SAFETY DATA SHEET

Creation Date	Revision Date	Version
07-Feb-2023	13-Jun-2023	2

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name Natural-Therm® Zero

Synonyms Natural Therm Zero B Component
Natural Therm Zero Spray Polyurethane Foam Insulation System

Product Code OCNP00005

Manufacturer Address Natural Polymers, LLC , a subsidiary of Owens Corning
14438 E North Ave
Cortland, IL 60112

Company Phone Number 1-800-GET-PINK or 1-800-438-7465
24 Hour Emergency Phone Number Chemtrec 1-800-424-9300 or 1-703-741-5970 CCN17393
Emergency Telephone 1-419-248-5330 (after 5 pm ET and weekends)

2. HAZARDS IDENTIFICATION

OSHA Regulatory Status This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1

Label elements

Danger

Hazard statements

Harmful if swallowed
Causes skin irritation
Causes serious eye damage

ERG Code Specific treatment (see first aid information on this label)

Eyes
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- Immediately call a POISON CENTER or doctor/physician

Skin
- IF ON SKIN: Wash with plenty of soap and water
- If skin irritation occurs: Get medical advice/attention
- Take off contaminated clothing and wash before reuse

Ingestion
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
- Rinse mouth

Precautionary Statements - Disposal
- Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)
- Not applicable

Unknown acute toxicity
- No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Product Components

Chemical name	CAS No.	Weight-%	Trade Secret
TCPP	13674-84-5	10-20	*
2,2`-oxydiethanol	111-46-6	5-10	*
Surfactant	Proprietary	<5	*
Reactive amine catalyst	Proprietary	<5	*
Catalyst 1-1	Proprietary	<5	*

*The exact percentage (concentration) of composition has been withheld as a trade secret

4. FIRST AID MEASURES

Description of First Aid Measures

General advice
Show this safety data sheet to the doctor in attendance.

Eye contact
- Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes
- Remove contact lenses, if present and easy to do. Continue rinsing
- Protect uninjured eye.
- Seek immediate medical attention, preferably from an ophthalmologist.

Skin contact
- Remove contaminated clothing and shoes
- Rinse skin with copious amounts of water [shower] for several minutes.
- Wash contaminated clothing before reuse
- Get medical attention if irritation develops and persists

Inhalation
- IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
- If breathing is difficult, give oxygen
- If breathing has stopped, give artificial respiration. Get medical attention immediately
- (Get medical attention immediately if symptoms occur.)

Ingestion
- If swallowed, DO NOT induce vomiting unless told to do so by a physician or poison control center.
- Rinse mouth with water (only if the person is conscious)
- Stop if the exposed person feels sick as vomiting may be dangerous.
- (Get medical attention immediately if symptoms occur.)

Most important symptoms and effects, both acute and delayed
- Skin contact may result in redness, pain, burning, and inflammation.
- Eye contact may result in irritation, redness, pain, inflammation, itching, burning, tearing, corneal damage and loss of vision.
- Effects are dependent on exposure (dose, concentration, contact time).

Note to physicians
- Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
- Water spray (fog)
- Carbon dioxide (CO2)
- Dry chemical
- Alcohol resistant foam

Unsuitable extinguishing media
- DO NOT use water jet, it may spread the fire.

Specific hazards arising from the chemical
- Thermal decomposition can lead to release of irritating and toxic fumes and gases.
- Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes

Explosion data

Sensitivity to Mechanical Impact • No

Sensitivity to Static Discharge • No

Protective equipment and precautions for firefighters
- As in any fire, wear self-contained breathing apparatus (SCBA) in positive pressure mode and full fire-fighting protective gear.
- Avoid breathing dust/fume/gas/mist/vapors/spray
- Move containers from fire area if you can do it without risk
- Cool containers with flooding quantities of water until well after fire is out
- Avoid unnecessary run-off of extinguishing media which may cause pollution.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions
- Use personal protections recommended in Section 8
- Avoid contact with skin, eyes or clothing
- Avoid breathing dust/fume/gas/mist/vapors/spray
- DO NOT walk through spilled material.
- Wash thoroughly after handling

Environmental precautions
- Prevent further leakage or spillage if safe to do so
- Prevent from reaching drains, sewers and waterways.
- Discharge into the environment must be avoided.

