

## Safety Data Sheet

In accordance with OSHA Hazard Communication Standard 29 CFR 1910.1200

### Purios 2500, B – Side

#### SECTION 1: Product identification and company identification

##### Product identification

Purios 2500, B – Side

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

Purios 2500, B – Side is one of two component system for producing thermal-insulating spraying rigid foam.

##### Company identification

Purinova LLC

111 W Jackson Blvd #1700,

Chicago, IL 60604, Illinois, USA

tel. +1 312-981-8427

E-mail: [sds@purinova.com](mailto:sds@purinova.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: **WARNING**

##### 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

P302 + P352 IF ON SKIN: Wash with plenty of water

**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-metyoetylo) phosphate-multiconstituent substance	-	≤ 20
N,N-bis[3dimethyloamino]propylo]-N',N'-dimethylo-propane-1,3-diamine	33329-35-0	≤ 1,3
1,4-Diazabicyklooctane	280-57-9	≤ 0,2
bis(2dimethyloaminoetylo)-methyloamine	3030-47-5	≤ 0,35
Ethylene glycol	107-21-1	≤ 4
Stannane, dibutylbis[(1-oxododecyl)oxy]-	77-58-7	≤ 0,035

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. 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

*Swallowing*

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 in the event of ignition of the 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**

Arise dangerous 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:**

Air passages 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.

Slippery surface sprinkle a layer of granular material or absorbing agent. Used absorbents stored in accordance with 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**

Spilled product covered by the absorption agent (eg sand, diatomaceous earth) shovel into sealed containers. In the case of a larger failure to be notified chemical rescue and the competent authority of environmental protection.

**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. Unused containers to hold closed. Containers should be opened once again tightly closed 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 15 ° C - 25 ° C [59°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**

**Control parameters – United States**

All ingredient not determinates.

**Control parameters – Canada**

All ingredient not determinates.

**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 <sup>3</sup> (25°C) [77°F]
Solubility	insoluble in water, soluble in acetone and ethyl acetate
Partition coefficient n-octanol / water	No data available
Viscosity	400 – 750 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 about the preparation. This health risk assessment based on available data on ingredients Tris (2-chloro-1-methylethyl) phosphate, and component N, N-bis [3- (dimethylamino) propyl] -N', N'-dimethyl-1,3 -diamine.**

### Acute toxicity (TCPP)

- Oral
- LD rat <2000 mg / kg
- Skin
- Rabbit LD50> 5000 mg / kg
- Rat LD50> 2000 mg / kg
- Inhalation
- LD50> 7mg / l (4h)

**Serious eye damage / irritation (diamine)**

The vapors can cause swelling of the cornea, the perception of blur, "haze" - this is a temporary respite. Prolonged contact may cause eye burns and loss of vision.

**Skin corrosion / irritation (diamine)** Skin burns.

**Irritation to the respiratory tract (diamine)** May cause burns to the respiratory system when inhaled.

**Sensitization** There is no evidence of sensitization by inhalation and skin.

**Mutagenic effect on reproductive cells (diamine)** Not mutagenic in Ames Test.

**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**

**No experimental data on the mixture. This risk assessment is based on available data on Tris(2-chloro-1-methylethyl) phosphate (TCPP).**

**Toxicity**

Toxicity for fish: LC50 – 56,2 mg/l

Toxicity to algae and aquatic plants: LC 50 – 82 mg/l

**Persistence and degradability**

Stable, under normal conditions does not decompose

**Bioaccumulation**

In a study conducted on fish (Cyprinus carpio), there was no bioaccumulation.

**Mobility in soil**

Slightly soluble in water after spills can hardly penetrate into the groundwater

**Results of PBT and vPvB**

The substance 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.

**Hazard statement:**

H400 – Very toxic to aquatic life

H410 – Very toxic to aquatic life with long lasting effects

H412 – Harmful to aquatic life with long lasting effects

H228 – Flammable solid

H314 – Causes severe skin burns and eye damage

H311 – Toxic in contact with skin

H312 – Harmful in contact with skin

H317 – May cause an allergic skin reaction

H318 – Causes serious eye damage

H341 – Suspected of causing genetic defects

H360d – Suspected of demeging fertility or unborn child

H372 – Causes damage to organs throug prolonged or repeated exposure

H373 – May cause damage to organs (Kidneys) through prolonged or repeated exposure

Version: 2.0

Date of issue: 17.01.2017

Date of review: 16.05.2017

End of Safety Data Sheet