MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: SA-1

Manufacture's Name : JOONG OIL CHEMICAL CO.,LTD.

Address : 31-15, Gomo-ro, 526beon-gil, Jillye-myeon, Gimhae-si, Gyeongnam, Korea

Telephone number : 82-55-342-5892 Date Prepare : NOV 23, 2022

Revise : Rev.2

Division : R&D Dept.

Use of Substance : Antistatic agent

2. HAZARDS IDENTIFICATION

Hazard Category

Adverse human health effects

Skin corrosion/Irritation: Class 2 Eye Damage/Irritation: Class 2A

Sensitization-Respiratory : Not classifiable

Sensitization-Skin: Not classifiable

Germ cell mutagenicity: Not classifiable

Carcinogenicity: Not classifiable

Toxic to reproduction: Not classifiable

Aspiration toxicity: Not classifiable

Environmental effects

Hazardous to aquatic environment

Acute hazard : Not classifiable Chromic hazard : Not classifiable

Hazard Pictograms



Signal word : Warning

Hazard statement H315 Causes skin irritation

H319 Causes serious eye irritation

Precautionary statement

Prevention P264 Wash hands thoroughly after handling.

P280 Wear protective gloves and eye/face protection.

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

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

Remove contact lenses if present and easy to do.

P331 Specific treatment (see supplemental first aid instructions on this label).

P333+P313 If skin irritation occurs : Gent medical advice/attention.

P321 Specific treatment (see supplemental first aid instructions on this label).

P362 Take off contaminated clothing and wash before reuse.

Storage P403+P233 Store container tightly closed in well-ventilated place.

Disposal P501 Dispose of contents and container as instructed in Section 13.

3. COMPOSITION / INFORMATION ON INGREDIENTS

NAME	OTHER NAME	CAS No.	wt%
Paraffin oils, sulfochlorinated, saponified		68188-18	100

4. FIRST AID MEASURES

If vapor is inhaled: Take the affected person to a clean-air space and give him rest in a easy- breathing pose.

Seek physician's counsel as may be needed.

If attached to skin: Wash affected area with soap and water.

Seek medical attention if symptoms develop or persist..

If gets in eye: Thoroughly wash the eye with clean water for a several minutes.

Remove contact lens if easily removable. Continue washing after seek physician's counsel.

If swallowed: Immediately wash the mouth with water. Do not compel him to vomit.

Immediately seek physician's counsel.

Ingestion: Rinse mouth. In serious cases seek medical advice.

Special note to physician: No information

5. FIRE FIGHTING MEASURES

Extinguishing media: Extinguish with carbon dioxide, water, foam or powder.

Fire fighting: Move container from fire area if you can do it without risk.

During a fire, irritating and toxic gases may be generated by thermal decomposition or combustion, so fire fighters should wear proper protective equipment, especially for safe respiration.

Fight against fire standing to its windward as much as possible and wear breathing aid if necessary.

Specific hazards: Fire may cause to generate irritant, toxic or erosive gas.

6. ACTIONS FOR LEAKAGE

Personal precautions, protective equipment and emergency procedures :

Ensure adequate centilation.

Ensure air handling systems are operational.

Environmental precaution:

Should not be released into the environment.

Prevent from reaching drains, sewer or waterway.

Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing.

Reference to other sections: None

7. HANDLING AND STORAGE

Handling

Technical measures: Near a handling place, install a shower to wash eyes and a body.

Safe handling: Good ventilation is required. Wear protective gloves and eye/face protection.

Avoid contact with eyes, skin. Avoid breathing mist or vapor.

Rinse mouth with water and wash hands after work.

Storage: Keep container closed. Avoid high temperature and freezing.

Store in a cool dry spaces.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Facility measures: Local ventilation of closed work room or total proper ventilation to prevent vapor inhalation.

Exposure controls

Permissible concentration: No data available.

ACGIH TLV-TWA: No data available.

TLV-STEL: No data available.

Personal protection

Skin protection: Rubber of plastic gloves, rubber boots and chemical apron.

Eye protection: Safety goggles of face shield.

Respiratory protection: Wear a suitable mask when vapor/aerosols are generated.

Skin and body protection: Long-sleeve fatigue uniform.

Hygienic measures: Wash hands well after handling.

Other protective clothing or equipment: Standard working clothes. Hand wash and Eye wash equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form and color: White flake

Oder : Slight smell $pH: 7\pm 1 \ (1\% \ soln.)$

Boiling point: Not determined or not available Flash point: Not determined or not available

Melting point : Approx. 60°C

Solubility in water: Soluble in water

Explosion limit lower: Not determined or not available Vapor pressure at 20°C: Not determined or not available

Evaporation rate: Not determined or not available Relative density: Not determined or not available Partition coeffocient: Not determined or not available Vapor density: Not determined or not available

Other: None

10. STABILITY AND REACTIVITY

Stability: Stable. Avoid high temperature sources which induce thermal decomposition.

Incompatibility (Materials to avoid): Strong oxidizing agents, and bases.

Hazardous polymerization: Will not occur.

Hazardous decomposition products: Carbon oxides on burning.

Other: None

11. TOXICOLOGICAL INFORMATION

Acute toxicity-Oral: No data available. Acute toxicity-Dermal: No data available. Skin corrosion/Irritation: No data available. Eye damage/Irritation: No data available. Toxic to reproduction: No data available.

Respiratory of skin sensitizations: No data available.

Carcinogenicity: No data available. Reproductive toxicity: No data available.

Other: None

12. ECOLOGICAL INFORMATION

Hazardous to aquatic environment Acute hazard: No data available. Chronic hazard: Not classifiable Degradability: No data available.

Bio-concentration Factor: No data available.

BOD / COD : No data available.

Other: None

13. PRECAUTION FOR DISPOSAL

Residual & waste:

In the disposal of residual and other wastes, observe the relevant laws/regulations and local government rules.

User of the product should contract with the local government or licenses "Industrial Waste Haulers' for disposal of waste.

It is important to let the contractor know well of fire and health hazards of the product, prior to disposal.

Contaminated containers and packages:

Dispose of contents/container in accordance with local/regional/national/international regulation.

14. PRECAUTION FOR TRANSPORTATION

Domestic control

Onshore control info.: Observe the Fire fighting Law & the Occupational Safety and Health act.

Offshore control info. : Observe the Marine Vessel Safety Law.

Air cargo control info. : Observe the Aviation Law.

UN number: Not applicable

UN classification: Not applicable

Special safety measure:

Containers of hazardous material must be piled firmly and orderly to avoid falling, tumbling and breaking.

Cargo of hazardous material must be transported in a way the containers or the material itself do not suffer severe friction.

15. APPLICABLE LAWS

Observe all federal, state and local regulations.

16. OTHER INFORMATION

Reference: 1) Chemical Safety Data Sheet (MSDS) Part 1: Content and Order of Items

2) Hazard Handbook of Chemicals by KOREA Industrial Safety and Health Association This data sheet is edited by referring to recently available information, however, it is snot intended to guarantee the data values or the precision of contained information. The precautions mentioned above are for ordinary handling and use. For special handling and use, please provide adequate safety measures for the particular cases.