

SAFETY DATA SHEET

according to 1907/2006/EC, Article 3

Version no. : 2.1
Prepared on : 06.11.2025
Revised on : -

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

1.1 Product identifiers

Product name HydraTrace standard solution 0.5%
Product Number PSR48223
Brand PureSynth research chemicals
CAS No. NA

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

Identified uses : HydraTrace

1.3 Details of the supplier of the safety data sheet

Company PureSynth Research Chemicals GmbH.
64683 Einhausen Marie-Curie-Straße. 3, Germany

1.4 Emergency telephone number

Worldwide Helpline No.: 1800-8908-260

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Flammable liquids, (Category 3)	H226: Flammable liquid and vapor.
Acute toxicity, (Category 4)	H332: Harmful if inhaled.
Skin irritation, (Category 2)	H315: Causes skin irritation.
Serious eye damage, (Category 1)	H318: Causes serious eye damage.
Specific target organ toxicity - single exposure, (Category 3), Respiratory system	H335: May cause respiratory irritation.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word Danger

Hazard statement(s)

H226	Flammable liquid and vapor.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.

Precautionary statement(s)

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P304 + P340 + P312	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor 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.
Supplemental Hazard Statements	none

2.3 Other hazards: This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at levels of 0.1% or higher

SECTION 3: Composition / information on ingredients

3.1 Substances

Common names & Synonyms	Mol. formula	CAS number
-	-	-
Component	Classification	Concentration
n-Amyl alcohol	Flam. Liq. 3; Acute Tox. 4; Skin Irrit. 2; Eye Dam. 1; STOT SE 3; H226, H332, H315, H318, H335	>= 90 - <= 100 %

SECTION 4: First aid measures

Description of first aid measures

General advice	Show this material safety data sheet to the doctor in attendance.
If inhaled	After inhalation: fresh air.
In case of skin contact	In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.
In case of eye contact	After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.
If swallowed	After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.
Most important symptoms and effects, both acute and delayed	The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11
Indication of any immediate medical attention and special treatment needed	No data available

SECTION 5: Fire fighting measures

Extinguishing media	Carbon dioxide (CO ₂) Dry powder Foam
Suitable extinguishing media	
Unsuitable extinguishing media	For this substance/mixture no limitations of extinguishing agents are given. Combustible.
Special hazards arising from the substance or mixture	Vapors are heavier than air and may spread along floors. Forms explosive mixtures with air at elevated temperatures. Development of hazardous combustion gases or vapours possible in the event of fire.
Advice for fire-fighters	Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.
Further information	Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures	Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.
Environmental precautions	Do not let product enter drains. Risk of explosion.
Methods and materials for containment and cleaning up	Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material. Dispose of properly. Clean up affected area.
Reference to other sections	For disposal see section 13.

SECTION 7: Handling and storage

Precautions for safe handling	Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.
Hygiene measures	Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2.
Conditions for safe storage, including any incompatibilities	Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition. Recommended storage temperature see product label.
Specific end use(s)	Storage class (TRGS 510): 3: Flammable liquids Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls / Personal protection

Control parameters	Ingredients with workplace control parameters
Exposure controls	
Personal protective equipment:	
Eye / face protection	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves
Skin protection	
Body Protection	Flame retardant antistatic protective clothing.
Respiratory protection	Recommended Filter type: Filter A (acc. to DIN 3181) for vapours of organic compounds
Control of environmental exposure	Do not let product enter drains. Risk of explosion.

SECTION 9: Physical and chemical properties

Appearance	Form: liquid Colour: colorless
Odour	characteristic
pH - Value	7 at 20 °C
Density	0.82 g/cm ³ at 20 °C
Boiling Point	138 °C at 1.013 hPa
Melting Point	-78 °C
Solubility in water	22 g/l at 20 °C
Flash point	49 °C
Vapour pressure	2.04 hPa at 20 °C - 1-Pentanol
Auto -ignition temperature	No data available
Vapour density	No data available
Flammability (solid, gas)	No data available
Evaporation rate	No data available
Partition coefficient: n- octanol / water	No data available
Viscosity	No data available
Explosive properties	Not classified as explosive.
Upper / lower flammability or explosive limits	Upper explosion limit: 8.0 %(V) - 1-Pentanol Lower explosion limit: 1.6 %(V) - 1-Pentanol
Oxidizing properties	None

Other safety information: No data available

SECTION 10: Stability and reactivity

Reactivity	danger of spontaneous combustion! Vapor/air-mixtures are explosive at intense warming.
Chemical stability	The product is chemically stable under standard ambient conditions (room temperature) . Risk of ignition or formation of inflammable gases or vapours with: Fluorine Oxygen Violent reactions possible with: Oxidizing agents
Possibility of hazardous reactions	Alkali metals Alkaline earth metals Halogens Acid chlorides Isocyanates lithium silicide Acids
Condition to avoid	Heating.
Incompatible materials	Rubber, various plastics
Hazardous decomposition products	In the event of fire: see section 5

SECTION 11: Toxicological information

Acute toxicity	Symptoms: Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract. Symptoms: Possible symptoms:, mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract Dermal: No data available
Skin corrosion/irritation	Mixture causes skin irritation.
Serious eye damage/eye irritation	Mixture causes serious eye damage.
Respiratory or skin sensitization	No data available
Germ cell mutagenicity	No data available
Carcinogenicity	No data available
Reproductive toxicity	No data available
Specific target organ toxicity - single exposure	Mixture may cause respiratory irritation.
Specific target organ toxicity - repeated exposure	No data available
Aspiration hazard	No data available
Additional Information	
Endocrine disrupting properties	
Assessment	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher

SECTION 12: Ecological information

Toxicity

Toxicity to fish	LC50 - Danio rerio (zebra fish) - 530 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates	- Daphnia magna (Water flea) - 341 mg/l - 48 h
Toxicity to algae	IC5 - Scenedesmus quadricauda (Green algae) - 260 mg/l - 8 d
Toxicity to bacteria	microtox test EC50 - Photobacterium phosphoreum - 394 mg/l - 30 min EC20 - activated sludge - > 1.000 mg/l - 30 min Biochemical Oxygen Demand (BOD): 1.278 mg/g
Persistence and degradability	Chemical Oxygen Demand (COD): 1.814 mg/g Ratio BOD/ThBOD: 47 %
Bio accumulative potential	No data available
Mobility in soil	No data available
Results of PBT and vPvB assessment	This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at Levels of 0.1% or higher. The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
Endocrine disrupting properties	
Other adverse effects	No data available

SECTION 13: Disposal considerations

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 uncleansed containers like the product itself.
Products	
Contaminated packaging	Dispose of as unused product.

SECTION 14: Transport information

	UN no.	UN proper shipping name	Hazard Class(es)	Packaging group	Marine Pollutant
ADR / RID	1105	PENTANOLS	3	III	No
IMDG	1105	PENTANOLS	3	III	No
IATA	1105	Pentanols	3	III	No

SECTION 15: Regulatory information

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

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Chemical safety assessment

A Chemical Safety Assessment has been carried out for this substance.

SECTION 16: Other information

The information in this SDS is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. The user must be determined suitability of this information for his application.