

Safety Data Sheet

In accordance with OSHA Hazard Communication Standard 29 CFR 1910.1200

Purios 2000, B – Side

Version: 3.0 US

Date of issue: Feb.17.2017

Review date: Jun.23.2022

SECTION 1: Identification

Product identification:

Purios 2000, B – Side

Recommended use of the chemical and restrictions on use:

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

Company identification:

Purinoa LLC

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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(s) identification:

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

Skin Corr. 1

Causes severe skin burns and eye damage.

Eye Dam.1

Causes serious eye damage

Aquatic Chronic 3

Harmful to aquatic life with long lasting effects.



Hazard Pictograms

Signal Word: Danger

Hazard Statement

Causes severe skin burns and eye damage.

Causes serious eye damage

Harmful to aquatic life with long lasting effects.

Precautionary Statement

Prevention

Do not breathe dust/fume/gas/mist/vapours/ spray.

Wash hands thoroughly after handling.

Avoid release to the environment.

Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

Wash contaminated clothing before reuse.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Immediately call a POISON CENTER/doctor/

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Specific treatment (see on this label).

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

Store locked up.

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

Mixtures

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

Dangerous component	CAS no.	Content [% mass]
Trans-1-Chloro-3,3,3-trifluoropropene	102687-65-0	≤ 10.9
Tris(2-chloro-1-methoxyethyl) phosphate-multiconstituent substance	1244733-77-4	≤ 7.3
1,3-Propanediamine,N,N-bis[3-(dimethylamino)propyl]-N',N'-dimethyl-	33329-35-0	≤ 3.3
Bis(2-dimethylaminoethyl)(methyl) amine	3030-47-5	≤ 0,9
Octamethylcyclotetrasiloxane	556-67-2	≤ 0.05
Decamethylcyclopentasiloxane	541-02-6	≤ 0.01
Dodecamethylcyclohexasiloxane	540-97-6	≤ 0.01

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

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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: Fire-fighting measures.

Suitable (and unsuitable) 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

Special protective equipment and precautions for fire-fighters.

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.

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.

SECTION 8: Exposure controls/personal protection

OSHA permissible exposure limit (PEL), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV), and any other exposure limit used or recommended by the chemical manufacturer, importer, or

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employer preparing the safety data sheet, where available.

Control parameters:

No data

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.

Exposure control

Technical means of collective protection: Ventilation

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

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Liquid, color from yellow to brown
Odour	Irritant
Odour threshold	No data available
pH	No data available
Melting point/ freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	Supporting combustion
Upper/lower flammability or explosive limits	No data available
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
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	300 – 700 mPas (25°C) [77°F]

SECTION 10: Stability and reactivity

Reactivity

Slightly chemically reactive substance

Chemical stability

Hygroscopic substance

Possibility of hazardous reactions

Not applicable.

Conditions to avoid

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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

Skin corrosion / irritation:

Causes severe skin burns

Serious eye damage / irritation:

Causes serious eye damage

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 to organisms or systems - single exposure:

Not classified as an operating target organ toxicity.

Toxic to organisms or systems - Repeated exposure:

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/l, 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

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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

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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