SAFETY DATA SHEET

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

1.1 Product identifiers

Product name	1-Naphthol
CAS number	90-15-3
Synonyms	1-Hydroxynaphthalene, α-Naphthol

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	Lab Alley, LLC 12501 Pauls Valley Road Austin, Texas 78737 U.S.A.
Telephone	512-668-9918
Fax	512-886-4008

1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity, (Category 4) H302: Harmful if swallowed.
Acute toxicity, (Category 3) H311: Toxic in contact with skin.
Skin irritation, (Category 2) H315: Causes skin irritation.
Serious eye damage, (Category 1) H318: Causes serious eye damage.
Skin sensitization, (Sub-category 1A) H317: May cause an allergic skin reaction.
Specific target organ toxicity - single exposure, (Category 2), Kidney. H371: May cause damage to organs if swallowed.
Specific target organ toxicity - single exposure, (Category 3), Respiratory system. H335: May cause respiratory irritation.
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.

2.2 GHS Label elements, including precautionary statements

Pictogram

Signal Word: Danger

Hazard statements:
H302 Harmful if swallowed.
H311 Toxic in contact with skin.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.
H371 May cause damage to organs (Kidney) if swallowed.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements:
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P312 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell.
P302 + P352 + P312 IF ON SKIN: Wash with plenty of water.Call a POISON CENTER/ doctor if you feel unwell.
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.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None identified.

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
1-Napthol	1-Hydroxynaphthalene, α-Naphthol	90-15-3	100%

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice First aiders need to protect themselves. 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. Call a physician immediately.

In case of eye contact After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

If swallowed After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

4.2 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.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Water, Foam, Carbon dioxide (CO2), Dry powder.

Unsuitable extinguishing media For this substance/mixture no limitations of extinguishing agents are given.

5.2 Specific hazards arising from the substance or mixture

Carbon oxides. Combustible. Vapors 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.

5.3 Special protective equipment and precautions 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.

5.4 Further information

Flash Point 125 °C - closed cup.

Autoignition Temperature No data available.

Explosion limits

Upper Upper explosion limit: 5 %(V)

Lower Lower explosion limit: 0.8 %(V)

Sensitivity to Mechanical Impact No data available.

Sensitivity to Static Discharge No data available.

NFPA

Health	Flammability	Instability	Physical hazards
2	1	1	N/A

SECTION 6: Accidental release measures

6.1 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.

6.2 Environmental precautions

Do not let product enter drains.

6.3 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.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Work under hood. Do not inhale substance/mixture.

Hygiene measures

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

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Tightly closed. Dry. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons. Light sensitive. Store under inert gas. Air sensitive. Air and light sensitive.

Incompatibilities

Strong oxidizing agents, Strong bases, Halogens, Acid anhydrides, Acid chlorides.

SECTION 8: Exposure controls/personal protection

8.1 Occupational exposure limits

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

8.2 Exposure controls

Appropriate engineering controls
Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

Eye/face protection
Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin protection
Wear appropriate protective gloves.

Body Protection
Protective clothing.

Respiratory protection
Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Control of environmental exposure
Handle in accordance with good industrial hygiene and safety practice.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Solid
Appearance	No data available.
Odor	No data available.
Odor Threshold	No data available.
pH	No data available.
Melting Point/Range	94 - 96 °C
Boiling Point/Range	278 - 280 °C
Evaporation Rate	No data available.
Flammability (solid)	No data available.
Flammability or explosive limit	No data available.
Upper	Upper explosion limit: 5 %(V)
Lower	Lower explosion limit: 0.8 %(V)
Vapor Pressure	2,3 hPa at 100 °C
Vapor Density	No data available.

Density	1,28 g/cm3 at 20 °C
Solubility	No data available.
Partition coefficient; n-octanol/water	log Pow: 2.85
Autoignition Temp	No data available.
Decomposition Temp	No data available.
Viscosity	No data available.
Molecular Formula	C10H8O
Molecular Weight	144.17
VOC Content(%)	No data available.
Oxidizing properties	None

9.2 Other safety information

No information available.

