



SAFETY DATA SHEET RetroFoam FAC

1. Identification of the Substance/Preparation and Company/Undertaking

Product name : RetroFoam Foaming Agent / Catalyst (FAC)
Use of the substance/preparation : Foaming agent and catalyst for Foam in Place Insulation
Supplier : PolyMaster, Inc., 10523 Lexington Drive, Knoxville, Tennessee, USA
 Tel, 1-865-966-3005 Fax. 1-865-675-3300
e-mail address of person : carleton@polymaster.com responsible for this SDS
Emergency telephone : 1-800-580-FOAM number

2. Hazards Identification

The product is not classified as dangerous according to Directive 1999/45/EC and its amendments.

See section 11 for more detailed information on health effects and symptoms.

3. Composition/Information on Ingredients

Classification : Product not classified.
Physical/chemical hazards : WARNING! Corrosive to skin and eyes. Causes eye irritation
Additional hazards : Handling or disposing of this material may generate dusts which can cause mechanical irritation of the eyes, skin, nose and throat.
Substance/preparation : Preparation
Chemical characterization : Mixture of inorganic acids and foaming agent

Ingredient	CAS Number	%	EC Number	Classification
Paratoluene sulfonic acid (PTSA)...%	104-15*4	0-30	203-180-0	R 36/37/38
Dodecylbenzenesulfonic acid (DDBSA)...%	1886-81-3	0-20	248-289-4	Xi, Xn, R22, R37/38, R41
Phosphoric acid ...%	7664-38-2	0-20	231-633-2	C, R34
See section 16 for the full text of the R-phrases declared above				

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit Occupational exposure limits, if available, are listed in section 8.

4. First-aid Measures

Inhalation : In case of breathing fumes released from heated material, remove

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person from immediate source of exposure to fresh air and assure that the victim is breathing. If breathing is difficult, administer oxygen or apply CPR (cardio-pulmonary resuscitation).

- Ingestion** : Can cause nausea, vomiting, diarrhea, corrosion, burns to mouth and esophagus, abdominal pain, chest pain, shortness of breath, seizures, death. Inhalation: Mist may cause irritation to nose, throat and lungs, shortness of breath, If swallowed, wash mouth thoroughly with plenty of water and give water to drink. Get medical attention immediately. NOTE: Never give an unconscious person anything to drink.
- Skin contact** : Causes irritation, burns.
Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- Eye contact** : Corrosive. Causes burns, tissue destruction, permanent damage to the cornea, blindness.
- General** : Move the victim to a safe area as soon as possible. If unconscious, place in recovery position and seek medical advice. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. Allow the victim to rest in a well-ventilated area.
- Protection of First-aiders** : No action shall be taken involving any personal risk or without suitable training.

See section 11 for more detailed information on health effects and symptoms.

5. Fire-fighting Measures

- Suitable response materials** : Use alcohol-resistant foam or water spray (mist).
- Special exposure hazards** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Hazardous combustion products** : Decomposition products may include the following materials: phosphorus oxides (POx) carbon dioxide, carbon monoxide, hydrogen sulfide, and sulphur oxides (SOx).
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental Release Measures

- Personal precautions** : CAUTION: Spilled material may make floors or hard surfaces slippery. Wear chemical safety goggles or face shield, rubber boots, liquid tight protective clothing and heavy rubber gloves.
- Large spill** : Dike and salvage. Collect in a labeled container for safe disposal according to the regulations of the local authority. Neutralize residuals with soda ash or slaked lime.
- Small spill** : Move containers from spill area. Absorb with liquid acid absorbent or

neutralize. soda ash and slake lime are neutralizing agents.

7. Handling and Storage

- Handling** : Do not inhale vapors. Avoid contact of the product with strong bases. When handling the product avoid bodily contact and use appropriate personal protective equipment.
- Storage** : Store in a dry, cool, well-ventilated area away from incompatible materials as specified in section 10, "Materials to avoid" of this MSDS. Keep containers tightly closed.
- Packaging materials recommended** : Use original container.

8. Exposure Controls/Personal Protection

Ingredient name(s) PTSA, DDBSA, Phosphoric acid	Occupational exposure limits EH40/2005 WELs (United Kingdom (UK), 8/2007). Phosphoric acid TWA: 1.0 mg/m ³ 8 hour(s). EH40/2005 WELs (United Kingdom (UK), 8/2007). Phosphoric acid STEL: 3 mg/m ³ 15 minute(s). Phosphoric acid TWA: 1.0 mg/m ³ 8 hour(s).
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- Recommended monitoring Procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.
- Occupational exposure controls** : Avoid breathing vapors. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Wash thoroughly after handling. Do not eat, drink or smoke until after-work showering and changing clothes.
- Respiratory protection** : For severe mist use approved acid gas respirator with full face piece.
- Hand protection** : Rubber, neoprene or other resistant elastomer gloves. The protective gloves to be used must comply with the specifications of EC directive 89/686/EEC and the resultant standard EN374.
- Eye protection** : Use chemical safety glasses with side shields or face shields.
- Skin protection** : Avoid contact with skin. Wear suitable protective clothing.
- Environmental protection** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

9. Physical and Chemical Properties

Appearance

Physical state : Liquid.

