

1. IDENTIFICATION

Product Name	Sulfanilic Acid
CAS Number	121-57-3
Uses	Industrial intermediates for the synthesis of organic chemicals
Manufacturer	Nation Ford Chemical Company 2300 Banks St Fort Mill, SC 29715 United States of America
Email	info@nationfordchem.com
Telephone	1-803-548-3210
Only Representative	Chemservice GmbH Herrnsheimer Hauptstr. 1b 67550 Worms, Germany
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Emergency Telephone Number	1-800-424-9300 (CHEMTREC)

2. HAZARDS IDENTIFICATION

Hazard Classification

Classification in accordance with Regulation (EC) No 1272/2008 and 29 CFR 1910.1200

Skin Irritant	Category 2	H315
Eye Irritant	Category 2A	H319
Skin Sensitizer	Category 1	H317

Label Elements

Hazard Pictograms



Signal Word Warning

Hazard Statements

H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation

Precautionary Statements

P261	Avoid breathing dust
P264	Wash skin thoroughly after handling
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves
P302/352	IF ON SKIN: Wash with plenty of soap and water
P305/351/338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333/313	If skin irritation or rash occurs: Get medical attention.
P337/313	If eye irritation persists: Get medical attention.
P362/364	Take off contaminated clothing and wash before reuse.
P501	Dispose of contents in accordance with local regulations.

Other Hazards

Results of PBT and vPvB assessment

PBT	No
vPvB	No

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance Name	Sulfanilic Acid
CAS Number	121-57-3
EINECS Number	204-482-5
Reach Registration Number	01-2119541820-45-0000
Index Number	612-014-00-X
Purity	99+%
Synonyms	4-Aminobenzenesulfonic acid p-anilinesulfonic acid Sulphanilic acid

4. FIRST AID MEASURES

General information	Immediately remove any clothing soiled by the product. Provide oxygen treatment if affected person has difficulty breathing. Take affected persons out into the fresh air.
Inhalation	If large amounts are inhaled, remove to fresh air. If breathing has stopped, give artificial respiration. If breathing is difficult, administer oxygen and call a physician.
Skin contact	Immediately wash skin with soap and copious amounts of water while removing contaminated clothing. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating eyelids with fingers. Seek medical attention.
Ingestion	Do not induce vomiting. Immediate vigorous rinsing of the mouth. Drink water in small sips (dilution effect). If unconscious place in recovery position and seek immediate medical attention. Maintain an open airway. Loosen tight clothing (such as a collar, tie, belt or waistband).
Most important symptoms and effects, both acute and delayed	Causes eye and skin irritation. May cause allergic skin reaction (sensitization.)
Indication of any immediate medical attention and special treatment needed	Symptomatic treatment and if possible contact poison specialist. No further relevant information available. Immediate medical attention should not be required.

5. FIRST AID MEASURES

Suitable extinguishing media	Carbon Dioxide (CO2) Powder Water Spray Fight larger fires with water spray or alcohol resistant foam
Unsuitable extinguishing media	Water with full jet
Special hazards arising from the substance	The substance emits toxic fumes of carbon monoxide, carbon dioxide, and oxides of sulfur and nitrogen under fire conditions. Sulfanilic acid can

produce flammable dust clouds in air. Take precautionary measures against static discharges. If involved in a fire, it may emit noxious and toxic fumes.

Advice for firefighters

If excessive smoke or fumes are encountered, wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Dispose of fire debris and contaminated fire-fighting water in accordance with official regulations. Collect contaminated fire-fighting water separately. It must not enter the sewage system.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures

Ensure suitable personal protection (including respiratory protection) during removal of spillages. Sweep up, place in drum and hold for approved waste disposal in compliance with local, state, and federal requirements. Avoid breathing dust. Avoid skin and eye contact and inhalation.

Environmental precautions

Do not allow to enter drains, sewers or watercourses.

Methods and materials for containment and cleaning

Protect against dust. Clear up spillages, transfer to a container for disposal. Wash the spillage area clean.

Reference to other sections

See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Store in well ventilated areas. Keep container tightly closed and dry. Do not store with acids. Take precautionary measures against static discharges.

Conditions for Safe Storage
Requirements to be met by Storerooms and receptacles

Store in a dry place.
Keep away from sources of ignition and strong oxidizing agents.
Do not use food containers. Risk of confusion!
Containers are clearly and permanently labelled.
Store in the original container if possible.
Keep container tightly closed.

Information about storage in one common storage facility

Do not store together with acids.
Store away from foodstuffs.
Store away from flammable substances.

