

Material Safety Data Sheet

In accordance with (UE) no. 1907/2006 (REACH)



Version: 2.0

Date of issue: 01.04.11

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Izopianol 03/35 N/03

SECTION 1: Product identification and company identification

- 1.1. **Product identification:** Izopianol 03/35 N/03
- 1.2. **Relevant identified uses of the substance or mixture and uses advised against:**
Izopianol 03/35 N/03 is two component system for producing thermal-insulating rigid polyurethane foam.
- 1.3. **Company identification:**
Purinova Sp. z o. o.
85 -825 Bydgoszcz ul. Wojska Polskiego 65
tel. 052 361 47 10 fax. 052 361 47 11

Person responsible for Material Safety Data Sheet: Marta Pieńkowska

m.pienkowska@purinova.com

- 1.4 **Emergency Telephone**

112 – emergency number

SECTION 2: Hazard identification:

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008

Acute Tox. 4,	H302 Harmful if swallowed.
Eye Dam. 1	H318 Causes serious eye damage.
Skin Irrit. 2	H315 Causes skin irritation.

2.2 Label elements



Danger

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Hazard Statement

H302 Harmful if swallowed.

H318 Causes serious eye damage.

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

P273 Avoid release to the environment

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

2.3 Other hazards

Not applicable

SECTION 3: Composition and information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Dangerous substances	WE no.	CAS no.	Registration no.	Content [mass %]	Classification (UE) no 1272/2008
Tris(2-chloro-1-metyetyl) fosforan	237-158-7	13674-84-5	01-2119480419-30-0000 01-2119447716-31-0000 01-2119486772-26-0005	≤ 20	Acute Tox. 4 H302 Aquatic Chronic 3 H412
N,N-bis[3dimetyloamino)propylo] -N',N'-dimetylo-propan-1,3-diamina	251-459-0	33329-35-0	-	≤ 1,5	Acute Tox. Derm. 4 H312 Skin Corr. 1B H314

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					Acute Tox. 4 Inha. H332
1,4-Diazabicyklooktan	205-999-9	280-57-9	-	≤ 1	Flam. Sol. 1 H228 Acute Tox. 4 H302 Eye Dam. 1 H318 Skin Corr. 2 H315
bis(2dimetyloaminoetylo)met yloamina	221-201-1	3030-47-5	-	≤ 2	Acute Tox. Derm. 3 H311 Acute Tox. Oral 4 H302 Skin Corr 1B H314
Diethylene glycol	203-872-2	111-46-6	01-2119457857-21-0022 01-2119457857-21-0020 01-2119457857-21-0005 01-2119457857-21-0004	≤ 4,5	Acute Tox. 4 H302 STOT RE 2 H373
Ethylene glycol	203-473-3	107-21-1	01-2119456816-28-0004 01-2119456816-28-0006	≤ 4,5	Acute Tox. 4 H302 STOT RE 2 H373

If REACH registration numbers do not appear the substance is either exempt from registration, does not meet the minimum volume threshold for registration, or not yet expired registration deadline.

Other components are not classified as hazardous.

SECTION 4: First aid measures

4.1. 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.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation

High vapour 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.

4.3 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.

5.1. Extinguishing media

Product is not classified as combustible. Recommended extinguishing in the event of ignition of the carbon dioxide, dry chemical, foam.

5.2. 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.

5.3. 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

6.1. 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 - eg., 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.

6.2 Environmental precautions:

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

6.3. 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.

6.4. Reference to other sections

Section 8 – personal protection

section 9 – chemical and physical properties

section 13 – disposal

SECTION 7: Handling and storage

7.1. 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

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

7.3. Specific end uses

Use this product only in accordance with the application.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

No data available.

8.2 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

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Protection of hands: Protective gloves resistant to the product - eg., 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

9.1 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)
Solubility	insoluble in water, soluble in acetone and ethyl acetate
Partition coefficient n-octanol / water	No data available
Viscosity	200 – 500 mPas (25°C)
Auto-ignition temperature	No data available
Decomposition temperature	No data available

9.2. Other information.

No data

SECTION 10: Stability and reactivity

10.1. Reactivity

Slightly chemically reactive substance

10.2. Chemical stability

Hygroscopic substance.

10.3. Possibility of hazardous reactions

Not applicable.

10.4. Conditions to avoid

Not applicable

10.5. Incompatible substances

Strong oxidizing agents

10.6. Hazardous decomposition products

During a fire, a dangerous carbon oxides form.

SECTION 11: Toxicological information

11.1. No experimental toxicological data about the preparation. This assessment of health risks based on available data on ingredients Tris (2-chloro-1-methylethyl) phosphate and component bis (dimethylaminoethyl) ether.

