

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Issue date: 04/05/2022 Revision date: 03/10/2023 Version: 2.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture

Product name : Miracle Foamseal F2100 Resin

1.2. Recommended use and restrictions on use

No additional information available

1.3. Supplier

Holcim Solutions and Products US, LLC 26 Century Boulevard, Suite 205 Nashville, Tennessee 37214

1-800-878-7876 • www. holcimmiracle.com

1.4. Emergency telephone number

Emergency number : CHEMTREC (US Transportation): (800) 424-9300 International: +1 (703) 527-3887

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Skin corrosion/irritation, Category 1B H314
Serious eye damage/irritation, Category 1 H318
Hazardous to the aquatic environment - Chronic Hazard, Category 2 H411

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US)





Signal word (GHS US) : Danger

Hazard statements (GHS US) : H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

H411 - Toxic to aquatic life with long lasting effects

Precautionary statements (GHS US) : P260 - Do not breathe mist/vapors/spray.

P264 - Wash hands, forearms and face thoroughly after handling.

P273 - Avoid release to the environment.

P280 - Wear protective gloves, protective clothing, chemical goggles, & face protection.

P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting.

P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse

skin with water/shower.

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing

P363 - Wash contaminated clothing before reuse.

P391 - Collect spillage. P405 - Store locked up.

P501 - Dispose of contents/container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

03/10/2023 Miracle Foamseal F2100 Resin Page 1

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

3.2 Mixtures

Name	Product identifier	%
Oxirane, 2-methyl-, polymer with oxirane, ether with 2,6-bis[[bis(2-hydroxyethyl)amino]methyl]-4-branched nonylphenol	(CAS-No.) 940912-28-7	30 – 60
N,N-Dimethylcyclohexylamine	(CAS-No.) 98-94-2	1 – 5
Ethanol, 2,2-iminobis-, polymer with 2-methyloxirane and oxirane	(CAS-No.) 34354-45-5	1 – 5

^{*} In accordance with paragraph (i) of the OSHA Hazard Communication Standard (29 CFR §1910.1200), the specific chemical identity or exact weight % has been withheld as a trade secret.

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : If exposed or concerned, get medical attention/advice. Show this safety data sheet to the

doctor in attendance. Wash contaminated clothing before re-use. Never give anything to an

unconscious person.

First-aid measures after inhalation : IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get

medical attention. If breathing is difficult, supply oxygen. If breathing has stopped, give artificial

respiration.

First-aid measures after skin contact : IF ON SKIN (or clothing): Remove affected clothing and wash all exposed skin with water for at

least 15 minutes. If irritation develops or persists, get medical attention immediately.

First-aid measures after eye contact : IF IN EYES: Immediately flush with plenty of water for at least 15 minutes. Remove contact

lenses if present and easy to do so. Get medical attention immediately. Continue rinsing.

First-aid measures after ingestion : IF SWALLOWED: rinse mouth thoroughly. Do not induce vomiting without advice from poison

control center or medical professional. Get medical attention immediately.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : Causes severe skin burns and eye damage.

Symptoms/effects after inhalation : May cause respiratory irritation.

Symptoms/effects after skin contact : Causes severe skin burns.

Symptoms/effects after eye contact : Causes serious eye damage.

Symptoms/effects after ingestion : May cause gastrointestinal irritation.

4.3. Immediate medical attention and special treatment, if necessary

No additional information available

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Foam. Carbon dioxide. Dry powder.

Unsuitable extinguishing media : Do not use a water jet since it may cause the fire to spread.

5.2. Specific hazards arising from the chemical

Fire hazard : Not flammable.

Explosion hazard : Product is not explosive.

Reactivity : None known.

5.3. Special protective equipment and precautions for fire-fighters

Precautionary measures fire : Eliminate all ignition sources if safe to do so.

Firefighting instructions : Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed

containers. Do not dispose of fire-fighting water in the environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Evacuate area. Ventilate area. Keep upwind. Spill should be handled by trained cleaning

personnel properly equipped with respiratory and eye protection.

6.1.1. For non-emergency personnel

Protective equipment : Wear protective equipment as described in section 8.

Emergency procedures : Evacuate unnecessary personnel.

03/10/2023 Miracle Foamseal F2100 Resin 2/8

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

6.1.2. For emergency responders

Protective equipment

: Wear suitable protective clothing, gloves and eye or face protection. Approved supplied-air respirator, in case of emergency.

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment

: SMALL SPILL: Dike area to contain spill. Take precautions as necessary to prevent contamination of ground and surface waters. Recover spilled material on absorbent, such as sawdust or vermiculite, and sweep/shovel into opentop containers with lids for disposal. Do not pressurize the container. Wipe off traces of material. Do not flush to sewer. If area of spill is porous, remove as much contaminated earth and gravel, etc. as necessary and place in closed containers for disposal. Only those persons who are adequately trained, authorized, and wearing the required personal protective equipment (PPE) should participate in spill response and clean-up.