SECTION 10: Stability and reactivity

10.1 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.

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

Exothermic reaction with:
Strong oxidizing agents
Violent reactions possible with:
strong alkalis
Acid chlorides
Acid anhydrides

10.4 Conditions to avoid

Strong heating.

10.5 Incompatible materials

No data available.

10.6 Hazardous decomposition products

In the event of fire: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
1-Napthol	Mouse - male and female - 1.000 - 2.000 mg/kg	Rabbit - male - >= 880 mg/kg	No information available.

Skin corrosion/irritation
Causes skin irritation.

Serious eye damage/eye irritation
Eyes - Chicken eye
Result: Causes serious eye damage. - 10 s

Respiratory or skin sensitization
Local lymph node assay (LLNA) - Mouse
Result: positive

Germ cell mutagenicity
Test Type: In vitro mammalian cell gene mutation test
Test system: mouse lymphoma cells
Metabolic activation: without metabolic activation
Method: OECD Test Guideline 476
Result: positive
Test Type: Ames test
Test system: Escherichia coli/Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative
Test Type: Chromosome aberration test in vitro
Test system: Chinese hamster ovary cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473
Result: positive

Test Type: unscheduled DNA synthesis assay
Species: Rat
Cell type: Liver cells
Application Route: Oral
Method: OECD Test Guideline 486
Result: negative

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

Carcinogenicity
No data available.

Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure
No data available.

Reproductive toxicity
No data available.

Chronic effects
No data available.

11.2 Additional Information
No data available.

SECTION 12: Ecological information

12.1 Toxicity
Toxicity to fish
LC50 - Lepomis macrochirus (Bluegill) - 0,76 mg/l - 96 h
Remarks: (ECOTOX Database)
Toxicity to daphnia and other aquatic invertebrates
static test EC50 - Daphnia magna (Water flea) - 2,51 mg/l - 48 h
(OECD Test Guideline 202)
Toxicity to algae
static test ErC50 - Pseudokirchneriella subcapitata - > 2,18 mg/l - 72 h
(OECD Test Guideline 201)
Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity)
NOEC - Daphnia magna (Water flea) - 0,25 mg/l
(OECD Test Guideline 211)

12.2 Persistence and degradability
Readily biodegradable.

12.3 Bio accumulative potential
No data available.

12.4 Mobility in soil
No data available.

12.5 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.

12.6 Endocrine disrupting properties
None.

12.7 Other adverse effects
No data available.

SECTION 13: Disposal considerations

13.1 Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14: Transport information

DOT (US)

UN Number	2811
Proper Shipping name	TOXIC SOLID, ORGANIC, N.O.S. (1-Naphthyl alcohol)
Hazard Class	6.1
Packaging Group	III
Technical name	1-Napthol

IMDG

UN Number	2811
Proper Shipping name	TOXIC SOLID, ORGANIC, N.O.S. (1-Naphthyl alcohol)
Hazard Class	6.1
Packaging Group	III
Technical name	1-Napthol

IATA

UN Number	2811
Proper Shipping name	Toxic solid, organic, n.o.s. (1-Naphthyl alcohol)
Hazard Class	6.1
Packaging Group	III
Technical name	1-Napthol

SECTION 15: Regulatory information

US federal regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not applicable.

CERCLA Hazardous Substance List (40 CFR 302.4)
Not applicable.

SARA 304 Emergency release notification
Not applicable.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not applicable.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not applicable.

SARA 311/312 Hazardous

Not applicable.

SARA 313 (TRI reporting)

Not applicable.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not applicable.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not applicable.

Safe Drinking Water Act

Not applicable.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Not applicable.

US state regulations

US. Massachusetts RTK - Substance List

Not listed.

US. New Jersey Worker and Community Right-to-Know Act

Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law

Not listed.

California Proposition 65

Not listed.

SECTION 16: Other information

Date of Issue: 5/30/2025

SECTION 17: Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.