Safety Data Sheet

OR80SLM, Part B

Section 1 – Identification

Oak Ridge Foam & Coating Systems, Inc
575 Commercial Ave
Green Lake, WI 54941
920-294-6800

Emergency Telephone: (800) 424-9300 Chemtrec
800-625-9577 (Oak Ridge Foam & Coating Systems, Inc)
BOTH NUMBERS ARE AVAILABLE DAYS, NIGHTS, WEEKENDS, & HOLIDAYS

GHS product identifier: **OR80SLM, Part B**
Other means of identification: Not available.
Product type: Liquid.

Relevant identified uses of the substance or mixture and uses advised against
Product use: Component of a Polyurethane System

Supplier's details: Oak Ridge Foam & Coating Systems, Inc
575 Commercial Avenue
Green Lake, WI 54941

Email address of person responsible for this SDS: info@oakridgepoly.com

Emergency telephone number (24h/7 day): Chemtrec: (800) 424-9300 or (703) 527-3887

Section 2 – Hazards Identification

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

Classification of the substance or mixture:

Acute Toxicity	4 (oral)
Acute Toxicity	4(dermal)
Skin corrosion/irritation	2
Serious eye damage/eye irritation	2
Hazardous to the aquatic environment – acute	3
Hazardous to the aquatic environment – acute	3

GHS Label Elements
Hazard pictograms:

Signal word: Danger

Hazard Statements: Harmful if inhaled
Causes skin and eye irritation.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
May cause respiratory irritation.

Precautionary Statements: Wear protective gloves. Wear eye or face protection. In case of inadequate ventilation, wear respiratory protection. Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. If experiencing respiratory symptoms: Call a POISON CENTER or physician. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention. Store locked up. Dispose of contents and container in accordance with all local, regional, national and international regulations.

Other hazards which do not result in classification: Not available.

Section 3 – Hazards Identification

Hazardous Components

Weight Percent	Components	CAS-No.	Classification
50 – 70%	Poly(oxy(methyl-1,2-ethanediyl)), Alpha-(2-aminomethylethyl) omega-(2-aminomethylethoxy)	9046-10-0	Acute Toxicity - 4 (oral) Acute Toxicity - 4(dermal) Skin corrosion/irritation - 2 Serious eye damage/eye irritation - 2 Hazardous to the aquatic environment (acute) - 3 Hazardous to the aquatic environment (chronic) - 3
15 – 25%	Aluminum	7429-90-5	Acute Toxicity - 4 (oral) Acute Toxicity - 4(dermal) Skin corrosion/irritation - 2 Serious eye damage/eye irritation - 2 Hazardous to the aquatic environment (acute) - 3 Hazardous to the aquatic environment (chronic) - 3
5 – 25%	Diethyltolvenediamine	68479-98-1	Acute Toxicity - 4 (oral) Acute Toxicity - 4(dermal) Skin corrosion/irritation - 2 Serious eye damage/eye irritation - 2 Hazardous to the aquatic environment (acute) - 3 Hazardous to the aquatic environment (chronic) - 3

5 – 20%	Glycerol poly(oxypropylene) triamine	64852-22-8	Acute Toxicity - 4 (oral) Acute Toxicity - 4(dermal) Skin corrosion/irritation - 2 Serious eye damage/eye irritation - 2 Hazardous to the aquatic environment (acute) - 3 Hazardous to the aquatic environment (chronic) - 3
2 - 10%	4,4'-methylenebis[N-sec-butylaniline]	5285-60-9	Acute Toxicity - 4 (oral) Acute Toxicity - 4(dermal) Skin corrosion/irritation - 2 Serious eye damage/eye irritation - 2 Hazardous to the aquatic environment (acute) - 3 Hazardous to the aquatic environment (chronic) - 3
.5 – 1.5%	Stoddard Solvent	8052-41-3	Acute Toxicity - 4 (oral) Acute Toxicity - 4(dermal) Skin corrosion/irritation - 2 Serious eye damage/eye irritation - 2 Hazardous to the aquatic environment (acute) - 3 Hazardous to the aquatic environment (chronic) - 3

The specific chemical identity and/or exact percentage of component(s) have been withheld as a trade secret.

Section 4 – First Aid Measures

Description of 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 area thoroughly with soap and water. Immediate medical attention required.

If in eyes: In case of contact with the eyes, rinse immediately for least 15 minutes with plenty of water.

If swallowed: Rinse mouth and then drink plenty of water. Do not induce vomiting. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Immediate medical attention required.