Methods and material for containment and cleaning up

Methods for containment
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing
- Perform without risk.
- Contain and soak up spill with absorbent that does not react with spilled product. Place used absorbent into suitable, covered, labelled containers for disposal.

Methods for cleaning up
- Clean and neutralize spill area, tools and equipment by washing with water and soap.
- Absorb reinstate and add to the collected waste.
- Waste must be classified and labeled prior to recycling or disposal.
- Dispose of waste as indicated in Section 13.

7. HANDLING AND STORAGE

Precautions for safe handling
- Use personal protections recommended in Section 8
- Provide adequate ventilation
- Do not taste or swallow.
- Avoid contact with skin, eyes or clothing
- Avoid breathing mist/vapor/spray.
- When using, do not eat, drink or smoke.
- Wash hands, forearms and face after handling.

Conditions for safe storage, including any incompatibilities

Storage Conditions
- Keep containers tightly closed in a dry, cool and well-ventilated place
- Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity)
- Do not store near incompatible materials (see Section 10)

Incompatible materials
- Strong oxidizing agents
- Strong acids

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH REL
Formaldehyde 50-00-0	STEL: 0.3 ppm TWA: 0.1 ppm	TWA: 0.75 ppm STEL: 2 ppm see 29 CFR 1910.1048	IDLH: 20 ppm Ceiling: 0.1 ppm 15 min TWA: 0.016 ppm

Engineering Controls.

Showers
Eyewash stations
Ventilation systems
Provide adequate ventilation to maintain the airborne concentrations of vapor, mists, and/or dusts below the applicable workplace exposure limits, while observing recognized national standards (or equivalent).

Individual protection measures, such as personal protective equipment

Eye/face protection
- Wear safety glasses with side shields (or goggles)
- Wear face shield if splash hazard exist
- Ensure compliance with OSHA's PPE standard(29 CFR 1910.132 and .133) for eye and face protection.

Skin and body protection
- The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
- Gloves must be inspected prior to and during the use.
- It should be noted that the time to breakthrough for any glove material may be different for different glove manufactures. Protection time for the mixtures may not be accurately estimated.
- Avoid contract with used gloves.
- Remove contaminated clothing and used gloves properly to avoid any skin contact.
- Full body protection shall be worn. PPE selection should be based on the task being performed and risks involved. Approval by a specialist before handling is necessary.
- National standards for the PPEs associated with using this product shall be met.

Respiratory protection
- If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations

General Hygiene Considerations
- Do not eat, drink or smoke when using this product
- Wash hands after handling, before breaks, and at the end of the workday.
- Avoid contact with skin, eyes or clothing
- Wash contaminated clothing before reuse
- Perform routine housekeeping.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid
Appearance	Liquid
Odor	Aromatic
Color	Tan
pH value	7.0-9.0
Melting point / freezing point	No data available
Boiling point / boiling range	No data available
Flash point	: > 220 °F
Evaporation rate	No data available
Autoignition temperature	No data available
Viscosity	550-700 cPs at 77 °F (25°C) (Kinematic viscosity)
Specific Gravity	1.08-1.12 g/cc

10. STABILITY AND REACTIVITY

Reactivity • Not reactive under recommended handling and storage conditions.

Chemical stability • Stable under recommended handling and storage conditions.

Possibility of Hazardous Reactions • No hazardous decomposition under normal conditions of storage and use

Conditions to avoid • Incompatible materials

Incompatible materials • Strong oxidizing agents
• Strong acids

Hazardous Decomposition Products • In a fire, product will give off irritating fumes (CO, CO2).

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure
Product Information No data available

Chemical name	**Oral LD50**	**LD50/dermal/rat - NO UNITS (Wizards mg/kg)**	**Inhalation LC50**
Glycerin-initiated polyether polyol (5000 mw)	> 10 g/kg (Rat)	-	-
TCPP 13674-84-5	= 1500 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	> 5.05 mg/L (Rat) 4 h
Blowing Agent	-	-	> 690 mg/L (Rat) 4 h
2,2`-oxydiethanol 111-46-6	= 12565 mg/kg (Rat)	= 11890 mg/kg (Rabbit)	> 4600 mg/m³ (Rat) 4 h
Surfactant	= 1310 mg/kg (Rat)	-	-
Reactive amine catalyst	-	= 5700 mg/kg (Rabbit)	-
Polypropylene glycol 25322-69-4	= 3750 mg/kg (Rat)	> 3000 mg/kg (Rabbit)	-
Alkyl Tin Catalyst	-	1000 - 2000 mg/kg (Rabbit)	-
Catalyst 1-3	= 922 mg/kg (Rat)	= 600 µL/kg (Rabbit)	> 4.31 mg/L (Rat) 4 h
Polyethylene Glycol	= 22 g/kg (Rat)	> 20 g/kg (Rabbit)	-

