

- ARP MATERIAL SAFETY DATA SHEETS -

1. PRODUCT AND COMPANY IDENTIFICATION
2. COMPOSITION AND INGREDIENT
3. HAZARDOUS IDENTIFICATION
4. FIRST AID AND MEASURES
5. FIRE FIGHTING MEASURES
6. ACCIDENTAL RELEASE MEASURES
7. HANDLING AND STORAGE
8. EXPOSURE CONTROLS AND PERSONAL PROTECTION
9. PHYSICAL AND CHEMICAL PROPERTIES
10. CHEMICAL STABILITY AND REACTIVITY
11. TOXICOLOGICAL PROPERTIES
12. ECOLOGICAL INFORMATION
13. DISPOSAL CONSIDERATION
14. TRANSPORTATION INFORMATION
15. REGULATORY INFORMATION

2004.02.04

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Information about manufacturer

1.1.1 Company Name : SUHIL CO., Ltd

1.1.2 Address : 372 Gammun-Nonggong 1BK, Bokkwang-ri, Gammun-myun,
Kimchun-city, KyungBuk-Do, Korea

Tel : 82-54-439-2441~2

Fax : 82-54-439-2444

1.2 Product

1.2.1 General Name : Aramid Reinforced Plastics

1.2.2 Synonyms : Vinyl Ester Resin treated with Aramid Fiber

SECTION 2. COMPOSITION AND INGREDIENT

2.1 Component

2.2 CAS No.

- Vinyl Ester Resin

100-42-5

- Aramid Fiber

26125-61-1

SECTION 3. HAZARDOUS IDENTIFICATION

3.1 Health Effects

- Eye Contact :

No hazards of this material have been wholly investigated and known; but may cause eye effects.

- Skin Contact :

When it was exposed to mist or powder of this material under breaking or cracking, it may cause itchy or stimulation on skin.

- Inhalation :

No hazards of this material have been wholly investigated and known.

- Ingestion :

No hazards of this material have been wholly investigated and known; but direct ingestion may cause hazards effects.

SECTION 4. FIRST AID AND MEASURES

4.1 Eye Contact :

Immediately flush with fresh plenty of water in several time. If any symptoms of such as irritation are perceived, get medical attention by doctor's instruction.

4.2 Skin Contact :

Flush with fresh plenty of water. Remove stained or contaminated clothing.

4.3 Inhalation :

Remove to fresh air. And get medical attention as soon as possible.

4.4 Ingestion :

If vomited, immediately induce vomiting. Get medical attention.

SECTION 5. FIRE FIGHTING MEASURES

5.1 Flash point : Refer to Section 9 Physical and Chemical Properties.

5.2 Auto Ignition Temperature : No applicable and available information.

5.3 Lower/Upper Explosive Limit : No applicable and available information.

5.4 Extinguishing Media :

- If possible, transfer container of this material from fireplace to safe place.
- Extinguishing with dry chemical or CO₂.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Action for Health Protection :

- Use protective equipment such as impermeable gloves, goggles and so forth.

6.2 Actions for Environmental Protection :

- Take action for this material not to influx in drainage systems or river, stream and lakes.

6.3 Removal and purification :

- In case of small leakage or spill, absorb leakage or spill with absorbent material E45 such as sand cottons. And place them in a chemical waste container.
- Obey relevant local state, federal and provincial laws and regulations.

SECTION 7. HANDLING AND STORAGE

7.1 Handling :

- For handling, use personal protective equipments. After handling wash thoroughly.

7.2 Storage :

- Store in a cool and dry place. Keep it away from heat sources material and direct light sources.
- Keep it away from oil or water.

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 Exposure Limit : No applicable and available information.

8.2 Engineering Controls :

- Use adequate ventilation.

8.3 Respiratory Protection :

- Under normal handling conditions, not required protective equipment.

8.4 Eye protection :

- If required, use goggle.

8.5 Skin Protection :

- If required, use impermeable gloves when handling.

8.6 Sanitary Care :

- Wash clearly hand after handling.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Appearance : Typical solid rod

9.2 Odor : Not determined

9.3 PH : Neutral

9.4 Solubility in water : Non-soluble

9.5 Flash point : Impossible to be determined

9.6 Tensile strength : min 1,200N/mm²

9.7 Explosive : No any component to cause explosion reaction

9.8 Oxidization : No applicable and available information.

9.9 Vapor Pressure : No applicable and available information.

SECTION 10. CHEMICAL STABILITY AND REACTIVITY

10.1 Chemical Stability :

- Very stable under normal condition, room temperature and air pressure.

10.2 Conditions to avoid instability or hazards :

- Avoid contacting with chemical strong acids.
- Avoid contacting with heat or humidity sources for long-term.
- Avoid contacting with strong oxidizing reagents

10.3 Hazardous polymerization :

- Will not occur under normal treating and handling condition.

10.4 Hazardous Decomposition Products :

- Will not occur under normal condition.

SECTION 11. TOXICOLOGICAL PROPERTIES

11.1 Acute Effects :

- No applicable and available information.

11.2 Carcinogenicity :

- Not any components inducing cancer or will not occur cancer.

11.3 Health Effects :

- Please refer Section 3. Hazardous Identification.

SECTION 12. ECOLOGICAL INFORMATION

12.1 Bionomic Toxicology :

- No applicable and available information.

12.2 Aquatic Toxicology :

- No applicable and available information.

SECTION 13. DISPOSAL CONSIDERATION

13.1 Disposal Method :

- Waste shall be disposed in accordance with relevant local, federal, state and provincial law or regulations.

SECTION 14. TRANSPORTATION INFORMATION

14.1 Relevant Shipping Classification and Regulations :

- No applicable and available information.

14.2 Proper Shipping Name :

- No applicable and available information.

SECTION 15 REGULATORY INFORMATION

15.1 Regulations on Korea Industrial Safety and Health Law :

- This product has not any hazardous components.

15.2 Regulations of Other Countries :

- No applicable and available information.