1-NAPHTHOL

SECTION 1: PRODUCT IDENTIFICATION

Product Name: 1-NAPHTHOL
Product Code: 893
CAS#: 90-15-3
Chemical Formula: $C_{10}H_8O$
Molecular Formula: 144.17g/mol
Formula Weight: NA

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Substances Synonyms: 1-Hydroxynapthalene, α-Naphthol
Formula: $C_{10}H_8O$
Molecular Weight: 144.17g/mol
CAS-No.: 90-15-3

SECTION 3: HAZARDS IDENTIFICATION

Classification of the substance or mixture

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 (Category 2), Kidney	H371: May cause damage to organs if swallowed.
Specific target organ toxicity - (Category 3),	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.

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 4: FIRST AID MEASURES

Description of first aid measures
General advice Consult a physician. Show this safety data sheet to the doctor in attendance.
Eye Contact: Flush eyes with water as a precaution.
Skin Contact: Wash off with soap and plenty of water. Consult a physician.
Serious Skin Contact: Not available
Serious Inhalation: Move person into fresh air. If not breathing, give artificial respiration. Consult a physician
If swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
Serious Ingestion: Not available
Most important symptoms and effects, both acute and delay no data available
Indication of any immediate medical attention and special treatment needed no data available

SECTION 5: FIRE AND EXPLOSION DATA

Extinguishing media
Suitable extinguishing media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special hazards arising from the substance or mixture no data available
Advice for firefighters Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Avoid dust formation. Avoid breathing vapor's, mist or gas. Ensure adequate ventilation. Avoid breathing dust.
Environmental precautions Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
Methods and materials for containment and cleaning up Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.
Conditions for safe storage, including any incompatibilities Store in cool place. Keep container tightly closed in a dry and well-ventilated place.
Specific end use(s) A part from the uses no other specific uses are stipulated.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure controls
Personal protective equipment
Appropriate engineering controls Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
Eye/face protection Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Skin protection Handle with gloves. Gloves must be inspected prior to use. 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.
Body Protection Complete suit protecting against chemicals, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical state and appearance Form	: Off-white flakes having phenolic odor.
Odour	: Not available
Taste	: Not available
Molecular Weight	: Not available
Colour	: Not available
pH	: Not available
Boiling Point	: Not available
Melting Point	: Not available
Critical Temperature	: Not available
Specific Density	: Not Available
Vapor Pressure	: Not Available
Vapor Density	: Not available
Volatility	: Not Available

Odor Threshold	**:** Not Available
Water/Oil Dist. Coeff.	**:** Not Available
Ionicity (in Water)	**:** Not Available
Dispersion Properties	**:** Not Available
Solubility	**:** Not available

SECTION 10: STABILITY AND REACTIVITY DATA

Reactivity Forms explosive mixtures with air on intense heating
Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions Exothermic reaction with: Strong oxidizing agents
Violent reactions possible with: strong alkalis, Acid chlorides and Acid anhydrides
Conditions to avoid Strong heating.
Incompatible materials no data available
Hazardous decomposition products no data available
Other decomposition products no data available

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects
Acute toxicity:
LD50 Oral - Mouse - male and female - 1.000 - 2.000 mg/kg
Remarks: (ECHA)
Acute toxicity estimate Oral - 1.000 mg/kg (Calculation method)
Inhalation: No data available
LD50 Dermal - Rabbit - male - >= 880 mg/kg
Remarks: (ECHA)
Acute toxicity estimate Dermal - 880 mg/kg (Calculation method)
Skin corrosion/irritation:
Remarks: Causes skin irritation.
Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)
Serious eye damage/eye irritation:
Eyes - Chicken eye
Result: Causes serious eye damage. - 10 s (OECD Test Guideline 438)
Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)
Respiratory or skin sensitization:
Local lymph node assay (LLNA) - Mouse
Result: positive (OECD Test Guideline 429)
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
Reproductive toxicity: No data available
Specific target organ toxicity: Inhalation - May cause respiratory irritation.
Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2) Oral - May cause damage to organs. - Kidney
Specific target organ toxicity - repeated exposure: No data available
Aspiration hazard: No data available

SECTION 12: ECOLOGICAL INFORMATION

Toxicity no data available
Persistence and degradability Biodegradability aerobic - Exposure time 29 d
Result: 77,8 % - Readily biodegradable.
Theoretical oxygen demand 2,55 mg/l ,Remarks: (Lit.)
Ratio BOD/ThBOD 60 %, Remarks: (Lit.)
Bio-accumulative potential no data available
Mobility in soil no data available
Results of PBT and vPvB assessment PBT/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.
Other adverse effects no data available

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal: Waste must be disposed of in accordance with federal, state and local environmental controlregulations.

SECTION 14: TRANSPORT INFORMATION

UN number:
ADR/RID: 2811 **IMDG:** 2811 **IATA:** 2811

UN proper shipping name
ADR/RID: TOXIC SOLID, ORGANIC, N.O.S. (1-NAPHTHOL)
IMDG: TOXIC SOLID, ORGANIC, N.O.S. (1-NAPHTHOL)
IATA: toxic solid, organic, n.o.s. (1-NAPHTHOL)

Transport hazard class(es):
ADR/RID: 6.1 **IMDG:** 6.1 **IATA:** 6.1

Packaging group:
ADR/RID: III **IMDG:** III **IATA:** III

Environmental hazards:
ADR/RID: no **IMDG Marine pollutant:** no **IATA:** No

SECTION 15: OTHER REGULATORY INFORMATION

Regulatory information: This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.
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.
Chemical Safety Assessment: For this product a chemical safety assessment was not carried out

SECTION 16: OTHER INFORMATION

References: Full text of H AND R-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 if swallowed.
H400 Very toxic to aquatic life.
H412 Harmful to aquatic life with long lasting effects.
LD50 Dermal - Rabbit - male - >= 880 mg/kg
LD50 Oral - Mouse - male and female - 1.000 - 2.000 mg/kg

Other Special Considerations: Not available.

The information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. The information is offered solely for user‘s obligation to investigate and determine the suitability of the information for their particular purpose.