

Safety Data Sheet

In accordance with OSHA Hazard Communication Standard 29 CFR 1910.1200

Purios 2000, B – Side

SECTION 1: Product identification and company identification

Product identification

Purios 2000, B – Side

Relevant identified uses of the substance or mixture and uses advised against

Purios 2000, B – Side is one of two component system for producing thermal-insulating spraying rigid polyurethane foam.

Company identification

Purinoa LLC

111 W Jackson Blvd #1700,
Chicago, IL 60604, Illinois, USA

tel. +1 312-981-8427

E-mail: sds@purinoa.com

Emergency Telephone

For Hazardous Materials [or Dangerous Goods] Incident Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC Day or Night 1-800-424-9300 / +1 703-527-3887

SECTION 2: Hazard identification

This material is classified hazardous under OSHA Hazard Communication Standard (29 CFR 1910.1200).

Acute Tox. 4 Harmful if swallowed

Eye Irrit. 2 Causes serious eye irritation

Skin Irrit. 2 Causes skin irritation

Hazard Pictograms



Signal Word: DANGER

Hazard Statement

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

H315 Causes skin irritation.

Precautionary Statement

Prevention

P264 Wash hand thoroughly after handling.

P280 Wash hands thoroughly after use

P270 Do not eat, drink or smoke when using the product

Response

P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P332 + P313 In case of skin irritation, seek advice / attention physician care

P501 Dispose of contents / container to properly labeled containers for selective collection of waste emptied by an authorized company

Hazards not otherwise classified (HNOC)

Not applicable

SECTION 3: Composition and information on ingredients

Chemical name

Mixture of polyols containing catalysts, flame retardants, and blowing agents

Dangerous component	CAS no.	Content [% mass]
Tris(2-chloro-1-methoxyethyl) phosphate-multiconstituent substance	-	≤ 18
Bis(2-dimethylaminoethyl) methyloamine	3030-47-5	≤ 2,6
N,N-bis[3-(dimethylamino)propyl]-N',N'-dimethylpropan-1,3- diamine	33329-35-0	≤ 1,5
1,4-Diazabicyclooctane	280-57-9	≤ 1,5
Diethylene glycol	111-46-6	≤ 5
Ethylene glycol	107-21-1	≤ 10

Other components are not classified as hazardous.

SECTION 4: First aid measures

Description of first aid measures

Contact by inhalation

Inhalation of vapors - in normal use, there is no risk of harm to the respiratory system.

Ingestion

If swallowed, rinse mouth and give plenty of water to drink. With long-term exposure to the product if you feel unwell, move to fresh air. If necessary, provide medical attention.

Skin contact

In case of contact with skin, remove contaminated cloth and wash skin with soap and water. Don't use solvents for this.

In case of skin irritation provide medical attention.

Eye contact

In case of contact with eyes, arrange medical care, and by the time of arrival, immediately rinse for at least 15 minutes with plenty of cool fresh water (avoid strong flux due to the risk of mechanical damage to the cornea).

Note: people exposed to the contamination of eyes must be instructed on the necessity and method of immediate washing.

Most important symptoms and effects, both acute and delayed

Inhalation

High vapours concentration of the heated product can cause mild irritation of air passages.

Skin contact

Prolonged contact can cause drying and mild skin irritation.

Eye contact

Liquid splashed into the eye may cause tearing, moderate irritation with prolonged contact

Ingestion

Can cause gastrointestinal disorders, central nervous system disorders, liver or kidney damage.

Indication of any immediate medical attention and special treatment needed

Symptomatic treatment. If swallowed, contact medical immediately and show the material safety data sheet.

SECTION 5: Firefighting measures.

Extinguishing media

Product is not classified as combustible. Recommended extinguishing media: carbon dioxide, dry chemical, foam.

Special hazards arising from the mixture

Fire may produce dense smoke containing hazardous products of combustion - carbon and nitrogen oxides. Do not enter fire area without proper protection. Extinguish a fire from a safe distance. May be required safety equipment inhalation.

Advice for firefighters

Fire may produce dense smoke containing hazardous products of combustion - carbon and nitrogen oxides. Incomplete combustion may lead to the formation of toxic pyrolysis products.

