

Material Safety Data Sheet

Date of print : 2008. 1. 1

| CAS No. | RTECS No. | UN No. | EN No. |
|-----------|-----------|--------|--------|
| 9003-56-9 | AT6970000 | | |

1. Substance/preparation and company identification

- ① Generic name : Acrylonitrile-butadiene-styrene co-polymer
- ② Product name : ABS 750SW
- ③ Supplier's name : Kumho Petrochemical
- ④ Supplier's address : 57-1, Shinmun-Ro, Jongro-Gu, Seoul 110-061 Korea
- ⑤ Contact : 82-2-6303-0114
- ⑥ <http://www.kkpc.com>

2. Composition/information on ingredients

| <u>Name</u> | <u>CAS No.</u> | <u>Content(%)</u> |
|--|----------------|-------------------|
| Acrylonitrile-butadiene-styrene co-polymer | 9003-56-9 | 97~100 |
| Stabilizer | | 0~1 |
| Lubricant | | 0~2 |
| Acrylonitrile monomer | 107-13-1 | <0.1 |
| Butadiene monomer | 106-99-0 | <0.1 |
| Styrene monomer | 100-42-5 | <0.1 |

3. Hazard identification

NFPA Grade(0~4) : Health =1, Fire=1, Reactivity=0

Physical/chemical hazard : Not classified as dangerous substance

Danger of burns while handling the hot product

Symptom(s) of exposure

Inhalation : Irritation

Ingestion : No hazard

Skin contact : No effects

Eye contact : Irritation

4. First-aid measures

If inhaled :

After inhalation of decomposition products, remove the affected person to a source of fresh air and keep calm. Provide medical aid.

On skin contact :

Areas affected by molten material should be quickly placed under cold running water. Burns



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caused by molten material require hospital treatment.

On contact with eyes :

In case of contact with the eyes, rinse immediately for ant least 15 minutes with plenty of water. If irritation develops, seek immediate medical attention.

On ingestion :

Rinse mouth and then drink plenty of water. If difficulties occur : Seek medical attention.

Note to physician :

Treatment : Treat according to symptoms(decontamination, vital functions), no known specific antidote.

5. Fire-fighting measures

Summary :

Normal fire fighting procedures should be followed to avoid inhalation of smoke and gases.

Suitable extinguishing media :

Water, dry extinguishing media, foam, carbon dioxide

Specific hazards :

Carbon dioxide, carbon monoxide, hydrogen cyanide

The substance/groups of substance mentioned can be released in case of fire.

Specific protective equipment :

Wear a self-contained breathing apparatus.

Further information :

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Flash point : 349°C (660°F)

Auto-ignition temperature : 455°C

6. Accidental release measures

Personal precautions :

Avoid inhalation. Source of ignition should be kept well clear.

Methods for cleaning up or taking up :

Sweep/shovel up. Avoid raising dust. Ensure adequate ventilation.

Additional information :

High risk of slipping due to leakage/spillage of product.

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7. Handling and storage

Handling :

Processing machines must be fitted with local exhaust ventilation. When working on exhaust systems special safety precautions must be taken, because dangerous substances can accumulate in the residue of the exhaust system. Handle in accordance with good industrial hygiene and safety practice.

Protection against fire and explosion :

Avoid dust formation. Dust can form an explosive mixture with air. Provide exhaust ventilation. When the product is ground(chopped), dust explosion regulation should be noted.

Storage :

Further information on storage conditions : Protect against moisture. Avoid extreme heat.
Avoid all source of ignition : heat, sparks, open flame.

8. Exposure controls and personal protection

Components with workplace control parameters :

Given suitable ventilation, it can be assumed that the threshold limits will not be reached.

Styrene(100-42-5), acrylonitrile(107-13-1), α -methyl styrene(98-83-9), butadiene(106-99-0)

Personal protective equipment :

Respiratory protection :

Breathing protection if dusts are formed. Particle filter with low efficiency for solid particles.

Hand protection :

Use additional heat protection gloves when handling hot molten masses, e.g. of textile or leather.

Eye protection :

Safety glasses with side-shields(frame goggles)..

Body protection :

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit.

General safety and hygiene measures :

Avoid contact of molten material with skin. Avoid inhalation of dusts/mists/vapors. Eye wash fountains and safety showers must be easily accessible. Handle in accordance with good industrial hygiene and safety practice.

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9. Physical and chemical properties

| | | | |
|--------------------|---|-----------------|---------------------|
| Form : | Pellet | Odor : | Faint specific odor |
| pH : | 7 | Solubility : | Insoluble in water |
| Boiling temp : | Not applicable | Melting temp : | Not applicable |
| Softening temp : | 100~128 °C | Mw : | 60,000~250,000 |
| Vapor pressure : | Not applicable | Vapor density : | Not applicable |
| Specific gravity : | 1.02~1.17 | Ignition temp : | > 450 °C |
| Evaporation rate : | Not applicable | Flammability : | 1/16" HB(UL 94) |
| Solubility : | Soluble - acetone, MEK, dichloromethane Insoluble - alcohol, mineral oil | | |

10. Stability and reactivity

Stability :

Stable at normal temperature and pressure.

Reactivity :

Not reactive

Conditions to avoid :

Avoid extreme heat. Avoid all sources of ignition : heat, sparks, open flame

Thermal decomposition : approx. 320 °C.(to avoid thermal decomposition, do not overheat.)

Substance to avoid :

Strong oxidizing agents

Hazardous decomposition products :

Hydrogen cyanide.

Monomers, oxides, gases/vapors, hydrocarbons, cyclic low molecular weight oligomers, gaseous products of degradation can be given off if the product is greatly overheated.

11. Toxicological information

| | | | |
|--------------------|----------------|-------------------|----------------|
| LD 50 : | Not determined | LC 50 : | Not determined |
| Eye irritation : | Not determined | Skin irritation : | Not determined |
| Chronic toxicity : | Not determined | | |

12. Ecological information

Eco-toxicity

Assessment of aquatic toxicity :

At the present state of knowledge, no negative ecological effects are expected. The product

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has not been tested. The statement has been derived from the structure of product.

Persistence and degradability

Assessment biodegradation and elimination(H₂O) :

Not readily biodegradable(by OECD criteria). The product has not been tested. The statement has been derived from the structure of the product. The product is virtually insoluble in water and can thus be separated from mechanically in suitable effluent treatment plants.

Bioaccumulation potential

Bioaccumulation potential :

The product will not be readily bio-available due to its consistency and insolubility in water.

13. Disposal considerations

Must be dumped or incinerated in accordance with local regulations.

Contaminated packaging :

Uncontaminated packaging can be recycled.

14. Transport information

Land transport :

Not classified as a dangerous good under transports regulation.

Sea transport :

Not classified as a dangerous good under transports regulation.

Air transport :

Not classified as a dangerous good under transports regulation.

15. Regulatory information

The product does not require a hazard warning label in accordance with regulations.

16. Other information

In addition to the information given in the safety data sheet we refer to the product specific 'Technical Information'.