

TEL: 82-63-469-1500 FAX: 82-63-469-1519 469-1579

1. COMPANY IDENTIFICATION

NAME OF MANUFACTURER: SH ENERGY & CHEMICAL CO., LTD.

NAME OF SECTION : QUALITY ASSURANCE SECTION

ADDRESS: 25, Soryong-Dong, Gunsan-City, Jeonlabuk-Do, Korea

TELEPHONE NUMBER: 82-63-469-1500

FAX NUMBER: 82-63-469-1519

2. HAZARD IDENTIFICATION

NFPA Ratings(0-4)

Health: 1, Fire: 1, Reactivity: 0

CLASS NAME OF HAZARDOUS CHEMICALS FOR SDS IN JAPAN

Other harmful substances: None

Improper transfer may cause electrostatic spark

PHYSICAL AND CHEMICAL HAZARD

Contains substance which generate toxic gas by incineration

POTENTIAL HEALTH EFFECTS

Inhalation and skin contact are expected to be the primary routes of occupational exposure to this material.

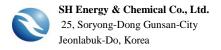
3. COMPOSITION / INFORMATION ON INGREDIENTS

TRADE NAME: ANYBES

INGREDIENT CAS-No PERCENT

Polyamide-12 25038-74-8 100%

Not contains hazardous ingredient which would exceed the regulated limit.



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4. FIRST – AID MEASURES

EYE CONTACT

Gently rinse the affected eyes with clean water for at least 15minutes. Rinse the eyes up to the back of eyelids

Arrange for transport to the nearest medical facility for examination and treatment by a physician as soon as possible.

SKIN CONTACT

Wipe off contacted materials from skin with clean cloth.

Wash the affected areas under running water using a mild soap. Do not use organic solvent to wash.

If there is any change in skin appearance and/or any pain, arrange for transport to the nearest medical facility for examination and treatment by a physician as soon as possible.

INHALATION

Remove the victim immediately from the contamination to fresh air area and keep warm and quiet.

If breathing is weak, irregular or has stopped, open his airway, loosen his collar and belt and administer artificial respiration.

Arrange for transport to the nearest medical facility for examination and treatment by a physician as soon as possible.

Do not swallow up the vomit

Refer MSDS and label of container.

INGESTION

Keep the victim quiet and arrange for transport to the nearest medical facility for examination and treatment bya physician as soon as possible.

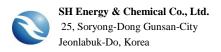
Do not swallow up the vomit.

5. FIRE - FIGHTING MEASURES

FIRE AND EXPLOSIVE PROPERTIES

Flash Point Nil Explosion Limit Upper NA

Auto Ignition Temperature NA Lower NA



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EXTINGUISHING MEDIA

In case of fire, use water spray, carbon dioxide, foam or dry chemical powder.

SPECIAL FIRE-FIGHTING INSTRUCTIONS

Firefighters should wear proper protective equipment (heat resisting clothes, self-contained breathing apparatus).

Move flammable substance from fire areas, if it can be done without risk.

Use the fire extinguisher specified.

FIRE AND EXPLOSION HAZARDS

Dust may cause an explosion hazard under extreme conditions(contact with an ignition source).

6. ACCIDENTAL RELEASE MEASURES

IN CASE OF SPILL OR LEAK

Wear proper protective equipment (Gloves, Apron, Safety goggles and etc.)

Stop the leak, if possible. Place spilled materials in a chemical waste container and move to safety areas.

For large spills, construct a dike to prevent spreading, for later disposal. Prevent spilled materials from entering into rivers, sewer, watercourses or low areas

Ensure disposal in compliance with government requirements and conformity to local disposable regulations

7. HANDLING & STORAGE

HANDLING

Use only in the well-ventilated areas. Keep container tightly closed. Use proper protective equipments to avoid contact with skin, eyes or clothing. Keep away from sparks and flames. Wash hand and face well after handling this material. Do not bring contaminated protective equipment into a resting room etc.

STORAGE

Protect from direct sunlight.

Store in a well-ventilated location, in a cool, dry location



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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING MEASURES

In confined working places, use automatic sprayers or installed a facility where workers have no direct contact or can be protected from explosion and exposure by ventilation.

Use in well-ventilated areas.

PERSONAL PROTECTIVE EQUIPMENT

- * RESPIRATORY PROTECTION: Use proper protective equipment.
- * EYE PROTECTION: Wear protective eyeglasses.
- * SKIN PROTECTION: To prevent any contact, wear impervious clothing such as gloves, apron, boots or whole body suits made from Neoprene, as appropriate.

9. PHYSICAL & CHEMICAL PROPERTIES

APPEARANCE Solid Powder

COLOR White

ODOR Odorless

BOILING POINT NA

VAPOR PRESSURE NA

MELTING POINT $165 \sim 175 \,^{\circ}$ C

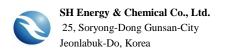
VAPOR DENSITY NA

PH $6 \sim 8$, at dilution aq.

BULK DENSITY $170 \sim 330 \text{kg/m}^3$

SOLUBILITY IN WATER Insoluble

OTHERS Nil



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10. STABILITY AND REACTIVITY

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This material is considered a stable material under normal and anticipated storage and handling condition.

Decomposition product: Toxic fumes of carbon monoxide, carbon dioxide.

INCOMPATIBILITY

Avoid contact with heat and moisture.

11. TOXICOLOGICAL INFORMATION

TOXICOLOGCIAL INFORMATION.

No information

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

Fish toxicity: No information

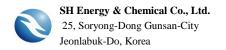
13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Any disposal practice must be in compliance with local, state or federal laws and regulations.

(Contact local or environmental agency for specific rules.)

Do not dump into sewers, on the ground or into any water.



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14. TRANSPORT INFORMATION

TRANSPORT INFORMATION

Any transportation practice must be in compliance with local, state or federal laws and regulations.

(Contact local or environmental agency for specific rules.)

General precautions should be minded in storage and handing of the material.

15. REGULATORY INFORMATION

REGULATORY INFORMATION

Regulatory information with regard to this substance in your country or region should be examined and is your own responsibility.

16. OTHER INFORMATION

REFERENCE

「Handbook for Solvent」 「Handbook for Industrial Poisoning」 「Chemical Product」

REMARK

To the best of our knowledge, the information herein is given in good faith, no warranty, expressed or implied, is made.

KEY LEGEND INFORMATION

NA = Not Applicable

NE = Not Established