

SAFETY DATA SHEET

according to 1907/2006/EC, Article 3

Version no. : 2.0
Prepared on : 28.02.2026
Revised on : -

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

1.1 Product identifiers

Product name Resorcinol
Product Number PSR50255
Brand PureSynth research chemicals
CAS No. 108-46-3

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

Identified uses Laboratory chemicals, Manufacture of substances

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

Classification according to Regulation (EC) No 1272/2008

Acute toxicity, Category 4	H302: Harmful if swallowed.
Skin irritation, Category 2	H315: Causes skin irritation.
Serious eye damage, Category 1	H318: Causes serious eye damage.
Skin sensitisation, Sub-category 1B	H317: May cause an allergic skin reaction.
Specific target organ toxicity - single exposure, Category 1, Central nervous system, Blood	H370: Causes damage to organs if swallowed.
Specific target organ toxicity - single exposure, Category 2, Respiratory system	H371: May cause damage to organs if swallowed.
Short-term (acute) aquatic hazard, Category 1	H400: Very toxic to aquatic life.
Long-term (chronic) aquatic hazard, Category 3	H412: Harmful to aquatic life with long lasting effects.
Eye irritation, (Category 2)	H319: Causes serious eye irritation.
Long-term (chronic) aquatic hazard, (Category 2)	H411: Toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram	
Signal word	Danger
Hazard statement(s)	
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H370	Causes damage to organs (Central nervous system, Blood) if swallowed.
H371	May cause damage to organs (Respiratory system) if swallowed.
H410	Very toxic to aquatic life with long lasting effects.
Precautionary statement(s)	
Prevention:	
P273	Avoid release to the environment.
P280	Wear protective gloves/ eye protection/ face protection.
P301 + P312	IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell.
P302 + P352	Avoid release to the environment.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P311	IF exposed or concerned: Call a POISON CENTER/ doctor.

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

Ecological information: 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.

Toxicological information: 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 3: Composition / information on ingredients

3.1 Substances

Common names & Synonyms	Mol. formula	CAS number
<i>1,3-Benzenediol</i>	C ₆ H ₆ O ₂	108-46-3
Component	Classification	Concentration
Resorcinol	M-Factor (Acute aquatic toxicity): 1Acute toxicity estimate Acute oral toxicity: 500 mg/kg	>= 90 - <= 100

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance.
If inhaled	After inhalation: fresh air. Call in physician.
In case of skin contact	In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.

In case of eye contact	After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.
If swallowed	If swallowed: give water to drink (two glasses at most). Seek medical advice immediately. In exceptional cases only, if medical care is not available within one hour, induce vomiting (only in persons who are wide awake and fully conscious), administer activated charcoal (20 - 40 g in a 10% slurry) and consult a doctor as quickly as possible.
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: Firefighting measures

Extinguishing media	
Suitable extinguishing media	Water Foam Carbon dioxide (CO ₂) Dry powder.
Unsuitable extinguishing media	For this substance/mixture no limitations of extinguishing agents are given.
Special hazards arising from the substance or mixture	Combustible Vapours are heavier than air and may spread along floors. Forms explosive mixtures with air on intense heating. Development of hazardous combustion gases or vapours possible in the event of fire. Carbon oxides
Advice for firefighters	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	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: Avoid generation and inhalation of dusts in all circumstances. Avoid substance contact. Ensure adequate ventilation. 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 carefully. Dispose of properly. Clean up affected area. Avoid generation of dusts.
Reference to other sections	For disposal see section 13.

SECTION 7: Handling and storage

Precautions for safe handling

PS-FORM-QA-11; Ver. No.: 2.1/23.09.2025

Hygiene measures

Conditions for safe storage, including any incompatibilities

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2.

Tightly closed. Dry. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorised persons.

Recommended storage temperature see product label.

Storage class (TRGS 510): 6.1C, Combustible, acute toxic Cat.3 / toxic compounds or compounds which causing chronic effects .Air and light sensitive.

Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls / Personal protection

8.1 Control parameters

Ingredients with workplace control parameters

8.2 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.

Hand Protection

Material: Nitrile rubber

Break through time: 480 min

Glove thickness: 0.11 mm

Protective index: Full contact

Material: Nitrile rubber

Break through time: 480 min

Glove thickness: 0.11 mm

Protective index: Splash contact

Remarks: 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 And Body Protection

protective clothing

Respiratory protection

required when dusts 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.

Recommended Filter type: Filter A-(P2)

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Control of environmental exposure

Do not let product enter drains.

SECTION 9: Physical and chemical properties

Appearance	Form: Solid Colour: White to Light yellow to Light orange
Odour	No data available
pH - Value	4.4 (20 °C) Concentration: 50 g/l
Density	1.28 g/cm ³ (20 °C)
Boiling Point	178 °C (21 hPa) Method: lit.
Melting Point	109 - 111 °C
Solubility in water	717 g/l (25 °C) soluble
Flash point	127 °C Method: closed cup
Vapour pressure	1 hPa (21,1 °C)
Auto -ignition temperature	608 °C
Vapour density	No data available
Flammability (solid, gas)	No data available
Evaporation rate	No data available
Partition coefficient: n- octanol / water	Not applicable for inorganic substances
Viscosity	Viscosity, kinematic: No data available Viscosity, dynamic: No data available
Explosive properties	Not classified as explosive
Upper / lower flammability or explosive limits	Upper explosion limit /: No data available Upper flammability limit Lower explosion limit / :1.4 %(V) Lower flammability limit
Oxidizing properties	none

Other safety information: No data available

SECTION 10: Stability and reactivity

Reactivity	Forms explosive mixtures with air on intense heating. A range from approx. 15 Kelvin below the flash point is to be rated as critical. The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.
Chemical stability	The product is chemically stable under standard ambient conditions (room temperature).
Possibility of hazardous reactions	Risk of explosion with: Nitric acid Exothermic reaction with: Ammonia Amines organic nitro compounds Strong oxidizing agents Violent reactions possible with: bases

	metallic salts
	Iron
	Acid anhydrides
	Acid chlorides
Condition to avoid	Strong heating.
Incompatible materials	No data available
Hazardous decomposition products	In the event of fire: see section 5

SECTION 11: Toxicological information

Acute toxicity	<p>Acute toxicity estimate Oral - 500 mg/kg (Expert judgement) Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2) Inhalation: No data available LD50 Dermal - Rabbit - male - 2830 mg/kg Remarks: (ECHA)</p>
Skin corrosion/irritation	<p>Skin - Rabbit Result: Irritating to skin. - 24 h Remarks: (ECHA) Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)</p>
Serious eye damage/eye irritation	<p>Eyes - Rabbit Result: Irreversible effects on the eye - 72 h Remarks: (ECHA)</p>
Respiratory or skin sensitization	<p>Local lymph node assay (LLNA) - Mouse Result: positive (OECD Test Guideline 429)</p>
Germ cell mutagenicity	<p>Test Type: Ames test Test system: Salmonella typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative Test Type: Mutagenicity (mammal cell test): micronucleus. Test system: Human lymphocytes Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 487 Result: positive Test Type: sister chromatid exchange assay Test system: Chinese hamster ovary cells Metabolic activation: with and without metabolic activation Result: positive Remarks: (ECHA) Test Type: In vitro mammalian cell gene mutation test Test system: mouse lymphoma cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: Positive results were obtained in some in vitro tests. Test Type: sister chromatid exchange assay Species: Rat</p>

Application Route: Oral

Result: negative
Remarks: (ECHA)

Test Type: Micronucleus
test Species: Rat
Cell type: Bone marrow
Application Route: Oral
Method: OECD Test Guideline 474
Result: negative

Test Type: in vivo assay
Species: Drosophila melanogaster

Application Route: Oral

Result: negative
Remarks: (ECHA)

Test Type: sister chromatid exchange assay
Species: Rat

Application Route: Intraperitoneal

Result: negative
Remarks: (ECHA)

Test Type: sister chromatid exchange assay
Species: Rat

Application Route: Dermal

Result: negative
Remarks: (ECHA)
No data available

Carcinogenicity

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

Oral - Causes damage to organs. - Central nervous system, Blood Oral - May cause damage to organs. - Respiratory system

Specific target organ toxicity - repeated exposure Aspiration hazard

No data available

Aspiration hazard

No data available

Additional Information

Endocrine disrupting properties

Product:

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.

