

Version 1.0

First Issue date: 11/10/2022

Revision date: 01/02/2023

SDS record number: CSSS-TCO-010-153199

**1. Identification**

<b>Product name</b>	HSAN 600 A
<b>Synonyms</b>	-
<b>CAS #</b>	See section 3
<b>Product code</b>	-
<b>Product use</b>	Heat-resisting material.
<b>Manufacturer/Supplier</b>	
<b>Supplier(Manufacturer):</b>	Korea Kumho Petrochemical Co., Ltd.
<b>Address:</b>	260-257, Cheoyong-ro, Nam-Gu, Ulsan, 44785, Korea
<b>Contact person(E-mail):</b>	-
<b>Telephone:</b>	+82-52-279-8852
<b>Fax:</b>	+82-52-279-8840
<b>Emergency telephone Number:</b>	1-858-987-0023

**2. Hazard(s) identification**
**GHS classification**

<b>Physical hazards</b>	Not classified
<b>Health hazards</b>	Not classified
<b>Environmental hazards</b>	Not classified

**GHS label elements**

<b>Hazard Pictograms</b>	No hazard pictogram is used.
<b>Signal word</b>	No signal word is used.
<b>Hazard statement</b>	Not applicable.

**Precautionary statement**

<b>Prevention</b>	Not applicable.
<b>Response</b>	Not applicable.
<b>Storage</b>	Not applicable.
<b>Disposal</b>	Not applicable.

<b>Other hazards</b>	Not available.
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**3. Composition / information on ingredients**

<b>Components</b>	<b>CAS#</b>	<b>Percent</b>
2-Propenenitrile polymer with ethenylbenzene and (1-methylethenyl)benzene	9010-96-2	99~100%

**4. First-aid Measures**
**First aid procedures**

<b>Eye contact</b>	Immediately flush eyes with plenty of water at least 15minutes. If irritation persists, get a doctor's examination. Lifting eyelids occasionally to wash eyelids
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down enough to follow up.

**Skin contact**

Wash the contaminated skin area with running water. Cooling the contaminated skin with cool running water when contact with melt. Get medical attention when burn by melt.

**Inhalation**

Remove exposed person to fresh air If inhaled smoke and decomposition products. Remove victim to fresh air and keep at rest in a position comfortable. Get medical attention.

**Ingestion**

Rinse mouth with water. Give large amounts of water. Toxic by ingestion does not high. If irritation or symptoms occurs, get a doctor's examination.

**Notes to physician**

Treat symptoms.

**5. Fire-fighting measures**

**Flammable properties**

Not available.

**Extinguishing media**

**Suitable extinguishing media**

Carbon Dioxide, Dry Chemical, Water. Big Fire : Water spray, regular foam.

**Unsuitable extinguishing media**

Do not use direct water.

**Firefighting equipment/instructions**

Wear appropriate personal protective equipment (see section 8. EXPOSURE CONTROLS/PERSONAL PROTECTION). Avoid inhalation of smoke or gas when fire fighting. Move container from fire area if it can be done without risk. Cool containers with water until well after fire is out.

**Hazardous combustion products**

Carbon monoxide, Carbon dioxide, hydrogen cyanide.

**6. Accidental release measures**

**Personal precautions**

Perform in accordance with [ See section 8 . EXPOSURE CONTROLS / PERSONAL PROTECTION ] . Put on appropriate personal protective equipment. Use a way to minimize dust. Avoid contact with eyes and skin. Avoid inhalation of substance itself or combustion. Evacuation against the wind. Keep unauthorized personnel out. Avoid contact with heat, sparks, flame or other ignition sources.

**Environmental precautions**

Avoid dispersal of spilt material and runoff and contact with waterways, drains and sewers. If large spills, advise emergency services.

**Methods for cleaning up**

For small spills: Remove all sources of ignition. Suppression occurrence of dust. Appropriate container for disposal of spilled material collected. Ventilate leak areas and clearing leak area.

For large spills: Remove all sources of ignition. Suppression occurrence of dust. Avoid entering to sewers or water system. For disposal of spilled material in appropriate containers collected and clear surface. Appropriate container for disposal of spilled material collected.

**7. Handling and storage**

**Handling**

Handle in a well-ventilated place. Avoid contact with heat, sparks, flame or

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**Storage**

other ignition sources. Remove all sources of ignition. Ground all equipment. Wash thoroughly after handling.  
Keep in original container and tightly closed. Avoid contact moisture. Avoid contact with incompatible materials.

**8. Exposure controls / personal protection**

**Control parameters:**

**Occupational exposure limits**

This substance has no PEL, TLV, or other recommended exposure limit.

**Biological limit values**

No biological exposure limits noted for the ingredient(s).

**Appropriate engineering controls:**

Use in a well-ventilated area.

**Individual protection measures, such as personal protective equipment:**

**Eye / face protection**

Wear primary eye protection such as splash resistant safety goggles with a secondary protection face shield. Provide an emergency eye wash station and quick drench shower in the immediate work area.

**Skin protection**

Wear chemical resistant protected gloves if there is hazard potential for direct skin contact. Wear heat resistant protected gloves to withstand the temperature of molten product. Wear chemical resistant protected clothing if there is hazard potential for direct contact.

**Respiratory protection**

Respiratory protection may be needed. Respiratory protection is ranked in order from minimum to maximum. Consider warning properties before use.

