



SMITHERS-OASIS NORTH AMERICA  
919 MARVIN AVENUE • P.O. BOX NUMBER 118 • KENT, OHIO 44240

406775

**MATERIAL SAFETY DATA SHEET**

**OASIS® SAHARA® II DRY FOAM**

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION	
<b>IDENTITY</b> OASIS® SAHARA® II DRY FOAM	<b>DATE PREPARED</b> 6/05/2005
<b>SYNONYMS, CHEMICAL NAMES, COMMON NAMES</b> OASIS® SAHARA® II Dry Foam	<b>USE:</b> Floral foam

<b>MANUFACTURER'S NAME</b> Smithers-Oasis	<b>TELEPHONE NUMBER - INFORMATION</b> 330-673-5831
<b>ADDRESS</b> 919 Marvin Avenue P.O. Box 118 Kent, OH 44240 USA	<b>EMERGENCY TELEPHONE NUMBER</b> Transportation emergency: CHEMTREC: 800 424-9300 International Transportation: CHEMTREC: 703-527-3887 Rocky Mountain Poison and Drug Center: 303- 623-5716

SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS			
HAZARDOUS COMPONENTS	OSHA PEL	ACGIH TLV	%
Polymerized polyurethane modified polyisocyanurate rigid cellular plastic	None established	None established	87.5-93.8%
Carbon dioxide CAS# 124-38-9	5000 ppm TWA	5000 ppm TWA 30,000 ppm STEL	0-7.0%
Tri(beta-chloropropyl) phosphate CAS# 13674-84-5	None established	None established	5.5-6.2%
Remaining components, if any, are not hazardous or hazardous components are present at less than 1% (0.1% for carcinogens).			

**EMERGENCY OVERVIEW**

Colored rigid plastic with no odor.  
Poses little or no immediate hazard.

**SECTION 3 - HAZARDS IDENTIFICATION**

**PRIMARY ROUTE(s) OF EXPOSURE:**

Inhalation; skin; eyes; ingestion.

**IRRITATION DATA:**

Dust may cause irritation or corneal injury to eye due to mechanical action.

**INHALATION:**

**ACUTE:** Dust may cause irritation to upper respiratory tract. Vapors/fumes generated in thermal operations may cause respiratory irritation. Small amounts of the blowing agent (carbon dioxide) are released from the material, especially when it is cut. Excessive exposure to carbon dioxide may be central nervous system effects, anesthetic or narcotic effects. Carbon dioxide may be a simple asphyxiant; it also acts as a potent respiratory stimulant and at high concentrations as a narcotic. Humans cannot breathe air containing >10% CO<sub>2</sub> without losing consciousness. Concentrations of the blowing agent, anticipated incidental to proper industrial handling, are expected to be well below those that cause the acute inhalation effects above the OSHA PEL.

**CHRONIC:** Repeated excessive exposure to dusts may cause respiratory irritation and possibly other respiratory effects. Experiments with humans and animals suggest that continued exposure to concentrations averaging 1.5% of CO<sub>2</sub> may alter physiological processes, such as acid-base and electrolyte balance in the blood, calcium-phosphorus metabolism, and neuroendocrine activity.

**SKIN CONTACT:**

**ACUTE:** Essentially non-irritating to skin. Mechanical irritation only. Skin absorption is unlikely due to physical properties.

**CHRONIC:** None known.

**EYE CONTACT:**

**ACUTE:** Dust may cause irritation or corneal injury due to mechanical action.

**CHRONIC:** Irritation and conjunctivitis. Prolonged contact may result in severe irritation or burns.

**INGESTION:**

**ACUTE:** Ingestion is unlikely due to physical state. May cause choking if swallowed.

**CHRONIC:** None known.

**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE**

None known.

<b>SECTION 4 - EMERGENCY AND FIRST AID PROCEDURES</b>
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**INHALATION:** Remove from exposure to fresh air. If breathing has stopped, give artificial respiration. Oxygen may be given if breathing is difficult. Get medical attention.

**SKIN CONTACT:** Wash affected area with soap and water or shower.

**EYE CONTACT:** Flush thoroughly with water. Only mechanical irritation expected.

**INGESTION:** No adverse effects expected by this route of exposure.

<b>SECTION 5 - FIRE FIGHTING MEASURES</b>			
<b>FLASH POINT</b>	<b>FLAMMABLE LIMITS</b>	<b>LEL</b>	<b>UEL</b>
Not applicable		Not applicable	Not applicable
<b>AUTOIGNITION TEMPERATURE:</b> Not applicable.			
<b>EXTINGUISHING MEDIA</b>			
Water spray, foam, carbon dioxide, or dry chemical powder.			
<b>SPECIAL FIRE FIGHTING PROCEDURES</b>			
Firefighters should wear full protective NIOSH approved self-contained breathing apparatus.			

### **UNUSUAL FIRE AND EXPLOSION HAZARDS**

Rigid polyurethane and polyisocyanurate foams, in common with other organic materials such as paper, wood, cotton, and rubber, can present unreasonable fire risks in certain misapplications when exposed to ignition sources in air. This product contains a flame retardant to inhibit accidental ignition from small fire sources. However, once ignited, this product will burn and produce intense heat, dense smoke, and irritating or toxic gases. Rigid polyurethane foams autoignite at about 650-800F (343-427 C) and rigid polyisocyanurate foams autoignite at about 900-1000 F (482-538 C).

Carbon dioxide, carbon monoxide, possible traces of hydrogen cyanide, halogen acids, and nitrogen oxides can be generated under fire conditions.