Repeated dose toxicity - Rat - male and female - Oral - No observed adverse effect level - 80 mg/kg

To the best of our knowledge, the chemical, physical, and toxicological

properties have not been thoroughly investigated.

SECTION 12: Ecological information

Toxicity

Toxicity to fish	LC50 (Pimephales promelas (fathead minnow)): 29.5 mg/l Exposure time: 96 h Test Type: flow-through test Analytical monitoring: yes Method: US-EPA
Toxicity to daphnia and other aquatic invertebrates	LC50 (Daphnia magna (Water flea)): 1 mg/l End point: Immobilization Exposure time: 48 h Test Type: semi-static test Analytical monitoring: yes Method: OECD Test Guideline 202 GLP: yes
Toxicity to algae	ErC50 (Pseudokirchneriella subcapitata (green algae)): > 97 mg/l Exposure time: 72 h Test Type: static test Analytical monitoring: yes Method: OECD Test Guideline 201 GLP: yes
M-Factor (Acute aquatic toxicity)	1
Toxicity to microorganisms	EC50 (activated sludge): 79 mg/l Exposure time: 3 h Method: OECD Test Guideline 209 GLP: yes No data available
Toxicity to fish (Chronic toxicity)	LC50: 260 mg/l Exposure time: 60 d Species: Oncorhynchus mykiss (rainbow trout) Remarks: (ECHA)
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	NOEC: >= 0.172 mg/l End point: reproduction rate Exposure time: 21 d Species: Daphnia magna (Water flea) Test Type: flow-through test Analytical monitoring: yes Method: OECD Test Guideline 211 GLP: yes
Persistence and degradability	Biodegradability: Test Type: aerobic Inoculum: activated sludge, non-adapted Concentration: 100 mg/l Result: Readily biodegradable. Biodegradation: 66,7 % Exposure time: 14 d Method: OECD Test Guideline 301C BOD/COD: BOD/COD: 1.74 % ThOD: 1890 mg/g Remarks: (Lit.)

Bioaccumulative potential	BOD/ThOD: 61 % Remarks: (Lit.) Partition coefficient: n-octanol/water: log Pow: 0.8 (20 °C) Remarks: Bioaccumulation is not expected.
Mobility in soil	No data available
Results of PBT and vPvB assessment	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. 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.
Other adverse effects	No data available

SECTION 13: Disposal considerations

Waste treatment methods	Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself. Dispose of as unused product.
Products	
Contaminated packaging	

SECTION 14: Transport information

	UN no.	UN proper shipping name	Hazard Class(es)	Packaging group	Marine Pollutant
ADR / RID	2876	RESORCINOL	6.1	III	no
IMDG	2876	RESORCINOL	6.1	III	yes
IATA	2876	Resorcinol	6.1	III	no

SECTION 15: Regulatory information

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

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)	Conditions of restriction for the following entries should be considered: Number on list 75: If you intend to use this product as tattoo ink, please contact your vendor.
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	Not applicable
Regulation (EU) No 2024/590 on substances that deplete the ozone layer	Not applicable
Regulation (EU) 2019/1021 on persistent organic pollutants (recast)	Not applicable
REACH - List of substances subject to authorisation (Annex XIV)	Not applicable
Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.	H3 STOT SPECIFIC TARGET ORGAN TOXICITY-SINGLE EXPOSURE E1 ENVIRONMENTAL HAZARDS

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.