Personal protective equipment: helmet, face shield and neck, breathing apparatus, fire jacket and pants with stripes on arms, legs and waist, neoprene gloves.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Respiratory protection: When exposed to dangerous / unknown concentrations of vapors / mists and / or insufficient ventilation, wear an approved respirator with filter type A

Hand protection: Protective gloves resistant to the product – e.g., neoprene, nitrile

Body protection: Protective clothing coated fabric, protective shoes.

Eye protection: Goggles in a sealed enclosure (goggles) for activities involving the risk of splashing into the eye.

Sprinkle a slippery substrate with a layer of granular material or an absorption agent. Store the absorbents accordance with the applicable regulations.

Environmental precautions:

Secure the spill site. Prevent spills from entering municipal sewers, ground and surface waters.

Methods and materials for containment and cleaning up

Collect spilt product covered with absorbent agent (e.g. sand, diatomaceous earth) with a shovel into tight containers. In the event of a major accident, the chemical rescue service and the competent environmental authority should be notified.

Reference to other sections

Section 8 – personal protection

Section 9 – chemical and physical properties

Section 13 – disposal

SECTION 7: Handling and storage

Precautions for safe handling

Avoid prolonged contact with skin; Avoid contact with eyes; Avoid inhalation of vapors / mists. Use with adequate ventilation. Once opened, containers should be closed again and kept upright to prevent leakage. Do not eat, drink or smoke in the workplace. Wash hands with soap and water after use. Do not use contaminated clothing.

Conditions for safe storage, including any incompatibilities

Store in a tightly closed container in a well ventilated area. Keep away from moisture. Store at 5°C - 25°C [41°F – 77°F].

Contents of damaged or leaking containers pour into corrosion-resistant packaging.

Specific end uses

Use this product only in accordance with the application.

SECTION 8: Exposure controls/personal protection

Limit values according current national regulations on the maximum permissible concentrations and intensities of harmful factors in the work environment.

Control parameters – United States

Ethylene glycol

	ACGIH TLV [©]		Cal/OSHA PEL	Notes
	TLV-TWA	TLV-STEL	PEL-C	
United States	25 ppm (vapor fraction)	50 ppm (vapor fraction), 10 mg/m ³ (inhalable particulate matter, aerosol only)	40 ppm (100 mg/m ³)	8-hour TWA (ST) STEL (C) Ceiling

Diethylene glycol

	Limit value - Eight hours		Limit value - Short term		Notes
	ppm	mg/m ³	ppm	mg/m ³	
United States	-	10	-	-	AIHA

Control parameters – Canada

Ethylene glycol, particulate

	Limit value - Eight hours		Limit value - Short term		Notes
	ppm	mg/m ³	ppm	mg/m ³	
Canada - Ontario				100 ⁽¹⁾⁽²⁾	⁽¹⁾ Ceiling limit value ⁽²⁾ Aerosol only
Canada - Québec			50 ⁽¹⁾	127 ⁽¹⁾	⁽¹⁾ Ceiling limit value

1,4-Diazabicyclooctane

Country	Limit value - Eight hours		Limit value - Short term	
	ppm	mg/m ³	ppm	mg/m ³
Canada - Ontario	1	4,6	-	-

Exposure control

Technical means of collective protection: Ventilation

Appropriate personal protective equipment:

Respiratory Protection: Under normal conditions, with adequate ventilation is not required. When exposed to dangerous / unknown concentrations of vapors / mists and / or insufficient ventilation, wear an approved respirator with filter type A.

Protection of hands: Protective gloves resistant to the product – e.g., neoprene, nitrile.

Body protection: Apron or protective clothing of coated fabrics, protective boots.

Eye protection: Safety glasses in a sealed enclosure (goggles) for activities involving the risk of splashing into the eye.

Environmental exposure controls: Avoid seepage into the groundwater and drains.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical appearance	Liquid, color from yellow to brown
Odour	Irritant
Odour threshold	No data available
pH value	No data available

Melting / freezing point	No data available
Boiling point / boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid state, gas)	Supporting combustion
Upper / lower flammability / explosion	No data available
Oxidizing properties	Not applicable
Vapour pressure	No data available
Vapour density	No data available
Relative density	1,10 – 1,20 g/cm ³ (25°C) [77°F]
Solubility	Insoluble in water, soluble in acetone and ethyl acetate
Partition coefficient n-octanol / water	No data available
Viscosity	300 – 700 mPas (25°C) [77°F]
Auto-ignition temperature	No data available
Decomposition temperature	No data available

SECTION 10: Stability and reactivity

Reactivity

Slightly chemically reactive substance

Chemical stability

Hygroscopic substance

Possibility of hazardous reactions

Not applicable.

