

<b>Product name</b>	FORTRON® FX4382T1 SF3001 NATURAL	<b>Revision Date</b>	TNA/EN
<b>MSDS number</b>	8720001364	<b>Issuing date</b>	Dec.04.2009
<b>Revision Number</b>	0		Nov.21.2011

## 1. Identification of the substance/preparation and of the company/undertaking

<b>Product name</b>	FORTRON® FX4382T1 SF3001 NATURAL
<b>Material Number:</b>	20001364
<b>MSDS ID</b>	FN1010

### Manufacturer, importer, supplier

#### TICONA

Corporate Headquarters  
8040 Dixie Hwy.  
Florence, KY 41042  
United States  
<http://www.ticona.com>

### Transportation emergency phone numbers:

In USA, call 800-424-9300  
Outside USA, call 703-527-3887, collect calls accepted

### Product Information

1-800-833-4882  
[prodinfo@ticona.com](mailto:prodinfo@ticona.com)

### Synonyms:

Polymer of p-Dichlorbenzene / Disodium Sulfide  
Polyphenylene Sulfide, PPS

### End Use:

Plastic processing industry.

## 2. Hazards identification

### Emergency Overview

Dust from this product can form an explosive organic dust cloud.  
Spilled pellets may present a slipping hazard.  
The molten product can cause serious burns.

### Potential health effects

#### Immediate effects

<b>Skin</b>	Polymer particles may cause mechanical irritation. The molten product can cause serious burns.
<b>Eyes</b>	Resin particles, like other inert materials, are mechanically irritating to eyes

<b>Product name</b>	FORTRON® FX4382T1 SF3001 NATURAL	<b>Revision Date</b>	TNA/EN
<b>MSDS number</b>	8720001364	<b>Issuing date</b>	Dec.04.2009
<b>Revision Number</b>	0		Nov.21.2011

**Inhalation** Dust irritating to respiratory tract. Overheating in processing may generate hazardous, irritating vapours.

**Ingestion** Low toxicity by this route is expected based on the biological activity of high molecular weight polymers.

**Medical conditions which may be aggravated by exposure:** No specific information available on the product. Off-gases, which may be released if overheated, may affect those with chronic diseases of the respiratory system.

### 3. Composition/information on ingredients

**Chemical characterization** Polyphenylene sulfide / PPS unfilled  
CAS-RN. of the basic polymer: 26125-40-6

This product may contain proprietary ingredients.

This is a polymeric material. Any hazardous constituents are wetted by the polymer system, and therefore are unlikely to present exposure under normal conditions of processing and handling.

### 4. First aid measures

**Skin**  
Cool skin rapidly with cold water after contact with molten polymer. Immediate medical attention is required. Do not peel solidified product off the skin.

**Eyes**  
Immediately flush eye(s) with plenty of water. Call a physician if irritation persists.

**Inhalation**  
Move to fresh air in case of accidental inhalation of vapors. Get medical attention immediately if symptoms occur.

**Ingestion**  
If swallowed, do not induce vomiting - seek medical advice.

**Notes to physician**  
This product is essentially inert and nontoxic. However, if it is heated at too high a temperature or if it burns, gases may be released. Gases that may be formed are extremely foul smelling, even at low and relatively nontoxic concentrations. Patients who have been exposed to off-gases may need to have their arterial blood gases and carboxyhemoglobin levels checked. If the carboxyhemoglobin levels are normal, the patients may still have suffered asphyxia from carbon dioxide replacing oxygen if they were exposed in an enclosed space. While it is unlikely that enough hydrogen sulfide would be formed to cause hydrogen sulfide poisoning, the possibility should be considered if the clinical picture is consistent (similar to cyanide toxicity). Sulfur oxides are respiratory tract irritants. Other irritant gases may also have been formed in lesser amounts. If patients may have inhaled high concentrations of irritating fumes, they should be monitored for delayed onset pulmonary edema. The sulfides and mercaptans can cause nausea and headache as a result of their foul odor

<b>Product name</b>	FORTRON® FX4382T1 SF3001 NATURAL	<b>Revision Date</b>	TNA/EN
<b>MSDS number</b>	8720001364	<b>Issuing date</b>	Dec.04.2009
<b>Revision Number</b>	0		Nov.21.2011

## 5. Fire-fighting measures

### Suitable extinguishing media

Water, Foam, Dry powder

### Special exposure hazards arising from the substance or preparation itself, its combustion products, or released gases

carbon monoxide  
carbon dioxide (CO<sub>2</sub>)  
Sulfur oxides (SO<sub>x</sub>)

### Special protective equipment for fire-fighters

Wear self-contained breathing apparatus and protective suit.

### Other Information

Potential dust explosion hazard.

## 6. Accidental release measures

### Personal precautions

Remove all sources of ignition. Avoid dust formation.

### Environmental precautions

No special environmental precautions required.

### Methods for cleaning up

Use mechanical handling equipment. Dispose of in accordance with local regulations.

## 7. Handling and storage

### Handling

#### Protection - fire and explosion:

Do not handle hot or molten material without appropriate protective equipment. Maintain good housekeeping in work areas. Do not exceed recommended process temperatures to minimize release of decomposition products.

#### Advice on safe handling

Do not smoke in areas where polymer dust is present. Appropriate measures should be taken to control the generation and accumulation of dust during conveying and processing operations. Electrical grounding of equipment and the minimization of ignition sources is required when handling powder to avoid possible dust explosion.

### Storage

#### Material storage

Store in a cool dry place.

