

Chemical Safety Data Sheet

Section 1 IDENTIFICATION

GHS Product identifier: 1-Pentanol.

Other means of identification: /

Recommended use of the chemical and restrictions on use: /.

Supplier's details: Dakings Chemical (shandong)Co.,Ltd.

Emergency phone number: +8617685872921

Section 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture:

Flammable liquids Category 3

Skin Corrosion/irritation Category 2

Acute toxicity, inhalation Category 4

Specific target organ toxicity (single exposure) Category 3 (respiratory tract irritation)

GHS Label elements, including precautionary statements:



Signal word: Warning

Hazard statement(s): Flammable liquid and vapor. Harmful if inhaled. Causes skin irritation. May cause respiratory irritation.

Precautionary statement(s):

Prevention:

Keep away from heat/sparks/open flames/hot surfaces. No smoking. Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust/fume/gas/mist/ vapors/spray. Use only outdoors or in a well-ventilated area. Wash ... thoroughly after handling.

Response:

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing and wash it before reuse. Rinse skin with water/shower. Specific treatment (see next). If skin irritation occurs: Get medical advice/attention. In case of fire: Use foam, dry chemical powder, carbon dioxide, water spray to extinguish.

Storage:

Store in well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

Disposal:

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

Other hazards which do not result in classification: /

Section 3 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Concentration%
1-Pentanol	71-41-0	99.85%

Section 4 FIRST AID MEASURES

Description of necessary first aid measures

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact: Wash off with soap and plenty of water. Consult a physician.

In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If Ingestion: Rinse mouth with water. Consult a physician.

Most important symptoms/effects, acute and delayed: /

Indication of immediate medical attention and special treatment needed, if necessary: /

Section 5 FIREFIGHTING MEASURES

Suitable extinguishing media: Use alcohol-resistant foam or chemical powder.

Special hazards arising from the chemical: Liquid and vapour are flammable. Moderate fire hazard when exposed to heat or flame. Vapour forms an explosive mixture with air.

Special protective actions for fire-fighters: Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water course. If safe, switch off electrical equipment until vapour fire hazard removed. Use water delivered as a fine spray to control fire and cool adjacent area. Avoid spraying water onto liquid pools. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire.

Section 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment.

Environmental precautions: No smoking, naked lights or ignition sources. Increase ventilation. Stop leak if safe to do so.

Methods and materials for containment and cleaning up: Minor Spills: Contain and absorb small quantities with vermiculite or other absorbent material. Wipe up. Collect residues in a flammable waste container. Major Spills: Water spray or fog may be used to disperse / absorb vapour. Contain spill with sand, earth or vermiculite. Use only spark-free shovels and explosion proof equipment. Collect recoverable product into labelled containers for recycling. Absorb remaining product with sand, earth or vermiculite. Collect solid residues and seal in labelled drums for disposal. Wash area and prevent runoff into drains.

Section 7 HANDLING AND STORAGE

Precautions for safe handling: Avoid all personal contact, including inhalation. Wear protective clothing when risk of overexposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps. DO NOT enter confined spaces until atmosphere has been checked. Avoid smoking, naked lights or ignition sources. Avoid generation of static electricity. DO NOT use plastic buckets. Earth all lines and equipment. Use spark-free tools when handling. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers.

Conditions for safe storage, including any incompatibilities: Store in original containers in approved flammable liquid storage area. Store away from incompatible materials in a cool, dry, well-ventilated area. DO NOT store in pits, depressions, basements or areas where vapours may be trapped. No smoking, naked lights, heat or ignition sources. Keep away from flammable materials and oxidizers. Keep adsorbents for leaks and spills readily available.

Section 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters:

Source	Material name	TWA
China Occupational Exposure Limits for Hazardous Agents in the Workplace	1-pentanol	100 (mg/m ³)

Appropriate engineering controls: Local exhaust ventilation or a process enclosure ventilation system may be required.

Individual protection measures

Eye/face protection: Safety glasses with side shields. Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants.

