



Safety Data Sheet

ZIFOAMPOR P ZF390R RESIN

Revision date : 2010/01/04
Version: 1.0

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(30184285/SDS_GEN_US/EN)

1. Product and Company Identification

Company
PCS CORPORATION
16 Technology Dr
Irvine, CA 92618

24 Hour Emergency Response Information
(714) 273-1380

Chemical family:	resin
Synonyms:	Urethane System Resin Component

2. Hazards Identification

Emergency overview

CAUTION:
MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.
CAN CAUSE NERVOUS SYSTEM DAMAGE.
SENSITIZER.

State of matter: gaseous
Colour: amber
Odour: faint odour

Potential health effects

Primary routes of exposure:
Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquified gases.

Acute toxicity:
Ingestion may cause gastrointestinal disturbances.

Irritation / corrosion:
Irritating to respiratory system.

Chronic toxicity:

Repeated dose toxicity: No other known chronic effects.

Medical conditions aggravated by overexposure:
Individuals with pre-existing diseases of the central nervous system, respiratory or cardiovascular system may have increased susceptibility to excessive exposures.

Potential environmental effects

Degradation / environmental fate:

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The product has not been tested.

Bioaccumulation / bioconcentration:

The product has not been tested.

3. Composition / Information on Ingredients

<u>CAS Number</u>	<u>Content (W/W)</u>	<u>Chemical name</u>
	< 80.0 %	Polyol
	< 15.0 %	Flame Retardant
	< 3.0 %	Surfactant
	< 1.0 %	Catalyst
460-73-1	< 10.0 %	1,1,1,3,3-pentafluoropropane

4. First-Aid Measures

General advice:

Remove contaminated clothing.

If inhaled:

Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary.

Immediate medical attention required.

If on skin:

Wash affected areas thoroughly with soap and water. Immediate medical attention required.

If in eyes:

In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. Immediate medical attention required.

If swallowed:

Rinse mouth and then drink plenty of water. Do not induce vomiting. Immediate medical attention required.

5. Fire-Fighting Measures

Flash point:	> 94 °C	(open cup)
Autoignition:		Unspecified
Self-ignition temperature:		not self-igniting

Suitable extinguishing media:

water, dry extinguishing media, carbon dioxide, foam

Hazards during fire-fighting:

No particular hazards known.

Protective equipment for fire-fighting:

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

6. Accidental release measures

Cleanup:

Spills should be contained, solidified, and placed in suitable containers for disposal.

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7. Handling and Storage

Handling

General advice:

Product should not be mixed with air above atmospheric pressure for leak testing or any other purpose. Use dry nitrogen to transfer or leak test equipment pressurized with product.

Protection against fire and explosion:

No explosion proofing necessary.

Storage

General advice:

Product that is frozen and/or tending to sedimentation can be liquified or homogenized by careful application of indirect heat (do not use flames or direct contact with a heat source). Protect from direct sunlight. Keep in a cool, well-ventilated place. Avoid extreme heat. Store protected against freezing. Stored and transported in a cylinder under pressure. Must not be repacked by the customer.

Storage stability:

Storage temperature: 16 - 27 °C

8. Exposure Controls and Personal Protection

Advice on system design:

Provide local exhaust ventilation to control vapours/mists.

Personal protective equipment

Respiratory protection:

Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator as needed.

Hand protection:

Chemical resistant protective gloves

Eye protection:

Wear face shield or tightly fitting safety goggles (chemical goggles) if splashing hazard exists.

General safety and hygiene measures:

Avoid contact with skin. Handle in accordance with good industrial hygiene and safety practice. Wear protective clothing as necessary to prevent contact. Avoid inhalation of vapours/mists. Wash soiled clothing immediately.

9. Physical and Chemical Properties

Form:	liquid	
	viscous	
Odour:	faint odour	
Colour:	amber	
pH value:	> 7.0	
Freezing point:		Unspecified
Boiling point:	15.60 °C	(103.000000 mmHg)
Vapour pressure:	155.00 mmHg	(23.00 °C)
Density:	approx. 1 g/cm ³	(25 °C)
Bulk density:	9.0600 lb/USg	(25 °C)
Partitioning coefficient n-octanol/water (log Pow):		Unspecified
Viscosity, dynamic:	3,000.000 mPa.s	(8.30 °C)
Solubility in water:		slightly soluble

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10. Stability and Reactivity

Conditions to avoid:

> 80 degrees Fahrenheit

Avoid moisture. Avoid direct sunlight. Avoid excessive temperatures.

Hazardous reactions:

The product is chemically stable.

Decomposition products:

Hazardous decomposition products: carbon monoxide, carbon dioxide

Thermal decomposition:

No data available.

Corrosion to metals:

No corrosive effect on metal.

Oxidizing properties:

not fire-propagating

11. Toxicological information

Acute toxicity

Information on: Fluorocarbons

Assessment of acute toxicity:

Has a narcotic effect. May cause drowsiness and dizziness.

Irritation / corrosion

Information on: Polyol

Assessment of irritating effects:

Contact may result in skin irritation. Contact may result in eye irritation.

12. Ecological Information

Fish

Information on: Flame Retardant

Acute:

OECD 203; ISO 7346; 84/449/EEC, C.1 static

Poecilia reticulata/LC50 (96 h): 30 mg/l

static

Pimephales promelas/LC50 (96 h): 98 mg/l

Aquatic invertebrates

Information on: Flame Retardant

Acute:

DIN 38412 Part 11 Daphnia magna/EC50 (48 h): 131 mg/l

Aquatic plants

Information on: Flame Retardant

Toxicity to aquatic plants:

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OECD Guideline 201 static
green algae/No observed effect concentration (72 h): 13 mg/l

Bioaccumulation

The product has not been tested.

13. Disposal considerations

Waste disposal of substance:

Incinerate in a licensed facility. Dispose of in a licensed facility. Do not discharge substance/product into sewer system.

Container disposal:

Return to the manufacturer with residual pressure. If cylinder is damaged, please contact supplier. Empty cylinders (all sizes) must be depressurized before they are returned to supplier. Depressurization will not relieve all pressure. Always seal cylinder valves for return.

Steel drums must be emptied and can be sent to a licensed drum reconditioner for reuse, a scrap metal dealer or an approved landfill. Refer to 40 CFR § 261.7 (residues of hazardous waste in empty containers).

Decontaminate containers prior to disposal. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

14. Transport Information

Land transport
USDOT

Not classified as a dangerous good under transport regulations

Sea transport
IMDG

Not classified as a dangerous good under transport regulations

Air transport
IATA/ICAO

Not classified as a dangerous good under transport regulations

15. Regulatory Information

Federal Regulations

Registration status:

Chemical TSCA, US released / listed

OSHA hazard category: No data available.;

EPCRA 311/312 (Hazard categories): Not hazardous;

State regulations

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CA Prop. 65:

THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

16. Other Information

HMIS III rating

Health: 1

Flammability: 1

Physical hazard: 1

NFPA and HMIS use a numbering scale ranging from 0 to 4 to indicate the degree of hazard. A value of zero means that the substance possesses essentially no hazard; a rating of four indicates extreme danger. Although similar, the two rating systems are intended for different purposes, and use different criteria. The NFPA system was developed to provide an on-the-spot alert to the hazards of a material, and their severity, to emergency responders. The HMIS system was designed to communicate workplace hazard information to employees who handle hazardous chemicals.

PCS supports worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

Local Contact Information

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