

Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH)
Classifications according to Regulation (EC) No 1272/2008.
Printdate 02 Jun 2023

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product name:

3-Pentanol

1.1. Catalog No.:

682505

1.2. Relevant identified uses of the substance or mixture

Identified: Laboratory chemical
uses: R&D

1.3. Uses advised against:

HPC Standards GmbH
Am Wieseneck 7

04451 Cunnersdorf
Deutschland

Tel. +49 34291 3372-36
Fax. +49 34291 3372-39
contact@hpc-standards.com

1.4. Emergency telephone number

HPC Standards Tel. +49 34291 3372-36
This number is only available during office hours.

2. HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008
- GHS02 flame
- Flam. Liq. 3 H226 Flammable liquid and vapour.
- GHS07
- Acute Tox. 4 H332 Harmful if inhaled.
- Skin Irrit. 2 H315 Causes skin irritation.
- STOT SE 3 H335 May cause respiratory irritation

2.2. Label elements

2.2.1. Pictogram



2.2.2.

- 2.2 Label elements

- Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

- Hazard pictograms

GHS02 GHS07

- Signal word Warning

- Hazard statements

H226 Flammable liquid and vapour.

H332 Harmful if inhaled.

H315 Causes skin irritation.

H335 May cause respiratory irritation.

- Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- 2.3 Other hazards

- Results of PBT and vPvB assessment

- PBT: Not applicable.

- vPvB: Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

- 3.1 Chemical characterisation: Substances

- CAS No. Description

584-02-1 3-pentanol

- Identification number(s) None

- EC number: 209-526-7

- Index number: 603-200-00-1

- RTECS: SA 5075000

- Additional information: For the wording of the listed hazard phrases refer to section 16.

3.1.1. Formula

C₅H₁₂O

3.1.2. Molecular Weight (g/mol)

88.15

3.1.3. CAS-No.

584-02-1

4. FIRST AID MEASURES

- 4.1 Description of first aid measures
- General information:
Immediately remove any clothing soiled by the product.
Symptoms of poisoning may occur even after several hours; therefore medical observation for at least 48 hours after the accident is recommended.
- After inhalation:
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
In case of unconsciousness place patient in recovery position for transport.
Seek medical treatment.
- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: Rinse mouth. Do not induce vomiting.
- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed
No further relevant information available.

5. FIRE-FIGHTING MEASURES

- 5.1 Extinguishing media
- Suitable extinguishing agents:
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- 5.2 Special hazards arising from the substance or mixture
Formation of toxic gases is possible during heating or in case of fire.
- 5.3 Advice for firefighters
- Protective equipment:
Mouth respiratory protective device.
Wear self-contained respiratory protective device.

6. ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions, protective equipment and emergency procedures
Wear protective equipment. Keep unprotected persons away.
- 6.2 Environmental precautions:
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
- 6.3 Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose of contaminated material as waste according to item 13.
Ensure adequate ventilation.
- 6.4 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

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- Additional information about design of technical facilities: No further data; see item 7.
- 8.1 Control parameters
- Ingredients with limit values that require monitoring at the workplace: Not required.
- Additional information: Lists used were valid at the time of SDS preparation.
- 8.2 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.
- Respiratory protection:
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- Protection of hands:
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374
Protective gloves
- Material of gloves
Nitrile rubber, NBR
Butyl rubber, BR
Fluorocarbon rubber (Viton)
- Penetration time of glove material
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- Eye protection:
Tightly sealed goggles

9. PHYSICAL AND CHEMICAL PROPERTIES

- 9.1 Information on basic physical and chemical properties
- General Information
- Appearance:
Form: Liquid
Colour: Colourless
- Odour: Characteristic
- Odour threshold: Not determined.
- pH-value: Not determined.
- Change in condition
- Melting point/Melting range: -8 °C
- Boiling point/Boiling range: 115.6 °C
- Flash point: 30 °C
- Flammability (solid, gaseous): Not determined.
- Ignition temperature: 360 °C
- Decomposition temperature: Not determined.
- Self-igniting: Not determined.
- Danger of explosion: Product is not explosive. However, formation of explosive air/vapour mixtures is possible
- Explosion limits:
Lower: 1.2 Vol %
Upper: 10.5 Vol %
- Vapour pressure at 20 °C: 7.6 hPa
- Density at 20 °C: 0.82 g/cm³