LARGE SPILL: Keep spectators away. Only those persons who are adequately trained, authorized and wearing the required personal protective equipment (PPE) should participate in spill response and clean-up. Know and prepare for spill response before using or handling this product. Dike and contain spill with inert material (e.g. sand, earth). Transfer liquids to covered and labeled containers for disposal. Use appropriate PPE. Place absorbent diking materials in covered containers for disposal. Prevent contamination of sewers, streams, and groundwater with spilled material or used absorbent.

6.4. Reference to other sections

See Sections 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

: For professional or industrial use only. Follow label instructions. Keep out of the reach of children. Not for consumption. No smoking. Do not breathe vapors. Avoid contact with body. Empty containers must not be washed and re-used for any purpose. Contact lens wearers must wear protective eye wear around chemical vapors and liquid. Wash hands thoroughly after handling. To prevent build-up of vapors, use adequate natural and/or mechanical ventilation (e.g. open all windows and doors to achieve cross ventilation).

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

: Store in original container. Keep container closed when not in use. Containers which are opened should be properly resealed and kept upright to prevent leakage. Store in a dry, cool and well-ventilated place.

Incompatible materials : No data available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

N,N-Dimethylcyclohexylamine (98-94-2)			
ACGIH	Remark (ACGIH)	OELs not established	
OSHA	Remark (OSHA)	OELs not established	
Oxirane, 2-methyl-, polymer with oxirane, ether with 2,6-bis[[bis(2-hydroxyethyl)amino]methyl]-4-branched nonylphenol (940912-28-7)			
ACGIH	Remark (ACGIH)	OELs not established	
OSHA	Remark (OSHA)	OELs not established	
Ethanol, 2,2-iminobis-, polymer with 2-methyloxirane and oxirane (34354-45-5)			
ACGIH	Remark (ACGIH)	OELs not established	
OSHA	Remark (OSHA)	OELs not established	

8.2. Appropriate engineering controls

Appropriate engineering controls

: Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Ensure adequate ventilation, especially in confined areas.

03/10/2023 Miracle Foamseal F2100 Resin 3/8

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment symbol(s):







Personal protective equipment:

Gloves. Protective goggles. Wear chemically impervious apron over labcoat and full coverage clothing.

Hand protection:

Use gloves chemically resistant to this material when prolonged or repeated contact could occur. Be aware that the chemical may penetrate the gloves. Frequent changes are advisable. Gloves should be classified under Standard EN 374 or ASTM F1296. Suggested glove materials are: Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, PVC or vinyl. Suitable gloves for this specific application can be recommended by the glove supplier.

Eye protection:

Wear eye protection, including chemical splash goggles and a face shield when possibility exists for eye contact due to spraying liquid or airborne particles.

Skin and body protection:

Wear long sleeves, and chemically impervious PPE/coveralls to minimize bodily exposure.

Respiratory protection:

Use NIOSH (or other equivalent national standard) -approved dust/particulate respirator. Where vapor, mist, or dust exceed PELs or other applicable OELs, use NIOSH-approved respiratory protective equipment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearanc : Translucent liquid

Color : Amber

Odor : Slight amine odor Odor threshold : No data available pΗ No data available Melting point No data available : No data available Freezing point **Boiling point** No data available Flash point : No data available : No data available Relative evaporation rate (n-butyl acetate=1) Flammability (solid, gas) No data available : No data available Vapor pressure Relative vapor density at 20 °C : No data available Density : 8.67 lb/gal

: No data available Solubility : No data available Partition coefficient n-octanol/water (Log Pow) Auto-ignition temperature : No data available Decomposition temperature : No data available Viscosity, kinematic : No data available · No data available Viscosity, dynamic **Explosion limits** : No data available Explosive properties : No data available Oxidizing properties : No data available

9.2. Other information

No additional information available

03/10/2023 Miracle Foamseal F2100 Resin 4/8

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 10: Stability and reactivity

10.1. Reactivity

None under normal use.

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions

None under normal use.

10.4. Conditions to avoid

None under normal use.

10.5. Incompatible materials

None under normal use.

10.6. Hazardous decomposition products

Decomposition products depend upon temperature, air supply and the presence of other materials. Carbon oxides (CO, CO2).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

N,N-Dimethylcyclohexylamine (98-94-2)	
LD50 oral rat	272 mg/kg
LD50 dermal rat	> 400 mg/kg
LC50 Inhalation - Rat	1889 mg/m3 2 h (Source: NLM CIP)

Oxirane, 2-methyl-, polymer with oxirane, ether with 2,6-bis[[bis(2-hydroxyethyl)amino]methyl]-4-branched nonylphenol (940912-28-7)		
LD50 oral rat	1370 mg/kg	
LD50 dermal rabbit	12800 mg/kg	

Skin corrosion/irritation : Causes severe skin burns.
Serious eye damage/irritation : Causes serious eye damage.

Respiratory or skin sensitization : Not classified Germ cell mutagenicity : Not classified : Not classified Carcinogenicity Reproductive toxicity : Not classified STOT-single exposure Not classified STOT-repeated exposure : Not classified Aspiration hazard : Not classified Viscosity, kinematic Not applicable

Symptoms/effects : Causes severe skin burns and eye damage.

Symptoms/effects after inhalation : May cause respiratory irritation.

