

SAFETY DATA SHEET

according to 1907/2006/EC, Article 3

Version no. : 2.0
Prepared on : 01.04.2026
Revised on : -

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

1.1 Product identifiers

Product name 4-Aminophenol
Product Number PSR37382
Brand PureSynth research chemicals
CAS No. 123-30-8

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

Identified uses : Laboratory chemicals

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

Classification according to Regulation (EC) No 1272/2008

Acute toxicity, Category 4, H302

Acute toxicity, Category 4, H332

Skin sensitisation, Category 1, H317

Germ cell mutagenicity, Category 2, H341

Specific target organ toxicity - repeated exposure, Category 2, Kidney, H373

Short-term (acute) aquatic hazard, Category 1, H400

Long-term (chronic) aquatic hazard, Category 1, H410

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word Warning

Hazard statement(s)

H302 + H332

Harmful if swallowed or if inhaled.

H317

May cause an allergic skin reaction

H341

Suspected of causing genetic defects.

H373

May cause damage to organs (Kidney) through prolonged or repeated exposure

H410	Very toxic to aquatic life with long lasting effects.
Precautionary statement(s)	
P273	Avoid release to the environment.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:	
P301 + P312	IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell.
P302 + P352	IF ON SKIN: Wash with plenty of 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.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.

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.

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
4-aminophenol	H ₂ NC ₆ H ₄ OH	123-30-8
Component	Classification	Concentration
4-aminophenol	M-Factor (Acute aquatic toxicity): 10 M-Factor (Chronic aquatic toxicity): 1	>= 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. 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. Call in ophthalmologist. Remove contact lenses.
If swallowed	After swallowing: caution if victim vomits. Risk of aspiration! Keep airways free. Pulmonary failure possible after aspiration of vomit. Call a physician immediately.
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) Foam Dry powder Water
suitable extinguishing media	
Unsuitable extinguishing media	For this substance/mixture no limitations of extinguishing agents are given.
Special hazards arising from the substance or mixture	Carbon oxides Combustible. 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	Suppress (knock down) gases/vapours/mists with a water spray jet 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 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	Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols. 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	Tightly closed. Dry. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorised persons. Storage class (TRGS 510): 6.1C : Combustible, acute toxic Cat.3 / toxic compounds or compounds which causing chronic effects
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

Control parameters	Ingredients with workplace control parameters
Appropriate engineering 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). Safety glasses
Skin protection	protective clothing
Body Protection	Flame retardant antistatic 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-(P3) 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. Risk of explosion.

SECTION 9: Physical and chemical properties

Appearance	Form: solid Colour: beige
Odour	phenol-like
pH - Value	No data available
Density	No data available
Boiling Point	284 °C (1.013 hPa)
Melting Point	189.6 – 190.2 °C
Solubility in water	1.000 g/l (25 °C) soluble
Flash point	No data available
Vapour pressure	No data available
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	log Pow: ca. -0,09 (25 °C) pH: 7.5 Method: OECD Test Guideline 107
Viscosity	No data available
Explosive properties	Not classified as explosive.
Upper / lower flammability or explosive limits	No data available
Oxidizing properties	None

Other safety information:

Self-ignition : > 400 °C Method: Regulation (EC) No. 440/2008, Annex, A.16

Surface tension: 61,13 mN/m, 1, 20 °C, OECD Test Guideline 115

Molecular weight: 109.13 g/mol

SECTION 10: Stability and reactivity

Reactivity	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: Violent reactions possible with: Oxidizing agents Bases Acid anhydrides Acid chlorides acids rubber various plastics Risk of ignition or formation of inflammable gases or vapours with: Peroxides (sodium salt)
Condition to avoid	No data available
Incompatible materials	No data available
Hazardous decomposition products	In the event of fire: see section 5

SECTION 11: Toxicological information

Acute toxicity	LD50 Oral - Rat - male and female - 671 mg/kg LC50 Inhalation - 4 h - > 3,42 mg/l - dust/mist (OECD Test Guideline 403) LD50 Dermal - Rabbit - male and female - > 8.000 mg/kg
Skin corrosion/irritation	Skin - Rabbit Result: No skin irritation
Serious eye damage/eye irritation	Eyes - Rabbit Result: No eye irritation
Respiratory or skin sensitization	Buehler Test - Guinea pig Result: positive (OECD Test Guideline 406)
Germ cell mutagenicity	Suspected of causing genetic defects. Test Type: Ames test Test system: S. typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative Test Type: Mutagenicity (mammal cell test): chromosome aberration. Test system: Chinese hamster lung cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 473 Result: Positive results were obtained in some in vitro tests. Test Type: unscheduled DNA synthesis assay Species: Rat Application Route: Oral Method: OECD Test Guideline 486 Result: negative Test Type: Chromosome aberration test

	Species: Mouse
	Application Route: Oral
	Method: OECD Test Guideline 474 Result: positive
Carcinogenicity	No data available
Reproductive toxicity	Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.
Specific target organ toxicity - single exposure	No data available
Specific target organ toxicity - repeated exposure	May cause damage to organs through prolonged or repeated exposure. - Kidney
Aspiration hazard	No data available
Additional Information	
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.

SECTION 12: Ecological information

Toxicity	LC50 (Oryzias latipes (Orange-red killifish)): 0.82 mg/l
	End point: mortality Exposure time: 96 h
Toxicity to fish	Test Type: flow-through test
	Analytical monitoring: yes
	Method: OECD Test Guideline 203
	EC50 (Daphnia magna (Water flea)): 0.089 mg/l
	End point: Immobilization
Toxicity to daphnia and other aquatic invertebrates	Exposure time: 48 h
	Test Type: semi-static test
	Analytical monitoring: yes
	Method: OECD Test Guideline 202
	ErC50 (Pseudokirchneriella subcapitata (algae)): 0.25 mg/l
Toxicity to algae/aquatic plants	Exposure time: 72 h
	Test Type: static test
	Analytical monitoring: yes Method: OECD Test Guideline 201
Persistence and degradability	Test Type: aerobic
	Inoculum: activated sludge, non-adapted
Biodegradability	Result: Not readily biodegradable.
	Biodegradation: 6 %
	Exposure time: 28 d
	Method: OECD Test Guideline 301C
Bio accumulative potential	
	Species: Cyprinus carpio (Carp)
Bio accumulative	Exposure time: 56 d
	Concentration: 0,00015 mg/l
	Bioconcentration factor (BCF): 15 - 46
	Method: OECD Test Guideline 305C
	log Pow: ca. -0,09 (25 °C) pH: 7.5
Partition coefficient: noctanol/water	Method: OECD Test Guideline 107
	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, 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.

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.

Products

Handle uncleaned containers like the product itself.

Contaminated packaging

No data available

SECTION 14: Transport information

	UN no.	UN proper shipping name	Hazard Class(es)	Packaging group	Marine Pollutant
ADR / RID	2512	AMINOPHENOLS	6.1	III	No
IMDG	2512	AMINOPHENOLS	6.1	III	No
IATA	2512	Aminophenols	6.1	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.

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.

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.