Skin protection: Wear chemical protective gloves, e.g. PVC. Wear safety footwear or safety gumboots, e.g. Rubber. PVC protective suit may be required if exposure severe.

Respiratory protection: Selection of the Class and Type of respirator will depend upon the level of breathing zone contaminant and the chemical nature of the contaminant.

Thermal hazards: /

Section 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, colour etc)	Colorless transparent liquid.
Odour	/
Odour Threshold	/
pH	/
Melting point/freezing point	-79℃。
Initial boiling point and boiling range	137℃。
Flash point	51.0℃。
Evaporation rate	0.54 BuAc=1
Flammability (solid, gas)	Flammable.
Upper/lower flammability or explosive limits	1.2%-10.0%。
Vapour pressure	/
Vapour density	3.04。
Relative density	0.815。
Solubility(ies)	Partly miscible
Partition coefficient: n-octanol/water	/
Auto-ignition temperature	/
Decomposition temperature	/
Viscosity	/

Section 10 STABILITY AND REACTIVITY

Reactivity: /

Chemical stability: This material is stable in normal temperature.

Possibility of hazardous reactions: Liquid and vapour are flammable. Moderate fire hazard when exposed to heat or flame.

Conditions to avoid: Spark, high temperature and static electricity. Flammable materials

Incompatible materials: incompatible with strong acids, acid chlorides, acid anhydrides, oxidising and reducing agents.

Hazardous decomposition products: carbon monoxide (CO) , carbon dioxide (CO₂) , other pyrolysis products typical of burning organic material.

Section 11 TOXICOLOGICAL INFORMATION

Information on the likely routes of exposure: Inhaled, swallowed, skin, eyes.

Symptoms related to the physical, chemical and toxicological characteristics: /

Acute health effects: Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be harmful. The material produces irritation of the respiratory system, in a substantial number of individuals, following inhalation. Accidental ingestion of the material may be damaging to the health of the individual. The material produces inflammation of the skin in a substantial number of individuals following direct contact. The material may cause eye irritation in a substantial number of individuals.

Chronic health effects: Long-term exposure to respiratory irritants may result in disease of the airways involving difficult breathing and related systemic problems.

Numerical measures of toxicity(such as acute toxicity estimates): /

Section 12 ECOLOGICAL INFORMATION

Toxicity: /
Persistence and degradability: low.
Bioaccumulative potential: low.
Mobility in soil: low.
Other adverse effects: /

Section 13 DISPOSAL CONSIDERATIONS

Disposal methods: Burial in a land-fill specifically licensed to accept chemical. Reuse of broken container is forbidden.

Section 14 TRANSPORT INFORMATION

UN number: 1105.
UN proper shipping name: PENTANOLS.
Transport hazard class(es) : 3.
Packing group, if applicable: III.
Environmental hazards: /
Special precautions for user: /

Section 15 REGULATORY INFORMATION

Regulations: This safety data sheet is in compliance with the following national standards: GB 16483-2008, GB 13690-2009, GB/T 15098-2008, GB 18218-2009, GB 15258-2009, GB 6944-2012, GB 190-2009, GB 191-2009, GB 12268-2008, GA 57-1993, GBZ 2-2007 as well as the following national regulations: Dangerous Goods Transport Administrative Regulation [Published by the Ministry of Railways, 2008], Dangerous Chemicals Safety Administrative Regulation [Published by the State Council, 2011].

Section 16 OTHER INFORMATION

References	UN Recommendations on the Transport of Dangerous Goods Model Regulations UN Globally Harmonized System of Classification and Labelling of Chemicals
Form Date	16-Dec.-2019

Note 1: When products contain two or more hazardous substances, Safety Data Sheets should be prepared based on the risk of the mixture.

Note 2: Manufacturer / supplier should ensure the correctness of the information contained in the safety data sheets, and updated in a timely manner.

Note 3: As a result of product features without the existence of certain information or no data available (such as boiling point does not exist for the solid) in the table with "/" logo.