- Dust, mist, fume-purifying respiratory protection.
- Any air-purifying respirator with a corpuscle filter of high efficiency.
- Any respiratory protection with a electro motion fan(for dust, mist, fume-purifying).
- ※ For Unknown Concentration or Immediately Dangerous to Life or Health.
- Self-contained breathing apparatus(pressure-demand or other positive-pressure mode in combination).
- Supplied-air respirator with full face piece.

**General hygiene considerations**

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. Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing.

**9. Physical and chemical properties**

**Appearance**

**Physical state**

Solid

**Form**

Pellet

**Color**

Colorless

**Odor**

Mild odor

**Odor threshold**

Not available

**pH**

Not available

**Vapor pressure**

Not available

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<b>Melting point/Freezing point</b>	>100 °C
<b>initial boiling point and boiling range</b>	Not available
<b>Flash point</b>	Not available
<b>Evaporation rate</b>	Not available
<b>Flammability (solid, gas)</b>	Not available
<b>Explosion limits</b>	Not available
<b>Vapor density</b>	Not available
<b>Relative density</b>	Not available
<b>Solubility (water)</b>	Insoluble
<b>Solubility (others)</b>	Acetone, MEK, dichloromethane : Soluble Alcohol, Mineral Oil: insoluble:
<b>Partition coefficient</b>	Not available
<b>Auto-ignition temperature</b>	Not available
<b>Decomposition temperature</b>	Not available
<b>Specific gravity</b>	Not available
<b>Relative Density</b>	1.02-1.17
<b>Flammability limits in air, upper, %by volume</b>	Not available
<b>Flammability limits in air, lower, % by volume</b>	Not available
<b>VOC</b>	Not available
<b>Percent volatile</b>	Not available
<b>Other data</b>	
<b>Viscosity</b>	Not available

## 10. Stability and reactivity

<b>Chemical stability</b>	Material is stable under normal conditions. Decompose at 320°C on heating.
<b>Conditions to avoid</b>	Incompatible materials. Avoid contact with heat, sparks, flame or other ignition sources.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Hydrogen cyanide. Generate monomer, oxides, gas/steam, hydrocarbon, low-molecular oligomers ring, gas products when heated to high temperature.
<b>Possibility of hazardous reactions</b>	No dangerous reactions known.

## 11. Toxicological information

### Toxicokinetics, metabolism and distribution:

**Non-human toxicological data:** Not available

### Information on toxicological effects:

#### Acute toxicity:

<b>LD50(Oral, Rat):</b>	Not available
<b>LD50(Dermal, Rat):</b>	Not available
<b>LC50(Inhalation, Rat):</b>	Not available
<b>Skin corrosion/Irritation:</b>	Not classified.
<b>Serious eye damage/irritation:</b>	Not classified

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**Respiratory or skin sensitization:** Not classified  
**Germ cell mutagenicity:** Not classified  
**Carcinogenicity:** Not classified  
**Reproductive toxicity:** Not classified  
**STOT- single exposure:** Not classified  
**STOT-repeated exposure:** Not classified  
**Aspiration hazard:** Not classified

## 12. Ecological information

### Toxicity:

Acute toxicity		Time	Species	Method	Evaluation	Remarks
LC50	N/A	96h	Fish	OECD 203	N/A	N/A
EC50	N/A	48h	Daphnia	OECD 202	N/A	N/A
EC50	N/A	72h	Algae	OECD 201	N/A	N/A

**Persistence and degradability:** Not available.  
**Bioaccumulative potential:** Not available.  
**Mobility in soil:** Not available.  
**Results of PBT&vPvB assessment:** Not available.  
**Other adverse effects:** No known significant effects or critical hazards.

## 13. Disposal considerations

**Disposal instructions** Dispose of contents/container in accordance with local/regional/national/international regulations.

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied.

## 14. Transport information

### DOT

#### Basic shipping requirements:

**UN number** Not regulated  
**Proper shipping name** Not regulated  
**Hazard class** Not regulated  
**Packing group** Not regulated  
**Environmental hazards** No

### IATA

**UN number** Not regulated  
**UN proper shipping name** Not regulated  
**Transport hazard class(es)** Not regulated  
**Packing group** Not regulated  
**Environmental hazards** No

### IMDG

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<b>UN number</b>	Not regulated
<b>UN proper shipping name</b>	Not regulated
<b>Transport hazard class(es)</b>	Not regulated
<b>Packing group</b>	Not regulated
<b>Environmental hazards</b>	No

## 15. Regulatory information

### US federal regulations

#### Toxic Substances Control Act (TSCA)

##### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

##### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

##### SARA 304 Emergency release notification

Not regulated.

##### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

#### SARA 302 Extremely hazardous substance

Not listed.

#### SARA 311/312 Hazardous chemical

No

#### SARA 313 (TRI reporting)

Not regulated.

### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

#### Safe Drinking Water Act (SDWA)

Not regulated.

## 16. Other information, including date of preparation or last revision

### HMIS® ratings

Health: 0  
Flammability: 1  
Physical hazard: 0

### NFPA ratings

Health: 0  
Flammability: 1  
Instability: 0

### Disclaimer

The information in the sheet was written based on the best knowledge and experience currently available.

### First Issue date

11-10-2022

### Revision date/version

01-02-2023/ver1.0