The probability of dust explosions from polyurethane or polyisocyanurate dust is very low, however, do not smoke or use naked lights, open flames, space heaters or other ignition sources near rigid foam fabricating operations or near stored buns or sheets.

When hot-wire cutting rigid polyurethane or polyisocyanurate foam, keep a fire extinguisher nearby. Work should be carried out in a well ventilated area. Do not breathe fumes.

### **SECTION 6 - ACCIDENTAL RELEASE MEASURES**

Keep unnecessary people away; isolate hazard area and deny unnecessary entry.

### **SECTION 7 - HANDLING AND STORAGE**

#### **HANDLING**

The probability of dust explosions from polyurethane or polyisocyanurate dust is very low. Finely divided dust can cause health risks and can irritate the eyes, nose, and throat, as can any other nuisance dust. Avoid exposure to any dust, including foam dust. Conduct rigid foam fabrication operations in areas reserved exclusively for such operations. Do not allow dust to accumulate. Use cyclone dust collectors on all fabricating power tools. Keep work areas clean. Remove settled dust by vacuuming, not blowing.

This polyisocyanurate foam plastic product is combustible and should be protected from flame and other high heat sources.

#### **STORAGE**

Potential risks associated with rigid polyurethane and polyisocyanurate foams arise from dust, fire, and toxic thermal decomposition products and may result from improper storage, inadequate ventilation, improper disposal and/or misapplication.

Protect all indoor storage areas with fusible sprinklers. Maintain a minimum clearance of six feet between tops of foam stacks and sprinkler heads.

### **SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION**

#### **RESPIRATORY PROTECTION**

Where airborne concentrations may exceed guidelines for permissible air concentrations, choose a respirator in accordance with OSHA Respirator Standard 29 CFR 1910.134. In dusty atmospheres, use an approved dust respirator.

#### **VENTILATION**

Use general dilution or local exhaust ventilation to maintain exposure below the exposure limits.

**PROTECTIVE GLOVES**

Choose appropriate gloves in accordance with OSHA Subpart I Personal Protective Equipment Hand Protection Standard 29 CFR 1910.138.

**EYE PROTECTION**

Wear safety glasses. If there is a potential exposure to particles which could cause mechanical injury to the eye, wear chemical goggles. Choose in accordance with OSHA Eye and Face Protection Standard 29 CFR 1910.133.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT**

Appropriate protective clothing to minimize repeated and prolonged skin contact with this material.  
An eye wash fountain should be provided.

**RECOMMENDED EXPOSURE LIMITS**

No exposure limits have been set by OSHA or ACGIH for this product.

Recommended PEL for particulates not otherwise regulated:

Total dust: 15 mg/m<sup>3</sup> TWA

Respirable fraction: 5 mg/m<sup>3</sup> TWA

Recommended PEL for carbon dioxide is 10,000 ppm TWA and 30,000 ppm STEL.

Although some additive in the product may have exposure guidelines, these additives are encapsulated in the product and no exposure would be expected under normal handling conditions.

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Teratology data: CO<sub>2</sub> has been reported to cause birth defects in rats and rabbits, but the predictive value of these studies is limited because of the test conditions. No relevant information found on other components.

**SECTION 12 - ECOLOGICAL INFORMATION**

**ENVIRONMENTAL FATE**

**MOVEMENT & PARTIONING:** No bioconcentration is expected because of the relatively high molecular weight (MW > 1000). In the terrestrial environment, material is expected to remain in the soil. In the aquatic environment, material is expected to float.

**DEGRADATION & PERSISTENCE:** This water insoluble polymeric solid is expected to be inert in the environment. Surface photodegradation is expected with exposure to sun-light. No appreciable biodegradation is expected.

**ECOTOXICITY:** Not expected to be acutely toxic.

**SECTION 13 - DISPOSAL CONSIDERATIONS**

Incinerate in an approved waste-to-energy process with excess oxygen or bury in an approved landfill.

Dispose in accordance with all applicable federal, state, and local environmental regulations.

If discarded in its original form, material is not regulated by Resource Conservation and Recovery Act (RCRA) as a hazardous waste.

**SECTION 14 - TRANSPORT INFORMATION**

Department of Transportation                      Not regulated  
Canadian TDG    Not regulated

Material is not regulated as a DOT Marine Pollutant

**SECTION 15 - REGULATORY INFORMATION**

**OSHA:** This material is not classified as hazardous under OSHA regulations.

**TSCA:** All components are listed on the TSCA 8(b) inventory.

**DSL:** All components listed.

**SARA Title III - Toxic chemicals list 40 CFR 372.65:**

None

**SARA Hazard Categories:**

Acute Health Hazard	Chronic Health Hazard	Fire Hazard	Reactive Hazard	Sudden Release of Pressure
No	No	No	No	No

**CERCLA Toxic Chemicals List 40 CFR 302:**

None

**RCRA Hazardous Waste Codes 40 CFR 261.21:**

None

**WHMIS:**

This material has been classified in accordance with the hazard criteria of the Controlled Product Regulations, and is not considered a Controlled Product. The MSDS has been prepared in compliance with the CPR. Ingredients that are required to be reported under the WHMIS IDL are:

None.

<b>SECTION 16 - OTHER INFORMATION</b>
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HMIS Ratings:

Health 0  
Flammability 1  
Reactivity 0

NFPA Ratings

Health 1  
Flammability 1  
Reactivity 0

where 0=minimal, 1=slight, 2=moderate, 3=serious, 4=severe

The information and recommendations set forth herein are made in good faith and are believed to be accurate as of the date of preparation. Smithers-Oasis makes no warranty, either expressed or implied, with respect to this information and disclaims all liability from reliance on it.