

## MATERIAL SAFETY DATA SHEET

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**COMPANY NAME** : Hakko Corporation  
**ADDRESS** : 4-5, Shiokusa 2-chome, Naniwa-ku,  
 Osaka, 556-0024 Japan  
**SECTION IN CHARGE** : Research & Development Center  
**EMERGENCY TELEPHONE** : 81-6-6561-3225 (FAX: 06-6568-0821)  
**NUMBER/REFERENCE** : Sales Division

**PRODUCT NAME:** Main filter for FA-430

**Model:** No.A1586

### 2. HAZARDS IDENTIFICATION

**GHS CLASSIFICATION** : N/A  
**GHS LABEL ELEMENTS** : N/A  
**PICTOGRAM OR SYMBOL** : N/A  
**HAZARD INFORMATION** : Fumes evolved from  
 high-temperature molten  
 resins are irritating to eyes  
 and respiratory system.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Single substance or mixture: Mixture

General name: Filter unit

Chemical name and content

Name of composed materials	Rate of weight(%)	Rate(%)	CAS No.	Chemical name
Non-riffled zinc-plating sheet	55.6	-	-	-
Pleatable filter	22.5	-	9003-07-0	polypropylene

Name of composed materials	Rate of weight(%)	Rate(%)	CAS No.	Chemical name
Honeycomb Activated carbon filter	1.13			
Adsorbent	-	55	64365-11-3	Activated carbon
Basic material	-	30	9003-11-6	Polyether
			584-84-9	TDI
Glue	-	15	57828-93-0	2-PROPENOIC ACID
Fibrous activated carbon filter	0.84	-	-	-
Adsorbent	-	55	64365-11-3	Activated carbon
Basic material	-	30	113669-95-7	Polythene fiber
			57828-93-0	2-PROPENOIC ACID
Glue	-	15	57828-93-0	2-PROPENOIC ACID
Chloroprene sponge sealing	1.41	-	-	-
Glue bond	18.3	-	-	-
aluminium rivets(16)	0.22	-	-	-

#### 4. FIRST-AID MEASURES

Eye contact :	Not likely to get into eyes due to physical form. However, if small pieces of the product get into eyes, immediately flush eyes with water without rubbing them. Rubbing may cause eye irritation and/or cornea damage.
Inhalation :	Not likely to be inhaled due to physical form. However, if fumes emitted when the product is molten are inhaled, remove the affected person to fresh air. Seek immediate medical attention if required.
Ingestion :	Not likely to be ingested due to physical form. However, if small pieces of the product are ingested, have the affected person gargle them out immediately. Seek medical attention if required.

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## 5. FIRE FIGHTING MEASURES

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Extinguishing media	:	Use water spray, alcohol-resistance foam, dry chemical power or carbon dioxide.
Hazardous combustion products	:	May include dense black smoke, carbon monoxide, nitrogen oxides, hydrogen chloride and other toxic gases or fumes.
Special fire fighting procedures	:	<ul style="list-style-type: none"> <li>• Work from the windward side.</li> <li>• Shut off fire sources if possible.</li> <li>• Take appropriate measures to prevent environmental contamination caused by fire extinguishing agent or water.</li> <li>• Evacuate affected persons to a safe area.</li> </ul>
Protection of fire fighters	:	<ul style="list-style-type: none"> <li>• Wear gas mask.</li> <li>• Wear appropriate protective gear.</li> </ul>

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## 6. ACCIDENTAL RELEASE MEASURES

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Personal protection	:	Nothing of particular note.
Removing procedures	:	Carefully sweep up.

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## 7. HANDLING & STORAGE

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### Handling

Technical measures : (Prevention of fire or explosion)  
 Keep the product away from heat, spark or fire sources.  
 The filter is combustible.

Precaution : Washing forbidden

Precaution for safe handling : Heating to higher than 80°C may evolve irritating fumes.

### Storage

Suitable storage conditions : Store the product in a cool dry place away from direct sunlight. Do not place heavy objects on the product.  
 Avoid contacting with acid and the alkali.

Storage conditions to avoid : Store the product away from heat sources.  
 Store the product away from fire sources. –No smoking  
 Store the product away from direct sunlight.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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Administrative level : Not determined.

Allowable concentration : Japan Society for Occupational Health: 2.0mg/m<sup>3</sup>(Total dust)  
; Activated carbon

### Protective gear

Protective gear for respiratory : Not required in normal conditions. But a dust respirator should be used in dusty conditions.

Protective gear for eyes : Not required

Protective gloves : Not required

Protective clothing : Not required

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### PHYSICAL PROPERTIES

**APPEARANCE** : Solid

**Color** : Frame : Silver white

Filter : White

**Odor** : Smell-less

**pH** : Not applicable

**Boiling point/range** : Not available

**Melting point/Freezing point** : Not available

**Ignition point** : Not available

**Explosiveness** : None

**Specific gravity/Density** : Not available

**Solubility in water** : Insoluble

## 10. STABILITY AND REACTIVITY

**Stability** : The product is deemed stable under normal storage and handling conditions.

**Incompatible materials** : Acid, Base

**Other** : Combustion, thermal decomposition or incomplete combustion of the product may cause carbon monoxide, nitrogen oxides, hydrogen chloride and other toxic gases or fumes to occur.

## 11. TOXICOLOGICAL INFORMATION

**MUTAGENICITY** :

Reverse Mutation Test : Data not available  
(Ames Test)

Chromosome Aberration Test : Data not available

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## 12. ECOLOGICAL INFORMATION

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Degradation : Data not available  
 Bioaccumulation : Data not available  
 Toxicity for fish : Data not available

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## 13. DISPOSAL CONSIDERATIONS

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The package of the product must be disposed of in a manner conforming to applicable laws and regulations, or by approved subcontractors in a manner specified by the manufacturer.

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## 14. TRANSPORTATION INFORMATION

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International rules : Nothing of particular note.  
 No UN number allocated.  
 Special safety measures required : The product is not classified as dangerous goods.  
 Keep the product away from direct sunlight and rainwater during transportation.

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## 15. REGULATORY INFORMATION

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Industrial Safety and Health Law

Hazardous Materials Requiring Notification : Manganese, Nickel, Chrome, Copper,  
 Solid paraffin(parts made of metals)

Ordinance on Prevention of Dust Hazard : Activated carbon

Ordinance on Prevention of Oxygen Deficiency : Activated carbon

Fire service Act : Designated combustibles

Law Relating to Prevention of Marine Pollution : Not dangerous substances according to  
 and Maritime Disaster Appended Table 1-2; Polypropylene

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## 16. OTHER INFORMATION

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Reference:

MSDS issued by the manufacturer.

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This document has been prepared based on the information and data that are available as of this date. Therefore, it may be revised when new information or data has been obtained.

The information and data contained herein are subject to the normal use. The evaluation of dangerousness and toxicity is, therefore, not always applicable. For this reason, the safety precautions suitable for your purpose and method must be taken prior to the use.