Conditions to avoid

Not applicable

Incompatible substances

Strong oxidizing agents

Hazardous decomposition products

During a fire, a dangerous carbon oxides form.

SECTION 11: Toxicological information

No experimental toxicological data on the mixture. The health hazard assessment refer to the calculation methods and available data on the ingredients.

Acute toxicity

Tris(2-chloro-1-methylethyl)phosphate- multiconstituent substance (TCPP)

Parameter	Route of exposure	Value	Species
LD50	Oral	500 - 2000 mg/kg	Rat
LD50	Skin	>2000 mg/kg	Rat, Rabbit
LC50	Inhalation	>5 mg/l	Rat

N,N-bis[3dimethyloamino]propylo]-N',N'-dimethylo-propane-1,3-diamine

Parameter	Route of exposure	Value	Species
LD50	Oral	2,445 mg/kg	Rat
LD50	Skin	1,150 mg/kg	Rabbit
LC50	Inhalation	1,9 mg/l	Rat

Serious eye damage / irritation

Causes serious eye irritation.

Skin corrosion / irritation

Causes skin irritation.

Irritation to the respiratory tract

No data.

Sensitization

No data.

Mutagenic effect on reproductive cells

Not mutagenic.

Carcinogenicity

Not classified as carcinogenic acting.

Reproductive toxicity

Not classified as toxic for reproduction.

Toxic effects on target organs (STOT)

Not classified as an operating target organ toxicity.

SECTION 12: Ecological information**Toxicity**

No experimental toxicological data on the mixture. The health hazard assessment refer to the calculation methods and available data on the ingredients.

Tris(2-chloro-1-methylethyl)phosphate- multiconstituent substance (TCPP)

	Parameter	Value	Species
Fish	LC50	51 mg/l, 96h 56,2 mg/, 96h	Pimeohales promela Brachydanio rerio
Algae and aquatic plants	LC50 NOEC	82 mg/l, 72h 13 mg/l, 3d	Pseudokirchneriella subcapitata
Aquatic invertebrates	LC50 NOEC	65 - 335 mg/l, 48h 32 mg/l, 21d	Daphnia magna

Persistence and degradability

No data.

Bioaccumulative potential

No data.

Mobility in soil

No data.

Results of PBT and vPvB

It does not meet the criteria for PBT and vPvB.

Other adverse effects

No data

SECTION 13: Disposal consideration**Waste treatment methods****Classification of formulation / packaging****Product:**

Due to the classification of the preparation as dangerous (see section 2), waste constituting the residue should be classified as hazardous.

Package:

Packages containing product should be treated as hazardous packaging.

Finished product:

Wastes that are remnants of the finished product - foam does not constitute hazardous waste.

Treatment / Disposal

Processing and disposal of waste should be in accordance with the applicable national law.

Sewage

Waste, even in small amounts, should not be discharged into sewage, wastewater or water.

Other recommendations

Waste management should be in accordance with the applicable national law and.

Waste resulting from the use of the product must be submitted by approved waste for recovery or disposal.

The obligation to correct handling of waste imposed on the manufacturer.

SECTION 14: Transport Information**UN (ONZ) number**

Not applicable.

UN proper shipping name

Not applicable.

Transport hazard class

It is not considered dangerous according to the provisions set forth in the transport rules IMO, ADR / RID, ICAO.

Packing group

It is not considered dangerous according to the provisions set forth in the transport rules IMO, ADR / RID, ICAO.

Environmental hazard

It is not considered dangerous according to the provisions set forth in the transport rules IMO, ADR / RID, ICAO.

Special precautions for user

It is not considered dangerous according to the provisions set forth in the transport rules IMO, ADR / RID, ICAO.

Transport in bulk according to MARPOL 73/78 and IBC code.

It is not considered dangerous according to the provisions set forth in the transport rules IMO, ADR / RID, ICAO.

SECTION 15: Regulatory information.**United States**

All ingredient reported in the EPA TSCA Inventory.

Canada

All ingredient reported in the DSL.

SECTION 16: Other information

The information contained in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless it is specified in the text.

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End of Safety Data Sheet