

SAFETY DATA SHEET

according to 1907/2006/EC, Article 3

Version no. : 2.1
Prepared on : 17.11.2025
Revised on : -

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

1.1 Product identifiers

Product name Acetonitrile, Moisture < 20 ppm PurOligo
Product Number PSR48576
Brand PureSynth research chemicals
CAS No. NA

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

Identified uses : PurOligo

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

Flam. Liq. 2 H225
Acute Tox. 4 (Inhalation) H332
Acute Tox. 4 (Dermal) H312
Acute Tox. 4 (Oral) H302
Eye Irrit. 2 H319

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word Danger

Hazard statement(s)

H225 Highly flammable liquid and vapour.
H332 Harmful if inhaled
H312 Harmful in contact with skin.
H302 Harmful if swallowed.
H319 Causes serious eye irritation.

Precautionary statement(s)

P210 Keep away from heat, sparks, open flames and hot surfaces . –
No smoking.

P280	Wear protective clothing, protective gloves, eye protection, face protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with 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 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
Acetonitrile (Anhydrous)	-	90 – 100%

SECTION 4: First aid measures

Description of first aid measures

General advice	Never give anything by mouth to an unconscious person. Consult a doctor. Show this safety data sheet to the doctor in attendance.
If inhaled	Move person to fresh air and ensure comfortable breathing. Give oxygen or artificial respiration if necessary. Call a physician immediately.
In case of skin contact	After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. Immediately call a POISON CENTER/doctor.
In case of eye contact	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Remove contact lenses, if possible. Continue rinsing.
If swallowed	Drink water immediately (max. 2 cups). Do NOT induce vomiting. Obtain emergency medical attention.
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	Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Suitable extinguishing media	
Unsuitable extinguishing media	Do not use a heavy water stream.
Special hazards arising from the substance or mixture	Highly flammable liquid. Vapors are heavier than air and may spread along floors.

Development of hazardous combustion gases or vapours possible in the event of fire. Forms explosive mixtures with air at ambient temperatures. Risk of explosion in contact with:

Cyanopropyl nitrate

metal perchlorates

Perchloric acid

Sulfuric acid/heat

Nitrogen-fluorine-compounds

The substance can react dangerously with:

Oxidizing agents

Acids

Nitrating agent

Perfluoro urea

Nitrogen dioxide/catalyst

Water (with acetonitrile vapour) -> release of toxic HCN.

Fire may cause evolution of:

Nitrogen oxides

Hydrogen cyanide (hydrocyanic acid)

Carbon oxides

Pay attention to flashback.

Remove container from danger zone and cool with water. Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

Stay in danger area only with self-contained breathing apparatus.

Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

Advice for fire-fighters

Further information

No data available

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid breathing vapours, spray. Avoid substance contact. Ensure adequate ventilation, observe emergency procedures, consult an expert. No flames, no sparks. Eliminate all sources of ignition. Evacuate unnecessary personnel. Use special care to avoid static electric charges. For personal protection see section 8.

Environmental precautions

Prevent entry to sewers and public waters. Be careful of explosion risk.

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 carefully 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

Handle empty containers with care because residual vapours are flammable. Use under laboratory hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols. Provide good ventilation in process area to prevent formation of vapour. No open flames. No smoking.

Hygiene measures	Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Apply preventive skin protection. Take off immediately all contaminated clothing and wash it before reuse.
Conditions for safe storage, including any incompatibilities	Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Keep container tightly closed in a dry, well-ventilated place. Keep away from heat and sources of ignition. Keep locked up or in an area accessible only to qualified or authorized persons. Storage temperature: 5 – 25 °C
Specific end use(s)	Storage class (TRGS 510) 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	Wear eye protection. Wear closed safety glasses. EN 166 Wear protective gloves. 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.
Skin protection	Wear protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous Substance at the specific workplace. Flame retardant antistatic protective clothing
Body Protection	
Respiratory protection	Wear appropriate mask. Recommended filter type: Filter A
Control of environmental exposure	Do not let product enter drains. Risk of explosion Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

Appearance	Form: Liquid
Odour	Colour: Colourless. Faint ethereal odour.
pH - Value	No data available
Density	0.78 g/cm ³ at 20 °C
Boiling Point	81 – 82 °C
Melting Point	-45 °C
Solubility in water	Miscible with water
Flash point	2 °C Closed cup
Vapour pressure	93.6 hPa at 20 °C
Auto-ignition temperature	525 °C Temperature class: T1
Vapour density	No data available
Flammability (solid, gas)	No data available
Evaporation rate	No data available
Partition coefficient: n- octanol / water	-0.34
Viscosity	No data available
Explosive properties	Vapors can form an explosive mixture with air.
Upper / lower flammability or explosive limits	No data available
Oxidizing properties	No data available

Other safety information: No data available

SECTION 10: Stability and reactivity

Reactivity	Vapors can form an explosive mixture with air. Highly flammable liquid.
Chemical stability	The product is chemically stable under standard ambient conditions (room temperature). Violent reactions possible with: Strong bases Strong reducing agents Risk of explosion with: Nitrates Perchlorates Perchloric acid
Possibility of hazardous reactions	Conc. sulfuric acid with heat Risk of ignition or formation of inflammable gases or vapours with: Oxidizing agents Nitric acid Nitrogen dioxide with catalyst Generates dangerous gases or fumes in contact with: Acids.
Condition to avoid	Direct sunlight. Open flame. Heat.
Incompatible materials	Strong acids. Strong bases. Rubber. Several plastics. Fire may cause evolution of: Nitrogen oxides
Hazardous decomposition products	Hydrogen cyanide (hydrocyanic acid) Carbon oxides Pay attention to flashback. Fume. May release flammable gases. In the event of fire: see section 5.

SECTION 11: Toxicological information

Acute toxicity	Harmful if swallowed. Harmful in contact with skin. Harmful if inhaled.
Skin corrosion/irritation	No data available
Serious eye damage/eye irritation	Eyes - Rabbit Result: Causes serious eye irritation.
Respiratory or skin sensitization	No data available
Germ cell mutagenicity	Test Type: Mutagenicity (mammal cell test): chromosome aberration. Test system: Chinese hamster ovary cells Metabolic activation: With and without metabolic activation Result: Positive results were obtained in some in vitro tests. Test system: Saccharomyces cerevisiae Metabolic activation: Without metabolic activation Result: Positive
Carcinogenicity	No data available
Reproductive toxicity	Animal testing did not show any effects on fertility.
Specific target organ toxicity - single exposure	No data available
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	No data available
Persistence and degradability	70 % - Result: Readily biodegradable. Partition coefficient n-octanol/water (Log Pow): -0.34
Bio accumulative potential	Bioaccumulative potential: No bioaccumulation is to be expected (log Pow <= 4).
Mobility in soil	Not expected to adsorb on soil.
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.
Endocrine disrupting properties	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. Biological effects:
Other adverse effects	Hazard for drinking water supplies. Discharge into the environment must be avoided. Avoid release to the environment.

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	1648	ACETONITRILE	3	II	No
IMDG	1648	ACETONITRILE	3	II	No
IATA	1648	Acetonitrile	3	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.