

# SAFETY DATA SHEET

according to 1907/2006/EC, Article 3

Version no. : 2.1  
Prepared on : 05.11.2025  
Revised on : -

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

### 1.1 Product identifiers

**Product name** HydraTrace Titrant 2  
**Product Number** PSR48199  
**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-StraBe. 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 2)	H225: Highly flammable liquid and vapour.
Acute toxicity, (Category 3)	H301: Toxic if swallowed.
Acute toxicity, (Category 3)	H331: Toxic if inhaled.
Acute toxicity, (Category 3)	H311: Toxic in contact with skin.
Specific target organ toxicity - single exposure, (Category 1), Eyes, Central nervous system	H370: Causes damage to organs.
Specific target organ toxicity - repeated exposure, (Category 2), Thyroid	H373: May cause damage to organs through prolonged or repeated exposure if swallowed.

### 2.2 Label elements

**Labelling according Regulation (EC) No 1272/2008**

**Pictogram**



**Signal word** Danger

**Hazard statement(s)**

H225	Highly flammable liquid and vapour.
H301 + H311 + H331	Toxic if swallowed, in contact with skin or if inhaled.
H370	Causes damage to organs (Eyes, Central nervous system).
H373	May cause damage to organs (Thyroid) through prolonged or repeated exposure if swallowed.

**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.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P304 + P340 + P311	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor.
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
Methanol	Flam. Liq. 2; Acute Tox. 3; STOT SE 1; H225, H301, H331, H311, H370 Concentration limits: $\geq 10\%$ : STOT SE 1, H370; 3 - $< 10\%$ : STOT SE 2, H371; Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; STOT RE 1; Aquatic Acute 1; H302, H332, H312, H315, H319, H335, H372, H400 M-Factor - Aquatic Acute: 1	$\geq 90 - \leq 100\%$          $\geq 2.5 - < 10\%$
Iodine		

**SECTION 4: First aid measures**

**Description of first aid measures**

<b>General advice</b>	First aiders need to protect themselves. Show this safety data sheet to the doctor in attendance.
<b>If inhaled</b>	After inhalation: fresh air. Immediately call in physician. If breathing stops: immediately apply artificial respiration, if necessary also oxygen.
<b>In case of skin contact</b>	In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.
<b>In case of eye contact</b>	After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.
<b>If swallowed</b>	After swallowing: fresh air. Make victim drink ethanol (e.g. 1 drinking glass of a 40% alcoholic beverage). Call a doctor immediately (mention methanol ingestion). Only in exceptional cases, if no medical care is

available within one hour, induce vomiting (only in fully conscious persons) and make victim drink ethanol again (approx. 0.3 ml of a 40% alcoholic beverage/kg body weight/hour).

<b>Most important symptoms and effects, both acute and delayed</b>	The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11
<b>Indication of any immediate medical attention and special treatment needed</b>	No data available

## SECTION 5: Fire fighting measures

<b>Extinguishing media</b>	Carbon dioxide (CO <sub>2</sub> ) Dry powder Foam
<b>Suitable extinguishing media</b>	
<b>Unsuitable extinguishing media</b>	For this substance/mixture no limitations of extinguishing agents are given. Carbon oxides Hydrogen iodide Combustible.
<b>Special hazards arising from the substance or mixture</b>	Fire may cause evolution of: hydrogen iodide Pay attention to flashback. Development of hazardous combustion gases or vapours possible in the event of fire. Forms explosive mixtures with air at ambient temperatures.
<b>Advice for fire-fighters</b>	Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing. Remove container from danger zone and cool with water. Suppress (knock down) gases/vapours/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.
<b>Further information</b>	

## SECTION 6: Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Advice for non-emergency personnel: Do not breathe vapours, 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.
<b>Environmental precautions</b>	Do not let product enter drains. Risk of explosion.
<b>Methods and materials for containment and cleaning up</b>	Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully with liquid-absorbent material. Dispose of properly. Clean up affected area.
<b>Reference to other sections</b>	For disposal see section 13.

