

# SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended



## Benzyl alcohol


Creation date 01st July 2020  
Revision date Version 1.0

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

- 1.1. Product identifier**  
Substance / mixture Benzyl alcohol  
Number substance  
603-057-00-5  
Chemical name benzyl alcohol  
CAS number 100-51-6  
Index number 603-057-00-5  
EC (EINECS) number 202-859-9  
Registration number 01-2119492630-38-XXXX  
Other substance name phenylmethanol
- 1.2. Relevant identified uses of the substance or mixture and uses advised against**  
Substance's intended use Laboratory chemicals, Manufacture of substances  
Substance uses advised against The product should not be used in ways other than those referred in Section 1.
- 1.3. Details of the supplier of the safety data sheet**  
**Supplier**  
Name or trade name Protolab Stanisław Staniuk  
Address Owocowa 4-8, Słupsk, 76-200  
Poland  
Phone +48 794 341 322  
E-mail protolab@protolab.pl  
**Competent person responsible for the safety data sheet**  
Name Protolab Stanisław Staniuk  
E-mail protolab@protolab.pl
- 1.4. Emergency telephone number**  
112



### SECTION 2: Hazards identification

- 2.1. Classification of the substance or mixture**  
**Classification of the substance in accordance with Regulation (EC) No 1272/2008**  
The substance is classified as dangerous.  
  
Acute Tox. 4, H302+H332  
  
Full text of all classifications and hazard statements is given in the section 16.  
  
**Most serious adverse effects on human health and the environment**  
Harmful if swallowed or if inhaled.
- 2.2. Label elements**  
**Hazard pictogram**  
  
**Signal word**  
Warning  
  
**Dangerous substance**  
benzyl alcohol  
(Index: 603-057-00-5; CAS: 100-51-6)

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### Hazard statements

H302+H332 Harmful if swallowed or if inhaled.

### Precautionary statements

P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
P261 Avoid breathing vapours.  
P264 Wash hands and exposed parts of the body thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P271 Use only outdoors or in a well-ventilated area.  
P312 Call a POISON CENTER if you feel unwell.  
P501 Dispose of contents/container to by handing over to the person authorized to dispose of waste or by returning to the supplier.

### Requirements for child-resistant fastenings and tactile warning of danger

Container must carry a tactile warning of danger.

### 2.3. Other hazards

Substance does not meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

#### Chemical characterization

The substance specified below.

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
Index: 603-057-00-5 CAS: 100-51-6 EC: 202-859-9	<b>substance main component</b> benzyl alcohol	>99	Acute Tox. 4, H302+H332	

Full text of all classifications and hazard statements is given in the section 16.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet. If unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards and make sure that airways are free; never induce vomiting. If the person vomits by himself, make sure that the vomit is not inhaled. In life threatening conditions first of all provide resuscitation of the affected person and ensure medical assistance. Respiratory arrest - provide artificial respiration immediately. Cardiac arrest - provide indirect cardiac massage immediately.

#### If inhaled

Terminate the exposure immediately; move the affected person to fresh air. Protect the person against growing cold. Provide medical treatment if irritation, dyspnoea or other symptoms persist.

#### If on skin

Remove contaminated clothes. Wash the affected area with plenty of water, lukewarm if possible. Soap, soap solution or shampoo should be used if there is no skin injury. Provide medical treatment if skin irritation persists.

#### If in eyes

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. Rinsing should continue at least for 10 minutes.

#### If swallowed

DO NOT INDUCE VOMITING! Rinse out the mouth with water and provide 2-5 dL of water. Provide medical treatment.

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### 4.2. Most important symptoms and effects, both acute and delayed

#### If inhaled

Cough, headache.

#### If on skin

Not expected.

#### If in eyes

Not expected.

#### If swallowed

Irritation, nausea.

### 4.3. Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### Suitable extinguishing media

Alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist.

#### Unsuitable extinguishing media

Water - full jet.

### 5.2. Special hazards arising from the substance or mixture

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

### 5.3. Advice for firefighters

Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit only where personal (close) contact is likely. Use a self-contained breathing apparatus and full-body protective clothing. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment for work. Follow the instructions in the Sections 7 and 8. Do not inhale aerosols. Prevent contact with skin and eyes.