25322-68-3			
Formaldehyde 50-00-0	= 100 mg/kg (Rat)	> 2000 mg/kg (Rat)	< 463 ppm (Rat) 4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.
Germ cell mutagenicity No information available.
Carcinogenicity No information available

Chemical name	ACGIH	IARC	NTP	OSHA
Formaldehyde 50-00-0	A1	Group 1	Known	X

Reproductive toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Aspiration hazard No information available.

12. ECOLOGICAL INFORMATION

Chemical name	Algae/aquatic plants	Fish	Crustacea
TCPP 13674-84-5	45: 72 h Desmodesmus subspicatus mg/L EC50 4: 96 h Pseudokirchneriella subcapitata mg/L EC50	56.2: 96 h Brachydanio rerio mg/L LC50 static 98: 96 h Pimephales promelas mg/L LC50 static 30: 96 h Poecilia reticulata mg/L LC50 static	63: 48 h Daphnia magna mg/L EC50
Blowing Agent	-	76.1: 96 h Oryzias latipes mg/L LC50 semi-static	-
2,2`-oxydiethanol 111-46-6	-	75200: 96 h Pimephales promelas mg/L LC50 flow-through	84000: 48 h Daphnia magna mg/L EC50
Catalyst 1-3	56.2: 72 h Desmodesmus subspicatus mg/L EC50 57.5: 96 h Desmodesmus subspicatus mg/L EC50	-	59.5: 48 h Daphnia magna mg/L EC50
Formaldehyde 50-00-0	-	22.6 - 25.7: 96 h Pimephales promelas mg/L LC50 flow-through 1510: 96 h Lepomis macrochirus µg/L LC50 static 41: 96 h Brachydanio rerio mg/L LC50 static 0.032 - 0.226: 96 h Oncorhynchus mykiss mL/L LC50 flow-through 100 - 136: 96 h Oncorhynchus mykiss mg/L LC50 static 23.2 - 29.7: 96 h Pimephales promelas mg/L LC50 static	2: 48 h Daphnia magna mg/L LC50 11.3 - 18: 48 h Daphnia magna mg/L EC50 Static

Persistence and degradability Formulation data is not available.

Bioaccumulation Formulation data is not available.

Chemical name	Partition coefficient
TCPP 13674-84-5	2.68
Blowing Agent	2.3
2,2`-oxydiethanol 111-46-6	-1.98
Surfactant	5.669
Reactive amine catalyst	-0.48
Catalyst 1-2	0.817

Polypropylene glycol 25322-69-4	1.13
Alkyl Tin Catalyst	3.11
Catalyst 1-3	-0.352
Formaldehyde 50-00-0	0.35

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and regulations

Contaminated packaging Do not reuse container

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Formaldehyde 50-00-0	U122	Included in waste streams: K009, K010, K038, K040, K156, K157	-	U122

14. TRANSPORT INFORMATION

Note: • Not regulated.

DOT Not regulated

IATA Not regulated

IMDG Not regulated

15. REGULATORY INFORMATION

International Inventories

Chemical name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
TCPP 13674-84-5	X	X		X		X	X	X	X	X
2,2`-oxydiethanol 111-46-6	X	X		X		X	X	X	X	X
Surfactant	X	X				X	X	X	X	X
Reactive amine catalyst	X	X			X	X	X		X	
Catalyst 1-1	X	X			X		X			X

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	SARA 313 - Threshold Values %
Surfactant -	1.0
Formaldehyde - 50-00-0	0.1

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
2,2`-oxydiethanol 111-46-6	-	-	X
Catalyst 1-3	X	X	X
Formaldehyde 50-00-0	X	X	X

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

Creation Date 07-Feb-2023
Revision Date 13-Jun-2023
Revision Note No information available

Disclaimer

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use.

End of Safety Data Sheet