SAFETY DATA SHEET

1. Identification

Product identifier	**ENVERGE SucraSeal (4700) - Part B Polyol - Open Cell**
Other means of identification	
Product code	F4700-OC
Recommended use	Component for the manufacture of polyurethane polymers.
Recommended restrictions	For professional use only. Uses other than the recommended use.
Manufacturer/Importer/Supplier/Distributor information	
Distributed by	Holcim Solutions and Products US, LLC
Address	26 Century Boulevard, Suite 205 Nashville, TN 37214 ENVERGE™ is a Holcim Solutions and Products US, LLC brand.
Website	envergesprayfoam.com
Email	contactSPF-us@holcim.com
Telephone Number	(713) 239-0252
Emergency Telephone Number	For Chemical Emergency, Spill, Leak, Fire, Exposure, or Incident: CHEMTREC within USA and Canada: 1-800-424-9300 CHEMTREC outside USA and Canada: +1 703-527-3887 (collect calls accepted)

2. Hazard(s) identification

Physical hazards	Not classified.	
Health hazards	Acute toxicity, oral	Category 4
	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 1
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 3
	Hazardous to the aquatic environment, long-term hazard	Category 3
OSHA defined hazards	Not classified.	

Label elements

Signal word	Danger
Hazard statement	Harmful if swallowed. Causes skin irritation. Causes serious eye damage. Harmful to aquatic life with long lasting effects.
Precautionary statement	
Prevention	Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear eye protection/face protection. Wear protective gloves.
Response	If swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth. Immediately call a poison center/doctor. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.
Storage	Store away from incompatible materials.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Tris(2-chloro-1-methylethyl) Phosphate	13674-84-5	10 - 30
4-Nonylphenol branched, ethoxylated	127087-87-0	1 - 5
Dimethylaminoethoxyethanol	1704-62-7	1 - 5
N'-[3-(Dimethylamino)propyl]-N,N-dimethylpropane-1,3-diamine	6711-48-4	1 - 5
N,N,N',N'-tetramethyl-2,2'-oxybis(ethylamine)	3033-62-3	1 - 5

Composition comments All concentrations are in percent by weight unless otherwise indicated. Any concentration shown as a range is to protect confidentiality or is due to batch variation.

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

Ingestion Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell.

Most important symptoms/effects, acute and delayed Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Coughing. Skin irritation. May cause redness and pain.

Indication of immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical During fire, gases hazardous to health may be formed such as: Carbon oxides. Nitrogen oxides.

Special protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions Move containers from fire area if you can do so without risk.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Prevent product from entering drains.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Absorb spillage with suitable absorbent material. Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Do not get this material in contact with eyes. Do not taste or swallow. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values (TLV)

Components	Type	Value
N,N,N',N'-tetramethyl-2,2'-oxybis(ethylamine) (CAS 3033-62-3)	STEL	0.15 ppm
	TWA	0.05 ppm

Biological limit values

No biological exposure limits noted for the ingredient(s).

Exposure guidelines

US - California OELs: Skin designation

N,N,N',N'-tetramethyl-2,2'-oxybis(ethylamine) (CAS 3033-62-3) — Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

N,N,N',N'-tetramethyl-2,2'-oxybis(ethylamine) (CAS 3033-62-3) — Danger of cutaneous absorption

Appropriate engineering controls

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear approved chemical safety goggles. Face shield is recommended.

Skin protection

Hand protection

Wear appropriate chemical resistant gloves. Examples of preferred glove barrier materials include: Butyl rubber. Nitrile butyl rubber (NBR). Neoprene. Suitable gloves can be recommended by the glove supplier.

Skin protection

Other

Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Chemical respirator with organic vapor cartridge and full facepiece.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Observe any medical surveillance requirements. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance

Physical state	Liquid.
Form	Slightly viscous liquid.
Color	Light brown.
Odor	Amine.
Odor threshold	Not available.
pH	10
Melting point/freezing point	Not determined.
Initial boiling point and boiling range	Not determined.
Flash point	> 200 °F (> 93.33 °C) Closed Cup
Evaporation rate	Not determined.
Flammability (solid, gas)	Not applicable.