### 6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water.

### 6.3. Methods and material for containment and cleaning up

Spilled product should be covered with suitable (non-flammable) absorbing material (sand, diatomaceous earth, earth and other suitable absorption materials); to be contained in well closed containers and removed as per the Section 13. In the event of leakage of the substantial amount of the product, inform fire brigade and other competent bodies. After removal of the product, wash the contaminated site with plenty of water. Do not use solvents.

### 6.4. Reference to other sections

See the Section 7, 8 and 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Prevent formation of gases and vapours in concentrations exceeding the occupational exposure limits. Do not inhale aerosols. Prevent contact with skin and eyes. Do not eat, drink or smoke when using this product. Wash hands and exposed parts of the body thoroughly after handling. Use only outdoors or in a well-ventilated area. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection.

### 7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. Keep container tightly closed. Hygroscopic.

### 7.3. Specific end use(s)

not available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

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### 8.2. Exposure controls

Follow the usual measures intended for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

#### Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

#### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Thermal hazard

Data not available.

#### Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Appearance	liquid
Physical state	liquid at 20°C
color	colourless
Odour	aromatic
Odour threshold	data not available
pH	data not available
Melting point/freezing point	-16 °C
Initial boiling point and boiling range	203-205 °C
Flash point	101 °C (DIN 51758)
Evaporation rate	data not available
Flammability (solid, gas)	data not available
Upper/lower flammability or explosive limits	
flammability limits	data not available
explosive limits	V
bottom	1.3 %
upper	13 %
Vapour pressure	data not available
Vapour density	data not available
Relative density	data not available
Solubility(ies)	
solubility in water	data not available
solubility in fats	data not available
Partition coefficient: n-octanol/water	log Pow: 1.05
Auto-ignition temperature	data not available
Decomposition temperature	data not available
Viscosity	data not available
Explosive properties	data not available
Oxidising properties	data not available

### 9.2. Other information

Density	1.045 g/cm <sup>3</sup> at 25°C
ignition temperature	data not available

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### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

The substance is non-flammable.

#### 10.2. Chemical stability

Hygroscopic. The product is stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

Unknown.

#### 10.4. Conditions to avoid

A mixture of benzyl alcohol and 58% sulfuric acid decomposed violently when heated to 180°C. Benzyl alcohol containing 1.4% hydrogen bromide and 1.1% of an iron(II) salt polymerized exothermally when heated above 100°C.

#### 10.5. Incompatible materials

Protect against strong acids, bases and oxidizing agents.

#### 10.6. Hazardous decomposition products

Not developed under normal uses. Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Inhalation of solvent vapors above values exceeding exposure limits for working environment may result in acute inhalation poisoning, depending on the level of concentration and exposure time. No toxicological data is available for the substance.

#### Acute toxicity

Harmful if swallowed or if inhaled.

Benzyl alcohol

Route of exposure	Parameter	Method	Value	Time of exposure	Species	Sex	Source
Oral	LD <sub>50</sub>		1620 mg/kg		Rat (Rattus norvegicus)	M	ECHA
Inhalation	LC <sub>50</sub>	OECD 403	>4.178 mg/l	4 hour	Rat (Rattus norvegicus)	F/M	ROZPORZĄDZENIE (WE) NR 1272/2008, Załącznik VI

#### Skin corrosion/irritation

Based on available data the classification criteria are not met.

Benzyl alcohol

Route of exposure	Result	Method	Time of exposure	Species
Skin	Not irritating	OECD 404	4 hour	Rabbit

#### Serious eye damage/irritation

Based on available data the classification criteria are not met.

#### Respiratory or skin sensitisation

Based on available data the classification criteria are not met.

#### Germ cell mutagenicity

Based on available data the classification criteria are not met.

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### Carcinogenicity

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

### Reproductive toxicity

Based on available data the classification criteria are not met.

### Toxicity for specific target organ - single exposure

Based on available data the classification criteria are not met.