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 (bis (dimethylaminoethyl) ether)

Severe irritant substance causing the threat of serious damage to eyes.

Skin corrosion / irritation (bis (dimethylaminoethyl) ether)

It causes irritation of the skin and mucous membranes.

Irritation to the respiratory tract (bis (dimethylaminoethyl) ether)

Studies in rats have shown harm the range of inhalation leads to the death or injury of lung, liver and stomach.

Sensitisation

There is no evidence of sensitization by inhalation and skin.

Mutagenic effect on reproductive cells (bis (dimethylaminoethyl) ether)

Not mutagenic in Ames Test.

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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 formulation. This risk assessment is based on Available data on the component Tris (2-chloro-1-methylethyl) phosphate (TCPP)

12.1 Toxicity (TCPP)

Fish LC50 - 56.2 mg / l

Algae LC 50 - 82 mg / l

12.2 Persistence and degradability

Stable, under normal conditions does not decompose

12.3 Bioaccumulative

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

12.4 Mobility in soil

Slightly soluble in water after spills may slightly penetrate into the groundwater

12.5 Results of PBT and vPvB

It does not meet the criteria for PBT and vPvB.

12.6 Other adverse effects

No data

SECTION 13: Disposal consideration

The proposed waste codes:

Remains of the product – 16 03 05* - organic waste containing dangerous substances.

Packaging polluted – 15 01 10* - packaging containing residues of hazardous substances or contaminated

Removal of waste should be in accordance with local or national regulations.

Waste, even in small amounts, do not wash into sewers, drains or watercourses.

Empty containers pass by approved waste for recovery or disposal. Suggested waste classification is consistent with the Regulation of the Minister of Environment of 27 September 2001. On waste. The

given method of classification is proposed and is not binding, and waste producers obliged proper handling of waste.

SECTION 14: Transport Information

14.1. UN (ONZ) number: not applicable

14.2. UN proper shipping name: not applicable

14.3. Transport hazard class:

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

14.4. Packing group

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

14.5. Environmental hazard

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

14.6. Special precautions for user

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

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

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

SECTION 15: Regulatory information.

15.1. Laws concerning the safety, health and environment specific for the substance or mixture

Legal framework for all EU Member States:

- Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006. Concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency,
- Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008. On classification, labeling and packaging of substances and mixtures (CLP), amending and repealing Directives 67/548 / EEC and 1999/45 / EC and amending Regulation (EC) No 1907/2006.
- Regulation (EU) No 453/2010 of the Commission of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

- Regulation (EC) nr694 / 2012 of the European Parliament and of the Council of 4 July 2012. Concerning the export and import of dangerous chemicals

- ADR

Important legal acts in force in Poland:

- Act of 25 February 2011. on chemical substances and their mixtures (Journal of Laws No. 63, item. 322), replacing the previously applicable Act of 11 January 2001. on chemical substances and preparations (Dz. U. of 2009. No. 152, item. 1222 and 2010. No. 107, item. 679 and No. 182, item. 1228)
- Regulation of the Minister of Health on 20 April 2012. On labeling of hazardous substances and mixtures, and certain mixtures (Dz. U. No, pos. 445)
- Regulation of the Minister of Health of 22 May 2012. On the methods of marking of places, pipelines, containers and tanks for storing or containing dangerous substances or mixtures of hazardous (Dz. U. No, pos. 601)
- Regulation of the Minister of Health of 10 August 2012. On the criteria and classification of chemical substances and mixtures (Dz. U. No, pos. 1018)
- Act of. 28 October 2002. on the transport of dangerous goods by road (Dz. U. No. 199, poz.1671 as amended)
- Act of 14 December 2012. Waste (Dz. U. of 8 January 2013., Pos. 21)
- Act of 13 June 2013. On packaging and packaging waste (Dz. U.2013., Pos. 888)
- Regulation Min, Labour and Social Policy of 6 June on the maximum permissible concentration and intensity of harmful factors in the work environment (Dz. U.2014., Pos. 817)
- The Minister of Environment of 9 December 2014. On the catalog of waste (Dz. U.2014., Pos. 1923)

15.2. Chemical safety assessment

Not applicable

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:

H412 – Harmful to aquatic life with long lasting effects

H228 – Flammable solid

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PURINOVA

H314 – Causes severe skin burns and eye damage

H311 – Toxic in contact with skin

H312 – Harmful in contact with skin

H332 – Harmful if inhaled

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

Changes from the previous version: section 1 – 16.

End of Safety Data Sheet