Upper/lower flammability or explosive limits

Explosive limit - lower (%)	Not determined.
Explosive limit - upper (%)	Not determined.
Vapor pressure	Not determined.
Vapor density	Not determined.
Relative density	1.09 (77 °F (25 °C))

Solubility(ies)

Solubility (water)	Soluble.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not determined.
Decomposition temperature	Not determined.
Viscosity	183 cps (77 °F (25 °C))

Other information

Density	10.34 lb/gal (77 °F (25 °C))
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
VOC	Not determined.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents. Isocyanates.
Hazardous decomposition products	No hazardous decomposition products are known. In the event of fire: See Section 5.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye damage.
Ingestion	Harmful if swallowed.
Symptoms related to the physical, chemical and toxicological characteristics	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Coughing. Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity Harmful if swallowed.

Components	Species	Test Results
Dimethylaminoethoxyethanol (CAS 1704-62-7)		
Acute		
Dermal		
LD50	Rabbit	1653 mg/kg
Inhalation		
Vapor		
LC50	Rat	> 0.39 mg/l, 4 hours
Oral		
LD50	Rat	2150 - 3830 mg/kg
N,N,N',N'-tetramethyl-2,2'-oxybis(ethylamine) (CAS 3033-62-3)		
Acute		
Dermal		
LD50	Rabbit	315 mg/kg
Inhalation		
Vapor		
LC50	Rat	4 mg/l, 4 hours
Oral		
LD50	Rat	609 - 677 mg/kg

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye irritation Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity Not classifiable as to carcinogenicity to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

NTP Report on Carcinogens

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects.

Components		Species	Test Results
Dimethylaminoethoxyethanol (CAS 1704-62-7)			
Aquatic			
Acute			
Algae	EC50	Pseudokirchneriella subcapitata	160 mg/l, 72 hours
Crustacea	EC50	Daphnia magna	> 100 mg/l, 48 hours

Components		Species	Test Results
Fish	LC50	Leuciscus idus	320 mg/l, 96 hours

N,N,N',N'-tetramethyl-2,2'-oxybis(ethylamine) (CAS 3033-62-3)

Aquatic			
Acute			
Algae	EC50	Pseudokirchneriella subcapitata	24 mg/l, 72 hours
Crustacea	EC50	Daphnia magna	102 mg/l, 48 hours
Fish	LC50	Danio rerio	131 mg/l, 96 hours

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential

Mobility in soil No data available.

Other adverse effects No data available.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

TSCA Chemical Action Plans, Chemicals of Concern

4-Nonylphenol branched, ethoxylated (CAS 127087-87-0)	Nonylphenol (NP) and Nonylphenol Ethoxylates (NPEs) Action Plan

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Toxic Substances Control Act (TSCA) All components of the mixture on the TSCA 8(b) inventory are designated “active”.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

Classified hazard categories
Acute toxicity (any route of exposure)
Skin corrosion or irritation
Serious eye damage or eye irritation

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
4-Nonylphenol branched, ethoxylated	127087-87-0	1 - 5

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Contains component(s) regulated under the Safe Drinking Water Act.

US state regulations

US. Massachusetts RTK - Substance List

Not regulated.

US. New Jersey Worker and Community Right-to-Know Act

4-Nonylphenol branched, ethoxylated (CAS 127087-87-0)
N,N,N',N'-tetramethyl-2,2'-oxybis(ethylamine) (CAS 3033-62-3)

US. Pennsylvania Worker and Community Right-to-Know Law

Not listed.

US. Rhode Island RTK

Not regulated.

California Proposition 65

WARNING: This product can expose you to chemicals including Ethylene Oxide and 1,4-Dioxane, which are known to the State of California to cause cancer, and Ethylene Oxide and Ethylene glycol, which are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

1,4-Dioxane (CAS 123-91-1)	Listed: January 1, 1988
Ethylene Oxide (CAS 75-21-8)	Listed: July 1, 1987

California Proposition 65 - CRT: Listed date/Developmental toxin

Ethylene glycol (CAS 107-21-1)	Listed: June 19, 2015
Ethylene Oxide (CAS 75-21-8)	Listed: August 7, 2009

California Proposition 65 - CRT: Listed date/Female reproductive toxin

Ethylene Oxide (CAS 75-21-8)	Listed: February 27, 1987

California Proposition 65 - CRT: Listed date/Male reproductive toxin

Ethylene Oxide (CAS 75-21-8)	Listed: August 7, 2009

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

4-Nonylphenol branched, ethoxylated (CAS 127087-87-0)
Tris(2-chloro-1-methylethyl) Phosphate (CAS 13674-84-5)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 08-December-2023

Revision date -

Version # 01

HMIS® ratings Health: 3
Flammability: 0
Physical hazard: 0
Personal protection: B

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