor pressure** : Not available.

**Relative vapor density** : Not applicable.

**Relative density** : 1.14

**Solubility** : Not available.

**Miscible with water** : No.

**VOC** 0 g/l

**Partition coefficient: n-octanol/water** : Not applicable.

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

**Decomposition temperature** : Not available.

**Viscosity** : Not applicable.

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

**Particle characteristics**

**Median particle size** : Not available.

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

**Conditions to avoid** : No specific data.

**Incompatibility with various substances** : Reactive or incompatible with the following materials: acids, alkalis and moisture.

**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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

# Section 11. Toxicological information

**Information on toxicological effects**

**Acute toxicity**

Not available.

**Irritation/Corrosion**

Not available.

**Sensitization**

Not available.

**Mutagenicity**

Not available.

**Carcinogenicity**

Not available.

**Reproductive toxicity**

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# Section 11. Toxicological information

Not available.

## Teratogenicity

Not available.

## Specific target organ toxicity (single exposure)

Not available.

## Specific target organ toxicity (repeated exposure)

Not available.

## Aspiration hazard

Not available.

**Information on the likely routes of exposure** : Dermal contact. Eye contact. Inhalation. Ingestion.

## Potential acute health effects

**Eye contact** : Causes serious eye irritation.

**Inhalation** : Fluoride Compounds: Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract. Symptoms include: burning sensation, coughing, wheezing and breathing difficulties, shortness of breath, headache, nausea or vomiting, pulmonary edema. Severe over-exposure can result in death.

**Skin contact** : Causes severe burns.

Fluoride compounds are highly corrosive and readily penetrates the skin causing destruction of deep tissue layers, including bone. Pain may be delayed for up to 24 hours following exposure to concentrations of 1-50% and is often not reported until tissue damage is extreme. Concentrations greater than 50% cause immediate burning, redness and tissue damage. Without immediate medical attention, tissue destruction may continue for days and result in limb loss or death. The extent of burns depends on the concentration, temperature and duration of contact with the acid. Systemic fluoride toxicity can cause hypocalcemia, hypomagnesemia, hyperkalemia, pulmonary edema, metabolic acidosis, ventricular arrythmias and possible death.

**Ingestion** : Corrosive to the digestive tract. Causes burns.

Fluoride Compounds: Symptoms include: necrotic lesions, hemmhoragic gastritis, pancreatitis

## Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : Adverse symptoms may include the following:
pain
watering
redness

**Inhalation** : No specific data.

**Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur

**Ingestion** : Adverse symptoms may include the following:
stomach pains

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

### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

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# Section 11. Toxicological information

## Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

## Potential chronic health effects

Not available.

**General** : No known significant effects or critical hazards.

**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

Not available.

# Section 12. Ecological information

## Toxicity

Not available.

## Persistence and degradability

Not available.

## Bioaccumulative potential

Not available.

## Mobility in soil

**Soil/water partition coefficient ($K_{OC}$)** : 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 non-recyclable 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.

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# Section 14. Transport information

| | UN | IMDG | IATA |
|---|---|---|---|
| **UN number** | UN3260 | UN3260 | UN3260 |
| **UN proper shipping name** | Corrosive Solid, Acidic, Inorganic, n.o.s. (Activator) | Corrosive Solid, Acidic, Inorganic, n.o.s. (Activator) | Corrosive Solid, Acidic, Inorganic, n.o.s. (Activator) |
| **Transport hazard class(es)** | 8  | 8  | 8  |
| **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**

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.

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# Section 15. Regulatory information

## 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

## Japan

### Fire Service Law

None of the components are listed.

### ISHL

None of the components are listed.

### Substances requiring labelling

| Ingredient name | % | Status |
|---|---|---|
| Activator | ≥50 - ≤60 | Listed |
| Fluoride salt. 1 | ≥40 - ≤50 | Listed |

### Chemicals requiring notification

| Ingredient name | % | Status |
|---|---|---|
| Activator | ≥50 - ≤60 | Listed |
| Fluoride salt. 1 | ≥40 - ≤50 | 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 |
|---|---|---|
| Fluoride salt. 1 | ≥40 - ≤50 | Class 1 |

## Republic of Korea

### A. Regulation according to ISHA

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# Section 15. Regulatory information

**ISHA article 117 (Harmful substances prohibited from manufacture)** : None of the components are listed.

**ISHA article 118 (Harmful substances requiring permission)** : None of the components are listed.

**Article 2 of Youth Protection Act on Substances Hazardous to Youth** : Not applicable.

**Exposure Limits of Chemical Substances and Physical Factors**

The following components have an OEL:
Activator
Fluoride salt. 1

**ISHA Enforcement Regs Annex 19 (Exposure standards established for harmful factors)** : None of the components are listed.

**ISHA Enforcement Regs Annex 21 (Harmful factors subject to Work Environment Measurement)** : None of the components are listed.

**ISHA Enforcement Regs Annex 22 (Harmful Factors Subject to Special Health Check-up)** : None of the components are listed.

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

**B. Regulation according to Chemicals Control Act**

**CCA Article 11 (TRI)** : None of the components are listed.

**Article 18 Prohibited (K-Reach Article 27)** : None of the components are listed.

**Article 19 Subject to authorization (K-Reach Article 25)** : None of the components are listed.

**Article 20 Toxic Chemicals (K-Reach Article 20)** : Not applicable

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

**Article 20 Restricted (K-Reach Article 27)** : None of the components are listed.

**CCA Article 39 (Accident Precaution Chemicals)** :

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

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# Section 15. Regulatory information

**Existing Chemical Substances Subject to Registration** :

| Ingredient name | CAS number | % |
|---|---|---|
| Fluoride salt. 1 | - | 30-40 |

**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.

## Malaysia

### Poison Act, Poison List - Schedule 1

Not applicable.

### 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.

**List of chemicals reputed to be a "threat of imminent danger"** : None of the components are listed.

**OSHA Article 29** : None of the components are listed.

**OSHA Article 30** : None of the components are listed.

**Regulation Governing Designation and Handling Permission of Controlled Chemicals** : Not applicable

## International regulations

### Inventory list

**Australia** : All components are listed or exempted.

**Canada** : All components are listed or exempted.

**China** : All components are listed or exempted.

**Japan** : All components are listed or exempted.

**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.

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# Section 16. Other information

## History

**Date of issue/Date of revision** : 2/23/2025

**Date of previous issue** : No previous validation

**Version** : 1

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**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 |
|---|---|
| SKIN CORROSION/IRRITATION - Category 1B<br>SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A | Calculation method<br>Calculation method |

**References** : Not available.

**Indicates information that has changed from previously issued version.**

## Notice to reader

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