



Revision Number: 001.2

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1. PRODUCT AND COMPANY IDENTIFICATION

Product name: OSI GREENSERIES PRO-FOAM II
INSULATING FOAM
IDH number: 1538743

Product type: Foam, 1-component with propellant gas

Company address:
 Henkel Corporation
 One Henkel Way
 Rocky Hill, Connecticut 06067

Region: United States

Contact information:
 Telephone: 800.624.7767
 MEDICAL EMERGENCY Phone: Poison Control Center
 1-877-671-4608 (toll free) or 1-303-592-1711
 TRANSPORT EMERGENCY Phone: CHEMTREC
 1-800-424-9300 (toll free) or 1-703-527-3887

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Physical state:	Liquid, Sprayable	HEALTH:	*2
Color:	Off white	FLAMMABILITY:	1
Odor:	Slightly, of fluorocarbon	PHYSICAL HAZARD:	1
		Personal Protection:	See MSDS Section 8

WARNING: VAPOR HARMFUL.
 MAY CAUSE LUNG DAMAGE.
 MAY CAUSE ALLERGIC SKIN AND RESPIRATORY REACTION.
 CONTENTS UNDER PRESSURE.
 MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.

Relevant routes of exposure: Inhalation, Ingestion, Skin

Potential Health Effects

Inhalation: Inhalation of mist or spray may be harmful. As a result of previous repeated overexposures or a single large dose, certain individuals will develop isocyanate sensitization (chemical asthma) which will cause them to react to a later exposure to isocyanate at levels well below the TLV. Chronic overexposure to isocyanates has been reported to cause lung damage. These symptoms, which can include chest tightness, wheezing, cough, shortness of breath or asthma attack, could be immediate or delayed (up to several hours after exposure). Persons suffering from allergic reactions to isocyanates should avoid contact with the product. May cause central nervous system effects with nausea, dizziness and headache. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Skin contact: Persons suffering from allergic reactions to isocyanates should avoid contact with the product. Prolonged or repeated skin contact may cause skin irritation or allergic skin sensitization reaction. This product may discolor the skin. Cured material is difficult to remove.

Eye contact: Contact with eyes can cause eye irritation.

Ingestion: Can cause irritation of mucous membranes. Nausea.

Existing conditions aggravated by exposure: Respiratory disorders. Pre-existing skin or lung allergies may increase the chance of developing exaggerated allergic symptoms from exposure to this product.

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous components	CAS NUMBER	%
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Methylenebis(phenylisocyanate)	101-68-8	10 - 30
Isocyanic acid, polymethylenepolyphenylene ester	9016-87-9	10 - 30
Norflurane	811-97-2	10 - 30
Tris(2-chloro-1-methylethyl) phosphate	13674-84-5	5 - 10

4. FIRST AID MEASURES

Inhalation:	If inhaled, immediately remove the affected person to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. If symptoms develop and persist, get medical attention.
Skin contact:	Fresh foam : Wipe off affected skin area immediately with a soft cloth and then remove residues with vegetable oil; apply skin care product. Cured foam can be removed only mechanically. Immediately wash skin thoroughly with soap and water. Remove contaminated clothes.
Eye contact:	Flush eyes with plenty of water for at least 5 minutes. If irritation persists seek medical attention.
Ingestion:	Do not induce vomiting, seek medical advice immediately.

5. FIRE FIGHTING MEASURES

Flash point:	427 °C (800.6 °F) Supplier method
Autoignition temperature:	Not available.
Flammable/Explosive limits - lower:	Not available.
Flammable/Explosive limits - upper:	Not available.
Extinguishing media:	powder foam Carbon dioxide. Do not use water.
Special firefighting procedures:	Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.
Unusual fire or explosion hazards:	Cool aerosol containers with jet of water. Containers may explode. Contents under pressure. Exposure to temperatures above 49°C (120°F) may cause container to burst. Do not puncture or incinerate pressurized containers.
Hazardous combustion products:	Isocyanate vapors In the event of a fire, carbon monoxide (CO), carbon dioxide (CO ₂) and nitrogen oxides (NO _x) can be released. Hydrogen fluoride. Traces of Hydrogen cyanide.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions:	Ventilate area. Wear suitable protective clothing, gloves and eye/face protection.
Clean-up methods:	Allow to solidify. Scrape up spilled material and place in a closed container for disposal.

