

Version: 2.0

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Purocyn B, B01, B02, B03

SECTION 1: Product identification and company identification

1.1. **Product identification:** Purocyn B, B01, B02, B03

1.2. **Relevant identified uses of the substance or mixture and uses advised against:**

Components producing polyurethane.

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**

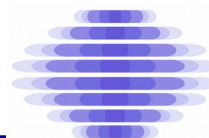
112 – emergency number

SECTION 2: Hazard identification:

2.1 Classification of the substance or mixture

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

Acute Tox. 4	H332 Harmful in inhaled
Skin Irrit. 2	H315 Causes skin irritation
Eye Irrit. 2	H319 Causes serious eye irritation
Resp. Sens. 1	H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
Skin Sens. 1	H317 May cause an allergic skin reaction
Carc. 2	H351 Suspected of causing cancer
STOT SE. 3	H335 May cause respiratory irritation
STOT RE. 3	H373 May cause damage to organs through prolonged or repeated exposure



2.2 Label elements



Warning

Hazard Statement

H332 Harmful in inhaled

H315 Causes skin irritation

H319 Causes serious eye irritation

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled

H317 May cause an allergic skin reaction

H351 Suspected of causing cancer

H335 May cause respiratory irritation

H373 May cause damage to organs through prolonged or repeated exposure

Precautionary Statement

Prevention

P201 Obtain special instructions before use

P281 Use personal protective equipment as required

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P271 Use only outdoors or well-ventilated area

P284 In case of inadequate ventilation wear respiratory protection

P280 Wear protective gloves/protective clothing/ eye protection/ face protection

P273 Avoid release to the environment

Response

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray

P280 Wear protective gloves/protective clothing/ eye protection/ face protection

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

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing

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

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

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



2.3 Other hazards

People with known hypersensitivity of the airways (ex. Asthma, chronic bronchitis) should avoid contact with the product.

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
diphenylmethane 4, 4' diisocyanate monomeric and polymers	-	9016-87-9	Polymer – exempt of registration	100	Acute Tox. 1; H330 Resp. Sens. 1; H334 Carc. 2; H351 Skin Irrit. 2; H315 Eye Irrit. 2A; H319 Skin Sens. 1; H317 STOT Single Exp. 3; H335 Aquatic Chronic 3; H412

SECTION 4: First aid measures

4.1. Description of first aid measures

Contact by inhalation

Remove the victim from the contaminated area, to rest. Obtain medical attention

contamination of the skin

Wash with soap and water immediately and accurately for a long time (at least 15 minutes).

In the case of inflammation (redness, irritation), seek medical advice.

Eye contact

Rinse immediately with plenty of running water for a long time (at least 15 minutes). If irritation

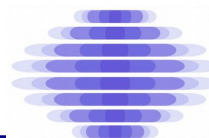
persists, consult a physician.

Warning: Those at risk of eye contamination should be advised about the necessity and method of immediate washing.

Swallowing

Never attempt to induce vomiting. Rinse mouth with water. Do not give anything to drink. The necessary medical attention.

4.2 Most important symptoms and effects, both acute and delayed



The product irritates the respiratory system and is a potential trigger sensitization of the respiratory tract and skin.

The first symptoms are acute irritation and broncho constriction.

4.3 Indication of any immediate medical attention and special treatment needed:

Show medical the material safety data sheet.

SECTION 5: Firefighting measures.

5.1. Extinguishing media

Recommended extinguishers in case of possible ignition of carbon dioxide, powder, foam.
Not recommended: water, compact stream.

5.2. Special hazards arising from the mixture

During fire, carbon monoxide, carbon dioxides, nitrogen oxides, isocyanate vapors and traces of hydrogen cyanide. In the event of fire or explosion do not breathe fumes. High temperatures can cause pressure in barrels, it is advisable to cool containers with water and possibly evacuate the danger zone.

5.3. Advice for firefighters

During fire fighting is necessary respiratory equipment with an independent air supply and tight chemical protective suit.

Do not allow contaminated extinguishing water into the soil.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures:

Wear suitable personal respiratory protection to prevent contamination of skin, eyes, and clothing. Must be tagged contaminated area and prohibit access to unauthorized persons.

6.2 Environmental precautions:

Secure the spill site. Contain the spillage by bunding. Prevent spills from entering municipal sewers, ground and surface water.

6.3. Methods and materials for containment and cleaning up

Remove mechanically; overwhelm the rest of the layer of damp, liquid-binding material (eg. sawdust, agent based on calcium silicate hydrate binding chemicals, sand). After approx. 1 hr. collect into a waste container. Do not close (evolution of CO₂!). Maintaining Leave for several days in a secure place outdoors.