## SECTION 7: Handling and storage

<b>Precautions for safe handling</b>	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.
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<b>Hygiene measures</b>	Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2.
<b>Conditions for safe storage, including any incompatibilities</b>	Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition. Keep locked up or in an area accessible only to qualified or authorised persons.  -70°C Degree Freezer
<b>Specific end use(s)</b>	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

<b>Control parameters</b>	Ingredients with workplace control parameters
<b>Exposure controls</b>	
<b>Personal protective equipment:</b>	
<b>Eye / face protection</b>	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses  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
<b>Skin protection</b>	
<b>Body Protection</b>	Flame retardant antistatic protective clothing.  required when vapours/aerosols are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.
<b>Respiratory protection</b>	Recommended Filter type: Filter type ABEK
<b>Control of environmental exposure</b>	Do not let product enter drains. Risk of explosion.

**SECTION 9: Physical and chemical properties**

<b>Appearance</b>	Form: liquid
<b>Odour</b>	Colour: brown alcohol-like
<b>pH - Value</b>	No data available
<b>Density</b>	0.82 g/cm <sup>3</sup> at 20 °C
<b>Boiling Point</b>	No data available
<b>Melting Point</b>	No data available
<b>Solubility in water</b>	No data available
<b>Flash point</b>	< 21 °C
<b>Vapour pressure</b>	No data available
<b>Auto -ignition temperature</b>	No data available
<b>Vapour density</b>	No data available
<b>Flammability (solid, gas)</b>	No data available
<b>Evaporation rate</b>	No data available
<b>Partition coefficient: n- octanol / water</b>	No data available
<b>Viscosity</b>	No data available
<b>Explosive properties</b>	Not classified as explosive.
<b>Upper / lower flammability or explosive limits</b>	No data available
<b>Oxidizing properties</b>	None

**Other safety information:** No data available

**SECTION 10: Stability and reactivity**

<b>Reactivity</b>	Vapours may form explosive mixture with air.
<b>Chemical stability</b>	The product is chemically stable under standard ambient conditions (room temperature) . Risk of explosion with: Oxidizing agents perchloric acid perchlorates salts of oxyhalogenic acids chromium(VI) oxide halogen oxides nitrogen oxides nonmetallic oxides chromosulfuric acid chlorates hydrides
<b>Possibility of hazardous reactions</b>	zinc diethyl Halogens Magnesium hydrogen peroxide Nitric acid Exothermic reaction with: acid halides Acid anhydrides Reducing agents Acids Generates dangerous gases or fumes in contact with: Alkaline earth metals Alkali metals
<b>Condition to avoid</b>	Warming.
<b>Incompatible materials</b>	various plastics, Magnesium, zinc alloys
<b>Hazardous decomposition products</b>	In the event of fire: see section 5

**SECTION 11: Toxicological information**

<b>Acute toxicity</b>	Acute toxicity estimate Oral – 102.88 mg/kg Acute toxicity estimate Inhalation - 4 h - 3 mg/l - vapour Acute toxicity estimate Dermal – 309.78 mg/kg
<b>Skin corrosion/irritation</b>	No data available
<b>Serious eye damage/eye irritation</b>	No data available
<b>Respiratory or skin sensitization</b>	No data available
<b>Germ cell mutagenicity</b>	No data available
<b>Carcinogenicity</b>	No data available
<b>Reproductive toxicity</b>	No data available
<b>Specific target organ toxicity - single exposure</b>	Mixture causes damage to organs. - Eyes, Central nervous system
<b>Specific target organ toxicity - repeated exposure</b>	Mixture may cause damage to organs through prolonged or repeated exposure. - Thyroid
<b>Aspiration hazard</b>	No data available
<b>Additional Information</b>	

**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**

<b>Toxicity</b>	No data available
<b>Persistence and degradability</b>	No data available
<b>Bio accumulative potential</b>	No data available
<b>Mobility in soil</b>	No data available
<b>Results of PBT and vPvB assessment</b>	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.
<b>Endocrine disrupting properties</b>	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.
<b>Other adverse effects</b>	Discharge into the environment must be avoided.

**SECTION 13: Disposal considerations**

<b>Waste treatment methods</b>	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.
<b>Products</b>	
<b>Contaminated packaging</b>	Dispose of as unused product.

**SECTION 14: Transport information**

	UN no.	UN proper shipping name	Hazard Class(es)	Packaging group	Marine Pollutant
<b>ADR / RID</b>	1230	METHANOL, SOLUTION	3 (6.1)	II	No
<b>IMDG</b>	1230	METHANOL, SOLUTION	3 (6.1)	II	No
<b>IATA</b>	1230	Methanol, SOLUTION	3 (6.1)	II	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**

For this product a chemical safety assessment was not carried out

**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.