7. HANDLING AND STORAGE

- Handling:** Do not puncture or incinerate pressurized containers. Ensure adequate ventilation, especially in confined areas. Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Keep out of the reach of children. When using do not eat, drink or smoke. Wear suitable protective clothing, gloves and eye/face protection. Refer to Section 8.
- Storage:** Store between 50°F and 80°F. (10° and 27°C) Do not store above 49 °C (120 °F). Do not cut or weld container.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous components	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Methylenebis(phenylisocyanate)	0.005 ppm TWA	0.02 ppm (0.2 mg/m3) Ceiling	None	None
Isocyanic acid, polymethylenepolyphenylene ester	0.005 ppm TWA	0.02 ppm (0.2 mg/m3) Ceiling	None	None
Norflurane	None	None	1,000 ppm (4,240 mg/m3) TWA	None
Tris(2-chloro-1-methylethyl) phosphate	None	None	None	None

- Engineering controls:** Persons with asthmatic-type conditions, chronic bronchitis, other chronic respiratory diseases or recurrent skin eczema or sensitization should be excluded from working with isocyanates. Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.
- Respiratory protection:** In case of insufficient ventilation wear suitable respiratory equipment.
- Eye/face protection:** Wear safety glasses with side shields.
- Skin protection:** Chemical resistant, impermeable gloves. Suitable protective clothing

9. PHYSICAL AND CHEMICAL PROPERTIES

- Physical state:** Liquid, Sprayable
- Color:** Off white
- Odor:** Slightly, of fluorocarbon
- Odor threshold:** Not available.
- pH:** Not available.
- Vapor pressure:** 345 kPa
- Boiling point/range:** < -26.1 °C (< -15°F) Compressed Gas.
- Melting point/ range:** Not available.
- Specific gravity:** 1.1 (Water = 1)
- Vapor density:** Not available.
- Flash point:** 427 °C (800.6 °F) Supplier method
- Flammable/Explosive limits - lower:** Not available.
- Flammable/Explosive limits - upper:** Not available.
- Autoignition temperature:** Not available.
- Evaporation rate:** Not available.
- Solubility in water:** Reacts slowly with water to liberate carbon dioxide gas.
- Partition coefficient (n-octanol/water):** Not available.
- VOC content:** 0 %; 0 g/l EPA Method 24

10. STABILITY AND REACTIVITY

Stability:	Not available.
Hazardous reactions:	May occur.
Hazardous decomposition products:	Carbon dioxide. Carbon monoxide. Oxides of nitrogen. Hydrogen fluoride. Traces of Hydrogen cyanide.
Incompatible materials:	Alcohols. Amines. Metal compounds. Strong bases.
Conditions to avoid:	Do not puncture, incinerate, or expose to temperatures above 48.9 °C (120 °F).

11. TOXICOLOGICAL INFORMATION

Acute inhalation product toxicity: In the event of protracted or repeated exposure, damage to health cannot be excluded., Cross-reactions with other isocyanate compounds are possible.

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Methylenebis(phenylisocyanate)	No	No	No
Isocyanic acid, polymethylenepolyphenylene ester	No	No	No
Norflurane	No	No	No
Tris(2-chloro-1-methylethyl) phosphate	No	No	No

Hazardous components	Health Effects/Target Organs
Methylenebis(phenylisocyanate)	Irritant, Respiratory, Allergen
Isocyanic acid, polymethylenepolyphenylene ester	Allergen, Irritant, Kidney, Liver, Respiratory
Norflurane	Cardiac, Central nervous system, Irritant, Respiratory, Skin
Tris(2-chloro-1-methylethyl) phosphate	Irritant, Reproductive, Some evidence of carcinogenicity

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal:	Dispose of according to Federal, State and local governmental regulations.
Hazardous waste number:	It is the responsibility of the user to determine if an item is hazardous as defined in the Resource Conservation and Recovery Act (RCRA) at the time of disposal. Product uses, transformations, mixtures, processes, etc., may render the resulting material hazardous, under the criteria of ignitability, corrosivity, reactivity and toxicity characteristics of the Toxicity Characteristics Leaching Procedure (TCLP) 40 CFR 261.20-24.

14. TRANSPORT INFORMATION

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name:	Aerosols
Hazard class or division:	2.2
Identification number:	UN 1950
Packing group:	None
DOT Reportable quantity:	Methylene diphenyl diisocyanate

International Air Transportation (ICAO/IATA)

Proper shipping name: Aerosols, non-flammable
Hazard class or division: 2.2
Identification number: UN 1950
Packing group: None

Water Transportation (IMO/IMDG)

Proper shipping name: AEROSOLS
Hazard class or division: 2.2
Identification number: UN 1950
Packing group: None

15. REGULATORY INFORMATION**United States Regulatory Information**

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.
TSCA 12 (b) Export Notification: None above reporting de minimis
CERCLA/SARA Section 302 EHS: None above reporting de minimis
CERCLA/SARA Section 311/312: Immediate Health, Delayed Health, Reactive, Pressure
CERCLA/SARA Section 313: This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). Methylenebis(phenylisocyanate) (CAS# 101-68-8). Isocyanic acid, polymethylenepolyphenylene ester (CAS# 9016-87-9).
California Proposition 65: No California Proposition 65 listed chemicals are known to be present.

Canada Regulatory Information

CEPA DSL/NDSL Status: All components are listed on or are exempt from listing on the Canadian Domestic Substances List.
WHMIS hazard class: A, D.2.B, D.2.A

16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: New Safety Data Sheet format.

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