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

Provide sufficient air exchange and / or exhaust at the workplace.

The values of maximum permissible concentration in the work environment presented in chapter 8 must be respected. Avoid contact with skin and eyes, as well as inhalation of vapors.

Keep away from foodstuffs and drugs. Wash hands before meals and after completion of the work.

Keep working clothes separately. Immediately remove contaminated clothes. Dirty, contaminated clothing immediately, disinfected, removed (see section 13).

7.2. Conditions for safe storage, including any incompatibilities:

Keep container tightly closed and dry.

The storage temperature for the protection of persons: max. 50 ° C.

7.3. Specific end uses

Use this product only in accordance with the application.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components data:

Chemical name	CAS no	NDS [mg/m ³]	NDSP [mg/m ³]
Difenylometano-4,4'-diizocyjanian	101-68-8	0,05	0,2

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

Eye/ face protection:

Safety glasses with side protection (goggles) (ex. To EN 166)

Skin care:

Protect your hands with gloves made of suitable materials; EN 374-3;

Polychloropropene – CR: thickness > = 0,5 mm; Breakthrough time > = 480 min.

Nitrile rubber – NBR: thickness > = 0,35 mm; Breakthrough time > = 480 min.

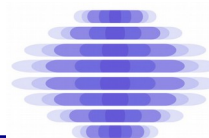
Butyl rubber – IIR: thickness > = 0,35 mm; Breakthrough time > = 480 min.

Fluorokauczuk - FKM: thickness > = 0.4mm; Breakthrough time > = 480min.

Recommendation: contaminated gloves should be removed.

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Body protection:

protective footwear (ex. according to EN 20346), protective clothing

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical appearance	Liquid, color brown
Odour	Earthy, musty
Odour threshold	No data available
pH value	No data available
Melting / freezing point	-24°C
Boiling point / boiling range	> 300°C
Flash point	> 250°C
Evaporation rate	No data available
Flammability (solid state, gas)	Supporting combustion
Upper / lower flammability / explosion	No data available
Oxidizing properties	Not applicable
Vapour pressure	1 hPa w 20°C
Vapour density	No data available
Relative density	1,24 [g/cm ³] w 20°C
Solubility	insoluble in water

9.2. Other information.

No data

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

Stable under normal conditions. Above 200 ° C, the polymerization and cleavage of CO₂.

10.3. Possibility of hazardous reactions

Exothermic reaction with amines and alcohols; water serration of CO₂ in closed containers, pressure, rupture of the containers.

10.4. Conditions to avoid

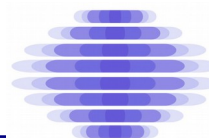
Decomposition under influence of moisture is greatly accelerated by heating. Protect from any contact with the water and direct heat source.

10.5. Incompatible substances

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Strong bases. Water. The amines. Alcohols. Copper. Aluminium.

10.6. Hazardous decomposition products

Highly toxic fumes..

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

LD50 / oral / rat> 2000 mg / kg. LC50 / inhalation / rat> 0.49 mg / l 4h (Wistar male / female). LD50 / skin / rabbit> 9400 mg / kg (According OECD 402).

Skin corrosion / irritation

Irritant to skin and mucous membranes.

Serious eye damage / irritation

Mild eye irritation.

Sensitisers Respiratory / skin

May cause sensitization by inhalation and skin contact.

Carcinogenic

Real ecosystems 1 mg / m³

Mutagenic effect on reproductive cells

Do not show mutagenic effects in animal experiments.

Reproductive toxicity

Do not show teratogenic effects in animal experiments.

Toxic effects on target organs - single exposure

May cause damage to organs (bronchioles.) When inhaled.

Toxic effects on target organs - repeated exposure

May cause damage to organs (bronchioles.) Through prolonged or repeated exposure.

Aspiration hazard

No data available ..

SECTION 12: Ecological information

12.1 Toxicity

Is hydrolyzed to form water insoluble compounds.

LC50 / 96h / fish> 1000 mg / l.

EC50 / 24h / Daphnia = 1000 mg / l.

12.2 Persistence and degradability

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diisocyanate, isomers and monomeric

Biodegradation: 0%, 28 d, ie. Non-biodegradable

Method: OECD 302 C

12.3 Bioaccumulation

Reacts with water, it is not mobile.

12.4 Mobility in soil

This substance is not considered to be persistent, bio accumulating nor toxic (PBT).

12.5 Results of PBT and vPvB

The substance 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.

Changes from the previous version: section 1 – 16.

End of Safety Data Sheet