Most important symptoms and effects, both acute and delayed

Indication of any immediate medical attention and special treatment needed

Notes to Physician
Eyes: Stain for evidence of corneal injury. If cornea is burned, instill antibiotic/steroid preparation as needed. Workplace vapors could produce reversible corneal epithelial edema impairing vision. Skin: This compound is a skin sensitizer. Treat symptomatically as for contact dermatitis or thermal burn. Ingestion: Treat symptomatically. There is no specific antidote. Inducing vomiting is contraindicated because of the irritating nature of the compound. Inhalation: Treatment is essentially symptomatic. An individual having a dermal or pulmonary sensitization reaction to this material should be removed from further exposure to any diisocyanate.

Section 5 – Fire Fighting Measures

Extinguishing media
Suitable extinguishing media:
Water spray, dry powder, alcohol-resistant foam, carbon dioxide

Special hazards arising from the substance or mixture
Hazards during fire-fighting:
Toxic gases/vapours
Depolymerisation and liberation of the mentioned substances/group of substances.

Advice for fire-fighters
Protective equipment for fire-fighting:
Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:
If exposed to fire, keep containers cool by spraying with water. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems.

Impact Sensitivity:
Remarks: Based on the chemical structure there is no shock-sensitivity.

Section 6 – Accidental Release Measures

Personal precautions, protective equipment and emergency procedures
Wear appropriate respiratory protection. Use personal protective clothing. Ensure adequate ventilation.

Environmental precautions
Do not discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up
Spills should be contained, solidified, and placed in suitable containers for disposal.

Section 7 – Storage and Handling

Precautions for safe handling
Ensure thorough ventilation of stories and work areas. Handle in accordance with good industrial hygiene and safety practice. Remove contaminated clothing and protective equipment before entering eating areas. Hands and/or face should be washed before breaks and at the end of the shift. When using do not eat, drink or smoke. Keep away from sources of ignition – No smoking. Keep container tightly sealed.

Protection against fire and explosion:
Prevent electrostatic charge – sources of ignition should be kept well clear – fire extinguishers should be kept handy.

Conditions for safe storage, including any incompatibilities
Segregate from acids and acid forming substances.

Further information on storage conditions: Keep container tightly closed in a cool, well-ventilated place.

Section 8 – Exposure Controls/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. Do not exceed the maximum use concentration for the respirator facepiece/cartridge combination. For emergency or non-routine, high exposure situations, use a NIOSH-certified full facepiece pressure demand supplied-air respirator (SAR) with escape provisions.

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:
Eye wash fountains and safety showers must be easily accessible. Wear protective clothing as necessary to prevent contact. When using, do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks). Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Store work clothing separately.

Section 9 – Physical Properties

Physical state:	Liquid
Colour:	Light yellow
Flammability:	Not applicable
Lower/Upper explosive limits:	No data available
Odor:	Negligible
Vapor pressure:	Not applicable
Vapor density:	1.06 @ 77°F
pH:	No data available
Relative density:	1 g/cm³
Melting Point:	Not applicable
Freezing point:	Approximately 60°F
Solubility(ies):	Insoluble
Initial boiling point and boiling range:	No data available
Flash point:	Approximately 360°F
Evaporation rate:	No data available
Partition coefficient: n-octanol/water;	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity:	No data available

Section 10 – Stability and Reactivity

Reactivity
Under normal conditions of storage and use, hazardous reactions will not occur.

Stability
Stable under normal conditions of use and storage.

Possibility of hazardous reactions
No dangerous reactions known.

Conditions to avoid
Avoid excessive heats. Protect from atmospheric moisture. Replace outage with inert dry nitrogen.

Incompatible materials
Oxidizing material

Hazardous decomposition products:
Carbon Dioxide, Carbon Monoxide, Nitrogen Oxides, Ammonia

Section 11 – Toxicological Information

Acute toxicity

Product/ingredient name	Endpoint	Species	Result
Poly(oxy(methyl-1,2-ethanediyl)), Alpha-(2-aminomethylethyl) omega-(2-aminomethylethoxy)	LD50 Oral LD50 Dermal	Rat Rabbit	2,885 mg/kg 2,980 mg/kg
White spirit	LD50 Oral	Rat	2,000 mg/kg
Diethyltolvenediamine	LD50 Oral LD50 Dermal	Rat Rat	738 mg/kg 2,000 mg/kg
Glycerol poly(oxypropylene) triamine	LD50 Oral LD50 Dermal	Rat Rabbit	2,690 mg/kg 12,500 mg/kg
4,4'-methylenebis[N-sec-butylaniline]	LD50 Oral LD50 Dermal	Rat Rabbit	1,380 mg/kg 3,090 mg/kg
Stoddard Solvent	LD50 LD50	No data available	No data available

Skin corrosion/irritation
Bases on available data, the classification criteria are not met.

