
N-DODECYL MERCAPTAN

IUPAC NAME: dodecane-1-thiol

CHEMICAL FORMULA: C₁₂H₂₆S

CAS NO: 112-55-0



MOLECULAR WEIGHT: 202.44 g/mol

PACKING: Barrel, 170 KG

PRODUCT DESCRIPTION:

n-Dodecyl mercaptan, also known as lauryl mercaptan or dodecane thiol, is an organic compound with the chemical formula C₁₂H₂₆S. It is a colourless liquid with a strong, characteristic odor. It is used as a raw material for the production of fragrances, as well as in the manufacture of other chemicals such as insecticides, fungicides, and plasticizers. It is also used as a reagent in organic synthesis.

PROPERTIES:

Some features and benefits of n-dodecyl mercaptan include:

- **Strong odor:** The strong, characteristic odor of n-dodecyl mercaptan makes it an effective warning agent for detecting gas leaks in natural gas pipelines.
- **Versatility:** It can be used as a raw material for the production of fragrances, as well as in the manufacture of other chemicals such as insecticides, fungicides, and plasticizers. It is also used as a reagent in organic synthesis.
- **Solubility:** It is easily soluble in most organic solvents, which makes it a useful intermediate in the production of other chemicals.
- **Low toxicity:** It has relatively low toxicity and is considered to be relatively safe to handle when proper precautions are taken.
- **Corrosion inhibitor:** It can be used as corrosion inhibitor in some application.
- **Lubricant additive:** It can also be used as lubricant additive in some applications.

Overall, n-dodecyl mercaptan is a versatile chemical with a range of uses in the production of fragrances, insecticides, fungicides, plasticizers, and other chemicals, as well as in organic synthesis and as a warning agent for gas leaks.

APPLICATION AREAS:

n-Dodecyl mercaptan is primarily used as a raw material for the production of fragrances and as an intermediate in the manufacture of other chemicals such as insecticides, fungicides, and plasticizers. It is also used as a reagent in organic synthesis.

It's also used as an odorant to detect gas leaks in natural gas pipelines, as the low odor threshold of n-dodecyl mercaptan makes it an effective warning agent.

It is also used as intermediate in the manufacturing of other chemicals, as a corrosion inhibitor, and as a lubricant additive.

IT IS APPLIED IN THE PRODUCTION OF:



- Polymerization
- Polymer Modification
- Rubber Industry
- Adhesives and Sealants
- Plastic Industry
- Emulsion Polymerization
- Lubricant Additives
- Surfactant Synthesis


CHEMICAL PROPERTIES

PURITY	≥ 98.0
ACID CONTENT	
MOISTURE AMOUNT	
COLOUR (APHA)	
INHIBITOR	

PHYSICAL PROPERTIES

APPEARANCE	Colourless
PHYSICAL STATE	Liquid
ODOR	Characteristic
DENSITY	0.844 g/cm ³ at 20 °C
BOILING POINT	275 °C
FREEZING POINT	-7 °C
FLASH POINT	closed cup: 128 °C
VISCOSITY	3,24 mPa.s, at 20 °C
VAPOR PRESSURE	1,2 Pa, at 25 °C

SAFETY INFORMATION

HAZARD PICTOGRAM(S)	
HAZARD STATEMENT(S)	<p>H314: Skin corrosion</p> <p>H318: Serious eye damage</p> <p>H317: Skin sensitisation</p> <p>H400: Acute aquatic toxicity</p> <p>H410: Chronic aquatic toxicity</p>
PRECAUTIONARY STATEMENT(S)	<p>P260: Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.</p> <p>P273: Avoid release to the environment.</p> <p>P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.</p>
STORAGE CONDITIONS	<p>Keep containers tightly closed in a cool, well-ventilated place. Store away from heat and ignition sources. Provide an impermeable floor. Provide electrical earthing of equipment and electrical equipment usable in explosive atmospheres. Provide a catch-tank and anti-corrosion protected electrical equipment in a bunded area. Provide waterproof electrical equipment.</p>
DISPOSAL	<p>Destroy product by oxidation with dilute solutions of: Hydrogen peroxide or sodium hypochlorite or destroy the product by incineration (in accordance with local and national regulations).</p>
TRANSPORT INFORMATION	<p>UN number:</p> <ul style="list-style-type: none"> • ADR/RID: 1760 • IMDG: 1760 • IATA: 1760 <p>UN proper shipping name:</p> <ul style="list-style-type: none"> • ADR/RID: CORROSIVE LIQUID, N.O.S.(DODECANETHIOL) • IMDG: CORROSIVE LIQUID, N.O.S.(DODECANETHIOL) • IATA: CORROSIVE LIQUID, N.O.S.(DODECANETHIOL) <p>Transport hazard class(es):</p> <ul style="list-style-type: none"> • ADR/RID: 8 • IMDG: 8



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- IATA: 8

Packaging group:

- ADR/RID: III
- IMDG: III
- IATA: III

Environmental hazards:

- ADR/RID: yes
- IMDG Marine pollutant: yes
- IATA: yes

For more information, check the SAFETY DATA SHEET or get contact with us.