- Relative density Not determined.
- Vapour density Not determined.
- Evaporation rate Not determined.
- Solubility in / Miscibility with water at 30 °C: 55 g/l
- Partition coefficient (n-octanol/water): 1.21 Log P
- Viscosity:
Dynamic: Not determined.
Kinematic: Not determined.
- 9.2 Other information No further relevant information available.

10. STABILITY AND REACTIVITY

- 10.1 Reactivity Stable under normal conditions.
- 10.2 Chemical stability Stable under normal conditions.
- Thermal decomposition / conditions to be avoided:
Formation of toxic gases is possible during heating or in case of fire.
- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- 10.4 Conditions to avoid
Sources of ignition
Heat.
- 10.5 Incompatible materials: Strong oxidizing agents.
- 10.6 Hazardous decomposition products:
Formation of toxic gases is possible during heating or in case of fire.

11. TOXICOLOGICAL INFORMATION

- 11.1 Information on toxicological effects
- Acute toxicity
Harmful if inhaled.
- LD/LC50 values relevant for classification:
Oral LD50 1870 mg/kg (rat)
Dermal LD50 2050 mg/kg (rabbit)
- Primary irritant effect:
Skin corrosion/irritation
Causes skin irritation.
- Serious eye damage/irritation Based on available data, the classification criteria are not met.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
- Germ cell mutagenicity Based on available data, the classification criteria are not met.
- Carcinogenicity Based on available data, the classification criteria are not met.
- Reproductive toxicity Based on available data, the classification criteria are not met.
- STOT-single exposure
May cause respiratory irritation
- STOT-repeated exposure Based on available data, the classification criteria are not met.
- Aspiration hazard Based on available data, the classification criteria are not met.

12. ECOLOGICAL INFORMATION

- 12.1 Toxicity

- Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- Additional ecological information:
- General notes:
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product to reach ground water, water course or sewage system.
- 12.5 Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.
- 12.6 Other adverse effects No further relevant information available.

13. DISPOSAL CONSIDERATIONS

- 13.1 Waste treatment methods
- Recommendation
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- European waste catalogue
Waste disposal key numbers from EWC have to be assigned depending on origin and processing.
- Uncleaned packaging:
- Recommendation: Dispose of in accordance with national regulations.
- Recommended cleansing agents: Water, if necessary together with cleansing agents.

14. TRANSPORT INFORMATION

- 14.1 UN-Number
- ADR, IMDG, IATA UN1105
- ADR 1105 PENTANOLS
- IMDG, IATA PENTANOLS
- 14.3 Transport hazard class(es)
- ADR, IMDG, IATA
- Class 3 Flammable liquids.
- Label 3
- 14.4 Packing group
- ADR, IMDG, IATA III
- 14.5 Environmental hazards:
- Marine pollutant: No
- 14.6 Special precautions for user Warning: Flammable liquids.
- Danger code (Kemler): 30
- EMS Number: F-E,S-D
- Stowage Category A
- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable.
- Transport/Additional information:
- ADR
- Limited quantities (LQ) 5L
- Transport category 3
- Tunnel restriction code D/E
- UN "Model Regulation": UN1105, PENTANOLS, 3, III

15. REGULATORY INFORMATION

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Philippines Inventory of Chemicals and Chemical Substances Substance is listed.
- Australian Inventory of Chemical Substances Substance is listed.
- Standard for the Uniform Scheduling of Medicines and Poisons Substance is not listed.
- Directive 2012/18/EU
- Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3, 40
- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16. OTHER INFORMATION

The above information 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. It does not represent any guarantee of the properties of the product. For lab use only!