Symptoms/effects after skin contact : Causes severe skin burns.

Symptoms/effects after eye contact : Causes serious eye damage.

Symptoms/effects after ingestion : May cause gastrointestinal irritation.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : No information available.

Hazardous to the aquatic environment, short-term (acute)

: Not classified.

Hazardous to the aquatic environment, long-

: Toxic to aquatic life with long lasting effects.

term (chronic)

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

03/10/2023 Miracle Foamseal F2100 Resin 5/8

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other adverse effects : No data available.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Do not discharge to public wastewater systems without permit of pollution control authorities.

No discharge to surface waters is allowed without an NPDES permit.

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Do not allow the

product to be released into the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description (DOT) : UN2735 Amines, liquid, corrosive, n.o.s. (Oxirane, 2-methyl-, polymer with oxirane, ether with

2,6-bis[[bis(2-hydroxyethyl)amino]methyl]-4-branched nonylphenol; N,N-

Dimethylcyclohexylamine), 8, III

UN-No.(DOT) : UN2735

Proper Shipping Name (DOT) : Polyamines, liquid, corrosive, n.o.s.

Class (DOT) : 8 - Class 8 - Corrosive material 49 CFR 173.136

Packing group (DOT) : III - Minor Danger Hazard labels (DOT) : 8 - Corrosive



Dangerous for the environment : Yes

Marine pollutant : Yes



DOT Quantity Limitations Passenger aircraft/rail :

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 60 L

CFR 175.75)

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a

passenger vessel.

DOT Vessel Stowage Other : 52 - Stow "separated from" acids

Emergency Response Guide (ERG) Number : 153

Other information : No supplementary information available.

Transport by sea (IMDG)

Transport document description (IMDG) : UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (Oxirane, 2-methyl-, polymer with oxirane,

ether with 2,6-bis[[bis(2-hydroxyethyl)amino]methyl]-4-branched nonylphenol; N,N-

Dimethylcyclohexylamine), 8, III

UN-No. (IMDG) : 27

Proper Shipping Name (IMDG) : AMINES, LIQUID, CORROSIVE, N.O.S.

Class (IMDG) : 8 - Corrosive substances

Packing group (IMDG) : III - substances presenting low danger

Limited quantities (IMDG) : 5 L

03/10/2023 Miracle Foamseal F2100 Resin 6/8

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Marine pollutant : Yes



Air transport (IATA)

Transport document description (IATA) : UN 2735 Amines, liquid, corrosive, n.o.s. (Oxirane, 2-methyl-, polymer with oxirane, ether with

2,6-bis[[bis(2-hydroxyethyl)amino]methyl]-4-branched nonylphenol; N,N-

Dimethylcyclohexylamine), 8, III

UN-No. (IATA) : 2735

Proper Shipping Name (IATA) : Amines, liquid, corrosive, n.o.s.

Class (IATA) : 8 - Corrosives
Packing group (IATA) : III - Minor Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

Miracle Foamseal F2100 Resin	
· ·	EPA (Environmental Protection Agency) "TSCA Inventory Notification (Activenended Feb. 2021, or are otherwise exempt or regulated by other agencies
SARA Section 311/312 Hazard Classes	Health hazard - Skin corrosion or Irritation Health hazard - Serious eye damage or eye irritation

15.2. International regulations

No additional information available.

15.3. US State regulations



This product can expose you to Diethanolamine, which is known to the State of California to cause cancer, and 2-Methoxyethanol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Component	Carcinogenicity	Developmental toxicity	Reproductive toxicity male	Reproductive toxicity female	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Diethanolamine (111-42-2)	Х					
Formaldehyde (50-00-0)	Х				40 μg/day	
2-Methoxyethanol (109-86-4)		Х	Х		63 μg/day (oral)	63 µg/day oral
1,4-Dioxane (123-91- 1)	Х				30 μg/day	
Ethylene glycol (107- 21-1)		Х				8700 µg/day (oral)

Component	State or local regulations
N,N-Dimethylcyclohexylamine (98-94-2)	U.S New Jersey - Right to Know Hazardous Substance List
Diethanolamine (111-42-2)	U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List
Formaldehyde (50-00-0)	U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List; U.S Massachusetts - Right To Know List
2-Methoxyethanol (109-86-4)	U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List; U.S Massachusetts - Right To Know List

03/10/2023 Miracle Foamseal F2100 Resin 7/8

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Component	State or local regulations
1,4-Dioxane (123-91-1)	U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List
Ethylene glycol (107-21-1)	U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List; U.S Pennsylvania - RTK (Right to Know) List
Diethylene glycol (111-46-6)	U.S Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Other information : Author: JAD.

NFPA health hazard : 3 - Materials that, under emergency conditions, can cause

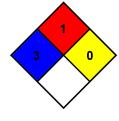
serious or permanent injury.

NFPA fire hazard : 1 - Materials that must be preheated before ignition can

occur.

NFPA reactivity : 0 - Material that in themselves are normally stable, even

under fire conditions.



HMIS Hazard Rating

Health : 3 Flammability : 1 Physical : 0

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

03/10/2023 Miracle Foamseal F2100 Resin 8/8