Further information about storage conditions

The storage in one common storage facility with materials belonging to another storage classes is only possible under certain conditions.
The substance should not be stored with substances, which can lead to dangerous reactions. Keep container tightly sealed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

DNEL Values

Dermal (Long Term Exposure)	3.33 mg/kg bw/day
Inhalation (Long Term Exposure)	6.67 mg/m ³

PNEC Values

PNEC _{aqua} (freshwater)	0.023 mg/L; Assessment factor 1000
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PNEC_{aqua} (marine water) 0.0023 mg/L; Assessment factor 1000
PNEC_{aqua} (intermittent releases) 0.23 mg/L; Assessment factor 100

PNEC_{STP} 100 mg/L

This product does not have an ACGIH TLV or OSHA PEL.

Ingredients with limit values that require monitoring at the workplace Contains no substances with occupational exposure limits.

Additional Information The lists valid during the making were used as basis.

Exposure Controls

Personal protective equipment general protective and hygienic measures Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.

Ventilation A general exhaust system is recommended.

Respiratory Protection NIOSH/MSHA approved respirator or follow the requirement of the local governing body. In case of an accidental release it is recommended to wear respiratory protection such as particle filter P2 or P3.

Hand Protection Protective gloves according to proper IH procedures.

Eye and Face Protection In cases where there is likelihood of eye contact, wear chemical goggles.

Skin and Body Protection Protective work clothing

Environmental Exposure Product as well as with product contaminated constituents, cleaning or solvent: do not release into the environment. Dispose of as hazardous waste in accordance with EC directives on waste.

9. PHYSICAL AND CHEMICAL PROPERTIES

Color White to light gray powder

Form Solid

Odor Odorless

Odor threshold No data available

pH 2.5

Melting/Freezing point The substance decomposes prior to melting

Boiling point The substance decomposes prior to melting

Flash point Not applicable

Evaporation rate Not applicable

Flammability (solid, gas) Substance is not flammable

Upper explosion limit	No data available
Lower explosion limit	No data available
Vapor pressure	<0.01 hPa
Density	1.862 g/cm ³
Water solubility at 20°C	12 g/L (Value used for CSA)
Segregation coefficient (n-octanol/water) at 25°C	-2.3 log POW
Ignition temperature	No data available
Decomposition temperature	ca. 288°C
Self-igniting	331°C at 1013 hPa (Valued used for CSA)
Danger of explosion	No data available
Dynamic viscosity	Not applicable
Kinematic viscosity	Not applicable

10. STABILITY AND REACTIVITY

Reactivity	No data available
Chemical stability	Stable at normal storage and handling conditions
Possibility of hazardous reactions	No data available
Conditions to avoid	No data available
Incompatible materials	Strong oxidizers, acids
Hazardous decomposition products	The substance emits toxic fumes of carbon monoxide, carbon dioxide, and oxide of sulfur and nitrogen under fire conditions. If involved in a fire, it may emit noxious and toxic fumes.

11. TOXICOLOGICAL INFORMATION

Inhalation	Dust may be irritant to the upper respiratory tract.
Ingestion	Unlikely to be hazardous if swallowed.
Eye Contact	Irritating to eyes.
Skin Contact	Irritating to skin.
Long-Term Exposure	No long-term effects have been identified.
Acute Oral Toxicity	LD50: >2000 mg/kg bw (rat) OECD Guideline 423 (Acute Oral Toxicity – Acute Toxic Class Method)
Acute Dermal Toxicity	LD50: >2000 mg/kg bw (rat) OECD Guideline 402 (Acute Dermal Toxicity)

Acute Inhalation Toxicity	No study performed as exposure is highly unlikely due to low vapor pressure.
Skin Irritation/Corrosion	Not an irritant per testing. Classification is according to CLP Harmonized Classification. OECD Guideline 405 (Acute Eye Irritation/Corrosion)
Eye Irritation/Corrosion	Rabbit ca. 2(mean) (Time Point: 24, 48, and 72h) (fully reversible)
Skin Sensitization	Not a sensitizer per testing. Classification is according to CLP Harmonized Classification. OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Germ Cell Mutagenicity in vitro:	Negative; S. typhimurium Doses: 1-1000 μ g/plate Equivalent or similar to OECD Guideline 471 (Bacterial Reverse Mutation Assay)
in vivo:	Negative; mouse and rat C. Westmoreland and D.G. Gatehouse (1991)
Carcinogenicity	Not a carcinogen Borzelleca rat/mice No component of this substance present at levels greater than or equal to 0.1% is identified as a probable, possible, or confirmed carcinogen by IARC, ACGIH, NTP or OSHA.
Reproductive toxicity oral	NOAEL: 1000 mg/kg bw/day OECD Guideline 421 (Reproduction/Developmental Toxicity Screening Test)
STOT: Single Exposure	No information available.
STOT: Repeated Exposure	No information available.