Serious eye damage/irritation
Causes serious eye irritation.

Respiratory or skin sensitization
Based on available data, the classification criteria are not met.

Germ cell mutagenicity
Based on available data, the classification criteria are not met.

Reproductive toxicity
Suspected of damaging fertility or the unborn child.

Specific target organ toxicity (single exposure)
Based on available data, the classification criteria are not met.

Specific target organ toxicity (repeated exposure)
Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard
Based on available data, the classification criteria are not met.

Symptoms/injuries after inhalation
May cause respiratory tract irritation.

Symptoms/injuries after skin contact
Harmful, in contact with skin. May cause skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin.

Symptoms/injuries after eye contact
Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

Symptoms/injuries after ingestion
Harmful if swallowed. May cause stomach distress, nausea or vomiting.

Section 12 – Ecological Information

Toxicity
Ecology - general: May cause long-term adverse effects in the aquatic environment.

Persistence and degradability
Persistence and degradability: No additional information available.

Bioaccumulative potential
Bioaccumulative potential: No additional information available.

Mobility in soil
Ecology – soil

Other adverse effects
Other adverse effects: No additional information available.
Effect on ozone layer: No additional information available.
Effect on the global warning: No known ecological damage caused by this product.

Section 13 – Disposal Consideration

Waste treatment methods
Waste disposal recommendations: This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.

Section 14 – Transportation Information

Land Transport (DOT)	Corrosive liquids, toxic, N.O.S. (polyoxypropylenediamine)
Sea Transport (MDG)	Corrosive liquids, toxic, N.O.S. (polyoxypropylenediamine)
Air Transport (CAO/LATA)	Corrosive liquids, toxic, N.O.S. (polyoxypropylenediamine)

Reportable quantity: 20,000 lb. (Single containers less than 5,000 lbs. are not regulated.

Sea Transport (IMDG)
Non-regulated

Air Transport (ICAO/IATA)
Non-regulated

Section 15 – Regulatory Information

U.S. Federal Regulations

OSHA Hazcom Standard Rating: Hazardous

US Toxic Substances Control Act:
All components of this product are included, or are exempt from inclusion, in the EPA Toxic Substance Control Act (TSCA) Chemical Substance Inventory.

Canadian DSL: All components of this product are included, or are exempt from inclusion, in the Canadian Domestic Substance
List (DSL).

US EPA CERCLA Hazardous Substances (40 CFR 302):

Components: None

SARA Section 311/312 Hazard Categories:
Acute health hazard, chronic health hazard, reactivity hazard.

US EPA Emergency Planning and Right-to-Know Act (EPCRA) ASARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A):

Components: None

US EPA Emergency Planning and Right-to-Know Act (EPCRA) ASARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required:

Components: None

US EPA Resource Conservation and Recovery Act (RCRA) Composite list of Hazardous Wastes and Appendix VIII Hazardous Constituents (40 CFR 261):
If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40CFR 261.20-24)

State Right-to-Know Information
The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

Massachusetts, New Jersey or Pennsylvania right-to-know substance lists:

Weight%	Components	CAS number
None		

New Jersey environmental Hazardous Substances List and/or New Jersey right-to-know special hazardous substances list:

Weight%	Components	CAS number
None		

California Proposition 65:

This product does not contain any of the listed chemicals, which the state of California has found to cause cancer, birth defects or other reproductive harm.

Section 16 – Other Information

NFPA 704M Rating
Health = 2
Fire = 1
Reactivity = 0
Other =
0= Insignificant 1 = Slight 2 = Moderate 3 = High 4 = Extreme

HMIS Rating
Health = 2*
Flammability = 1
Physical Hazard = 1
0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe
***= Chronic health hazard**

Disclaimer: This information is furnished without warranty, express or implied. This information is believed to be accurate to the best knowledge of Oak Ridge Foam & Coating Systems, Inc. Oak Ridge Foam & Coating Systems, Inc assumes no legal responsibility for use of or reliance upon the information in this MSDS. 6-2015