<b>Product name</b>	FORTRON® FX4382T1 SF3001 NATURAL	<b>TNA/EN</b>	
<b>MSDS number</b>	8720001364	<b>Revision Date</b>	Dec.04.2009
<b>Revision Number</b>	0	<b>Issuing date</b>	Nov.21.2011

**8. Exposure controls/personal protection**

**OSHA Exposure Limits**

Components	TWA
Respirable Dust	5 mg/m <sup>3</sup>
Total Dust	15 mg/m <sup>3</sup>

**ACGIH Exposure Limits**

Components	TWA
Respirable Dust	3 mg/m <sup>3</sup>
Total Dust	10 mg/m <sup>3</sup>

**Mexico National Exposure Limits**

No exposure limits established

**Exposure controls**

**Engineering measures**

General: May not be adequate as the sole means to control employee exposure.

Local Exhaust: Recommended when appropriate to control employee exposure to dust or process vapors

**General advice**

Do not breathe dust. When using, do not eat, drink or smoke.

**9. Physical and chemical properties**

**Appearance**

<b>Form</b>	pellets
<b>Odor</b>	slight , specific .
<b>Flash point</b>	> 480°C(896°F)
<b>Density</b>	approx 1.3 - 2.1 g/ml @ 20°C
<b>Method</b>	ISO 1183, Process A

**Water solubility** insoluble

<b>Product name</b>	FORTRON® FX4382T1 SF3001 NATURAL	<b>Revision Date</b>	TNA/EN
<b>MSDS number</b>	8720001364	<b>Issuing date</b>	Dec.04.2009
<b>Revision Number</b>	0		Nov.21.2011

## 10. Stability and reactivity

### Reactivity

Stable under normal conditions.

### Conditions to avoid

Flame. Avoid prolonged heating at or above the recommended processing temperature. Do not heat above 698 °F (370 °C). Fine powder may present a dust explosion hazard. Electrical grounding of equipment and the minimization of ignition sources is required when handling powder to avoid possible dust explosion.

### Incompatible Materials

Halogens, strong oxidizing agents, aromatic solvents.

### Hazardous Combustion or Decomposition Products:

Phenyl sulfides, n-methyl-2-pyrrolidone, dichlorobenzene, phenyl mercaptan, hydrogen sulfide, butyrolactone, mesityl oxide, acetic acid, phenol, formic acid, succinic acid, chlorine, palmitic acid, p-chlorothiophenol, stearic acid, aromatic compounds, chlorinated aromatic compounds, carbonyl sulfide, and sulfur compounds.

## 11. Toxicological information

No data is available on the product itself

## 12. Ecological information

### Ecotoxicity:

The effects of resin pellets on the wildlife that may ingest them is not well understood. In the case of seabirds, some marine biologists believe that the fowl may not be able to pass plastic pellets through their digestive tracts. Thus, large quantities of ingested pellets may cause intestinal blockage, false feelings of satiation or reduction in absorption of nutrients, causing malnutrition and starvation. The goal of SPI's Operation Clean Sweep is zero loss of pellets into the environment.

### Environmental Fate/Information:

This material is considered to be non-biodegradable.

## 13. Disposal considerations

### Disposal considerations

Recycling is encouraged. Dispose of spilled material in accordance with state and local regulations for waste that is non-hazardous by Federal definition. Note that this information applies to the material as manufactured; processing, use, or contamination may make this information inappropriate, inaccurate, or incomplete.

This product as shipped is not a RCRA hazardous waste under present EPA regulations

<b>Product name</b>	FORTRON® FX4382T1 SF3001 NATURAL	<b>Revision Date</b>	TNA/EN
<b>MSDS number</b>	8720001364	<b>Issuing date</b>	Dec.04.2009
<b>Revision Number</b>	0		Nov.21.2011

**14. Transport information**

**US Department of Transportation** Not regulated

**TDG** Not regulated

**Mexico Transport Information** Not regulated

**ICAO/IATA** Not restricted

**IMDG** Not regulated

**15. Regulatory information**

**U.S. FEDERAL REGULATIONS**

**TSCA Inventory**

This product complies with the U.S. Toxic Substances Control Act (TSCA).

**SARA 313 Chemicals**

Contains no substances at or above the reporting threshold under Section 313.

**CANADIAN REGULATIONS**

**WHMIS Classification:**

Not a WHMIS controlled product.

**WHMIS Ingredient Disclosure List**

This product does not contain substances required to be disclosed according to the Canada WHMIS Ingredient Disclosure List.

**16. Other information**

**Prepared By**

Product Stewardship Department  
Ticona

NFPA: Health: 1

Flammability: 1

Instability: 0

HMIS: Health: 1

Flammability: 1

Physical Hazard: 0

Changes against the previous version are marked by \*\*\*

# Material Safety Data Sheet



---

<b>Product name</b>	FORTRON® FX4382T1 SF3001 NATURAL	<b>Revision Date</b>	TNA/EN
<b>MSDS number</b>	8720001364	<b>Issuing date</b>	Dec.04.2009
<b>Revision Number</b>	0		Nov.21.2011

---

This product is not intended for use in medical or dental implants.

Refer to the appropriate Ticona bulletins for specific processing guidance and good manufacturing practices (purging, processing parameters, shutdown, etc.).

The information contained herein is accurate to the best of our knowledge. We do not suggest or guarantee that any hazards listed herein are the only ones which exist. Ticona makes no warranty of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances. Effects can be aggravated by other materials and/or this material may aggravate or add to the effects of other materials. User has the sole responsibility to determine the suitability of the materials for any use and the manner of use contemplated. User must meet all applicable safety and health standards.

#### Abbreviation and Acronym:

ADR = Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

CAS = Chemical Abstracts Service (division of the American Chemical Society)

CLP = Classification, Labelling and Packaging

DNEL = Derived No Effect Level

EINECS = European Inventory of Existing Commercial Chemical Substances

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC Code = International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IMO)

ICAO = International Civil Aviation Organization

IMDG = International Maritime Code for Dangerous Goods