Color : Straw to brown.

Odor : None (slight).

Important Health, Safety and Environmental Information

pH : < 1.0 [Conc. (%w/w) 70%]

Solubility : Easily soluble in water.

Explosion hazard : None

10. Stability and Reactivity

Stability : The product is stable.

Conditions to avoid : Strong heating.

Materials to avoid : Alkalines, metal oxides, metals, metal alloys, and organic matters, fluorine, strong reducing agents, bases, sulfur trioxide, phosphorus pentoxide,

Hazardous decomposition : Under normal conditions of use, hazardous decomposition products should not be produced. Formaldehyde may be released during processing.

11. Toxicological Information

Acute Toxicity

Product/Ingredient Name	Test	Species	Dose	Exposure
PTSA...%	LD50 Oral	Rat	2480 mg/kg	-
DDBSA...%	LD50 Oral	Rat	650 mg/kg	-
Phosphoric acid...%	LD50 Dermal	Rat	2740 mg/kg	-
--	LD50 Oral	Rat	1530 mg/kg	-
--	LC50 Inhalation	Rat	850 ppm	-

Potential Acute Health Effects

Inhalation : Damage to nose, lungs

Skin contact : Burns or irritation with repeated exposure.

Eye contact : Burns, irritation or damage to the cornea with repeated exposure.

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Potential Chronic Health Effects

Chronic effects : No data available

Over-exposure signs/symptoms

Inhalation : Irritation

Eyes : Irritation, burns

12. Ecological Information

Environmental Effects : Water soluble phosphates are translocated in the soil over a very short period of time, and being immobilized. No specific biodegradation test data located. While acidity of this material is readily reduced in natural waters, the resulting phosphate may persist indefinitely or incorporate into biological systems and contribute to eutrophication.

Aquatic Ecotoxicity

Product/ingredient name	Test	Result	Species	Exposure
No data available				

Biodegradability			
Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
PTSA	--	--	--
DDBSA	--	--	--
Phosphoric acid	--	--	--

Bioaccumulative Potential			
Product/ingredient name	LogPow	BCF	Potential
PTSA	--	--	Low
DDBSA	--	--	Low
Phosphoric acid	--	--	Low

13. Disposal Considerations

Methods of Disposal : Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor.

European Waste Catalog (EWC) : 8 Corrosive.

Hazardous Waste : This product contains one or more chemical substances classified according to the Annex I of Directive 67/548/EEC. EC No. 231-633-2 ANNEX I INDEX 015-011-00-6.

14. Transportation Information

	UN Number	Proper Shipping Name	Classes	PG	Label	Additional Information
ADR/RID Class PTSA DDBSA Phosphoric acid	2585 2586 1805	Corrosive substances	8 (C1,C4) Corrosive substances	III	8	PTSA-Limited Qty 6 kg per inner pkg, and 30kg gross pkg unit
ADN/ADNR Class	Not regulated	--	--	--		--
IMDG Class PTSA DDBSA Phosphoric acid	2585 2586 1805	Corrosive substances	--	III	8	--
IATA Class PTSA DDBSA Phosphoric acid	2585 2586 1805	Corrosive substances	8	III	8	PTSA-Passenger and cargo aircraft 822 25 Kg max net/Pkg

DDBSA Reportable Quantity (RQ) 1000 lbs (446 Kg). RQ for product, 5500 lbs (2480kg)

15. Regulatory Information

Classification and labeling have been determined according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and take into account the intended product use.

- Risk phrases** : This product is not classified according to EU legislation.
- Product use** : Foaming agent/catalyst for foam-in-place plastic insulation.
- Europe inventory** : All components are listed or exempted.
- Additional warning phrases** : Spills on hard surfaces create a significant slip hazard.

16. Other Information

- Full text of R-phrases** : R22 Harmful if swallowed
R 34 Causes burns
R 36/37/38 Irritating to eyes, respiratory system and skin
R41 Risk of serious damage to eyes, rinse immediately with plenty of water and seek medical advice.
- Full text of Safety Phrases** : S24/25 Avoid contact with skin and eyes
S 26 In case of contact with eyes rinse immediately with plenty of water and seek medical attention.
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection
S 45 In case of accident or if you feel unwell, seek medical attention immediately (show the label where possible).
S 60 This material and its container must be disposed of as hazardous waste.
- Full text of classifications** : Xi Irritant
Xn Harmfull
C Corrosive
- Recommended use and Restrictions** : No restrictions need to be observed

RetroFoam

History

Date of issue : 12.09.2010
Date of previous issue : No previous validation
Version : 1

^Indicates information that has changed from previously issued version.

Notice to reader: To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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