12. ECOLOGICAL INFORMATION

Toxicity

Toxicity to Fish	Fish (low toxicity to fish) LC50: 100.8 mg/L Exposure time: 96 h
Toxicity to Aquatic Invertebrates	Daphnia (harmful to aquatic invertebrates) EC50: 85.7 mg/L Exposure time: 48 h
Persistence and Degradability	Readily Biodegradable OECD Guideline 301D
Bioaccumulative Potential	Due to the distribution coefficient n-octanol/water an accumulation in organisms is not expected.
Mobility in Soil	No further information available.
Other Information	

Elimination	COD removal, adapted activated OECD guideline
Sludge Assessment	Readily biodegradable, according to appropriate OECD guideline
Water Solubility Results	The substance is soluble in water
Results of PBT and VPVB Assessment	
PBT	Not applicable
vPvB	Not applicable
Ecotoxicological Effects	
Remark	The substance is substantially removed in a biological treatment process. Tests show that the inhibition of aerobic wastewater bacterial is unlikely.
Other Information	Ecotoxicity: This environmental hazard assessment is based on information available on similar substances and actual test.
Additional Ecological Information	
General Notes	Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods	Dispose of according to local, state, and national guidelines. Must not be disposed together with household garbage. Do not allow product to reach sewage system.
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14. TRANSPORT INFORMATION

Substance is not classified as dangerous for transportation.

15. REGULATORY INFORMATION

CERCLA	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by CERCLA Title 40, Part 302.4.
SARA 311/312	Refer to Section 2 for OSHA Hazard Classification.
SARA 313	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
TSCA	This substance is listed in the TSCA database.
California Proposition 65	This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.
Chemical Safety Assessment	A Chemical Safety Assessment has been carried out.
SEVESO Substance	No

German Storage Class (LGK) 13 (Non-flammable solids that cannot be assigned to any of the aforementioned LGK)

16. OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Date of Last Revision April 1, 2023

Further Information All the information mentioned in this SDS are compliant with the COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

Abbreviations and Acronyms

EC50 Effective concentration, 50 percent

GHS Globally Harmonized System of Classification and Labelling of Chemicals

EINECS European Inventory of Existing Commercial Chemical Substances

CAS Chemical Abstracts Service (division of the American Chemical Society)

LC50 Lethal concentration, 50 percent

LD50 Lethal dose, 50 percent

Annexes

Annex 1 Exposure Scenario 1 – Manufacturing

Annex 2 Exposure Scenario 1 – Manufacturing of Fine Chemicals

Annex 3 Exposure Scenario 1 – Formulation

Annex 1: Exposure Scenario 1 – Manufacturing

PROCESS	DURATION	RESPIRATORY PROTECTION	FURTHER RISK MANAGEMENT MEASURES
PROC 1: Use in a closed process, no likelihood of exposure	> 4 hours (default)	No	No
PROC 2: Use in a closed, continuous process with occasional controlled exposure	> 4 hours (default)	No	No
PROC 3: Use in a closed batch process (synthesis or formulation)	> 4 hours (default)	No	No
PROC 4: Use in a batch and other process (synthesis) where opportunity for exposure arises	> 4 hours (default)	90%	Gloves: 80% effective
PROC 8A: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities	1 – 4 hours	90%	Gloves: 80% effective
PROC 8B: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities	> 4 hours (default)	90%	Gloves: 80% effective

Setting – Industrial; Form – Solid; Dustiness – High; Ventilation – Indoor w/o LEV;

Annex 2: Exposure Scenario 2 – Manufacturing of Fine Chemicals

PROCESS	DURATION	RESPIRATORY PROTECTION	FURTHER RISK MANAGEMENT MEASURES
PROC 3: Use in a closed batch process (synthesis or formulation)	> 4 hours (default)	No	No
PROC 4: Use in a batch and other process (synthesis) where opportunity for exposure arises	> 4 hours (default)	No	No
PROC 15: Use of laboratory reagents in small scale laboratories	> 4 hours (default)	No	No

Setting – Industrial; Form – Solid; Dustiness – High; Ventilation – Indoor w/o LEV;

Annex 3: Exposure Scenario 3 – Formulation

PROCESS	DURATION	RESPIRATORY PROTECTION	FURTHER RISK MANAGEMENT MEASURES
PROC 4: Use in a batch and other process (synthesis) where opportunity for exposure arises	> 4 hours (default)	90%	Gloves: 80% effective