### Toxicity for specific target organ - repeated exposure

Based on available data the classification criteria are not met.

### Aspiration hazard

Based on available data the classification criteria are not met.

## SECTION 12: Ecological information

### 12.1. Toxicity

#### Acute toxicity

Benzyl alcohol

Parameter	Method	Value	Time of exposure	Species	Environment	Source
LC <sub>50</sub>		460 mg/l	96 hour	Fishes (Pimephales promelas)		US-EPA
EC <sub>50</sub>	OECD 202	230 mg/l	48 hour	Daphnia (Daphnia magna)		
ErC <sub>50</sub>	OECD 202	700 mg/l	72 hour	Algae (Pseudokirchneriella subcapitata)		

### 12.2. Persistence and degradability

#### Biodegradability

Benzyl alcohol

Parameter	Method	Value	Time of exposure	Environment	Result
	OECD 301C	92-96 %	14 day	Atmosphere	Easily biodegradable
	OECD 301A	95-97 %	21 day	Atmosphere	Easily biodegradable

Readily biodegradable

### 12.3. Bioaccumulative potential

Data not available.

### 12.4. Mobility in soil

Data not available.

### 12.5. Results of PBT and vPvB assessment

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

### 12.6. Other adverse effects

Data not available.

## SECTION 13: Disposal considerations

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### 13.1. Waste treatment methods

Offer surplus and non-recyclable solutions to a licensed disposal company. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself

### Waste management legislation

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

## SECTION 14: Transport information

### 14.1. UN number

UN 3334

### 14.2. UN proper shipping name

Aviation regulated liquid, n.o.s.

### 14.3. Transport hazard class(es)

9 Miscellaneous dangerous substances and articles

### 14.4. Packing group

not available

### 14.5. Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

### 14.6. Special precautions for user

Reference in the Sections 4 to 8.

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not available

### Additional information

Hazard identification No.

UN number

Classification code

3334

M11

### Air transport - ICAO/IATA

Packaging instructions passenger 956

Cargo packaging instructions 956

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16th December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006, as amended.

### 15.2. Chemical safety assessment

not available

## SECTION 16: Other information

### A list of standard risk phrases used in the safety data sheet

H302+H332 Harmful if swallowed or if inhaled.

### Guidelines for safe handling used in the safety data sheet

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P261 Avoid breathing vapours.

P264 Wash hands and exposed parts of the body thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

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- P271 Use only outdoors or in a well-ventilated area.  
P312 Call a POISON CENTER if you feel unwell.  
P501 Dispose of contents/container to be handed over to the person authorized to dispose of waste or by returning to the supplier.

### Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

### Key to abbreviations and acronyms used in the safety data sheet

ADR	European agreement concerning the international carriage of dangerous goods by road
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
DNEL	Derived no-effect level
EC	Identification code for each substance listed in EINECS
EC <sub>50</sub>	Concentration of a substance when it is affected 50% of the population
EINECS	European Inventory of Existing Commercial Chemical Substances
EmS	Emergency plan
EU	European Union
IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
IC <sub>50</sub>	Concentration causing 50% blockade
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
INCI	International Nomenclature of Cosmetic Ingredients
ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
LC <sub>50</sub>	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD <sub>50</sub>	Lethal dose of a substance in which it can be expected death of 50% of the population
LOAEC	Lowest observed adverse effect concentration
LOAEL	Lowest observed adverse effect level
log K <sub>ow</sub>	Octanol-water partition coefficient
MARPOL	International Convention for the Prevention of Pollution From Ships
NOAEC	No observed adverse effect concentration
NOAEL	No observed adverse effect level
NOEC	No observed effect concentration
NOEL	No observed effect level
OEL	Occupational Exposure Limits
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted no-effect concentration
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Agreement on the transport of dangerous goods by rail
UN	Four-figure identification number of the substance or article taken from the UN Model Regulations
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative

Acute Tox. Acute toxicity

### Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

### Recommended restrictions of use



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**Protolab**  
Tworzymy unikalne rozwiązania

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not available

### Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended.  
REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

### More information

Classification procedure - calculation method.

### Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.