

化学品安全数据单

一、标识

全球统一制度产品标识符：戊醇/1-Pentanol。

其它标识办法：/

化学品使用建议和使用限制：/

供货商的详细情况：德肯思化工（山东）有限公司

紧急电话号码：/17685872921

二、危险标识

物质或混合物的分类：

易燃液体类别 3。皮肤腐蚀/刺激类别 2。急毒性-吸入类别 4。特定目标器官毒性--单次接触类别 3（呼吸道刺激）。

全球统一制度标签要素，包括防范说明：



信号词：警告。

危险说明：易燃液体和蒸汽。吸入有害。造成皮肤刺激。可引起呼吸道刺激。

防范说明：

预防：

远离热源/火花/明火/热表面。禁止吸烟。保持容器密闭。容器和装载设备接地/等势联接。使用防爆的电气/通风/照明/……/设备。只能使用不产生火花的工具。采取防止静电放电的措施。戴防护手套/穿防护服/戴防护眼罩/戴防护面具。避免吸入粉尘/烟/气体/烟雾/蒸气/喷雾。只能在室外或通风良好之处使用。作业后彻底清洗……。

反应：

如误吸入：将受害人转移到空气新鲜处，保持呼吸舒适体位。如感觉不适，呼叫解毒中心或医生/……。如皮肤（或头发）沾染：立即脱掉所有沾染的衣服。清洗后方可重新使用。用水清洗皮肤/淋浴。具体治疗（见下文）。如发生皮肤刺激：求医/就诊。火灾时：使用泡沫，干粉，二氧化碳或雾状水灭火。

贮存：

存放在通风良好的地方。保持低温。保持容器密闭。存放处须加锁。

处置：

按照相关规定处置内装物和容器。

不导致分类的其他危险：/

三、组成/成分信息

| 化学名称 | 化学文摘社编号 (CAS No.) | 成分（由送检 企业提供） |
|------|----------------------|-----------------|
| 正戊醇 | 71-41-0 | 99.85% |

四、急救措施

不同暴露途径的急救方法

吸入：迅速脱离现场至空气新鲜处。保持呼吸道通畅。如呼吸困难，给输氧。如呼吸停止，立即进行人工呼吸。就医。

皮肤接触：脱去污染的衣着，用大量流动清水冲洗。

眼睛接触：立即提起眼睑，用大量流动清水或生理盐水彻底冲洗至少 15 分钟。就医。

摄入：漱口，就医。

最重要的急性和延迟症状/效应： /

必要时注明立即就医及所需的特殊治疗： /

五、消防措施

适当的灭火剂：可用泡沫，干粉，二氧化碳或雾状水等灭火。

化学品产生的具体危险：液体和蒸气易燃。受热或接触明火，有中等程度的火灾危险。蒸气与空气能形成爆炸性混合物。

消防人员的特殊防护行动：佩戴呼吸设备及防护手套。采取一切可能的措施防止溢出物进入下水道或水道。如果可以保证安全，关掉电器，直至气体火灾危害被清除。用喷水雾的方法来控制火势，并冷却邻近区域。避免直接喷水到液池中。不要靠近可能灼热的容器。从有防护的位置喷水以便冷却暴露于火灾中的容器。如果这么做安全的话，将容器从火场中移走。

六、意外释放措施

人身防范、保护设备和应急程序：避免吸入蒸气，避免接触皮肤和眼睛。使用防护装备控制人员接触。

环境防范措施：禁止吸烟、明火或点火源。加强通风。在安全的前提下，阻止泄漏。

抑制和清洁的方法和材料：小量泄漏：用蛭石或其它吸附性物质来收集并吸附少量泄漏物。擦除。收集残留物置于易燃废弃物容器。大量泄漏：可以用喷水或水雾的方法来驱散/吸收蒸气。用沙子、土或蛭石来吸收泄漏物。只能使用不产生火花的铲子和防爆设备。收集可回收的产品于贴有标签的容器中，以便回收利用。用沙子、土或蛭石来吸收残留的产品。收集固体残留物，密封于贴有标签的桶中，以便废弃处置。冲洗泄漏区域，并防止进入下水体。

七、搬运与储存

安全搬运的防范措施：避免个体接触，包括吸入。当有接触危险时，穿戴防护服。在通风良好的区域使用。防止本品在低洼处汇集。未作空气检测，禁止进入封闭空间内。禁止吸烟、明火或点火源。防止产生静电。禁止用塑料桶。所有线路和设备都应接地。操作处置时，使用不产生火花的工具。避免接触不相容物料。操作处置时，禁止进食、饮水或吸烟。不使用时，容器应保持安全密封。防止容器受到物理损伤。

安全存储的条件，包括任何不相容性：采用原装容器存放在经批准的防爆区域。远离不相容材料，存储于阴凉、干燥、通风良好的地方。禁止存放在凹坑、洼地、地下室或者气体能够汇聚的场所。禁止吸烟、明火、受热或接触点火源。应与易（可）燃物、氧化剂等分开存放，切忌混储。储区应备有用于处理泄漏的吸附剂。

八、接触控制/人身保护**控制参数：**

| 来源 | 物质名称 | TWA |
|-------------------|------|--------------------------|
| 中国 工作场所有害因素职业接触限值 | 正戊醇 | 100 (mg/m ³) |

适当的工程控制：严加密闭，提供充分的局部排风。

个人防护措施

防护眼罩/面具：带侧框保护的安全眼镜。化学护目镜。隐形眼镜可能会造成特殊危害；软性隐形眼镜可能会吸收和富集刺激物。

皮肤防护：戴化学防护手套(如聚氯乙烯手套)。穿安全鞋或安全靴(如橡胶材料)。如果暴露严重，可能需要聚氯乙烯防护服。

呼吸系统防护：呼吸器种类和型号的选择取决于呼吸区域污染物的等级以及污染物的化学性质。

高温危险： /

九、物理及化学性质

| | |
|--------------|-------------|
| 外观（物理状态、颜色等） | 无色透明液体。 |
| 气味 | / |
| 气味阈值 | / |
| pH 值 | / |
| 熔点/凝固点 | -79℃。 |
| 初始沸点和沸腾范围 | 137℃。 |
| 闪点 | 51.0℃。 |
| 蒸发速率 | 0.54 BuAc=1 |
| 易燃性（固态、气态） | 易燃。 |
| 上下易燃极限或爆炸极限 | 1.2%-10.0%。 |
| 蒸气压力 | / |
| 蒸气密度 | 3.04。 |
| 相对密度 | 0.815。 |
| 可溶性 | 部分溶解。 |
| 分配系数：正辛醇/水 | / |
| 自动点火温度 | / |
| 分解温度 | / |
| 粘度 | / |

十、稳定及反应性

反应性： /

化学稳定性：在常温下稳定。

危险反应的可能性：液体和蒸气易燃。受热或接触明火，有中等程度的火灾危险。

应避免的条件：火星、高温、静电。易燃或可燃物。

不相容材料：与强酸、酰基氯、酸酐、氧化剂和还原剂不相容

危险分解产物：一氧化碳(CO)，二氧化碳 (CO₂)，有机物燃烧产生的其他典型热解产物。

十一、毒理学信息

暴露途径：吸入，食入，经皮吸收，眼睛接触。

有关物理、化学和毒理学特点的症状： /

急性毒性效应：吸入本物质的蒸气或气溶胶(烟雾、气雾)可能有害。本物质能够对某些人造成呼吸道刺激。意外食入该物质可对个体健康造成伤害。皮肤直接接触本物质可能引起皮炎。

本物质可能会对一些人的眼睛产生刺激。

慢性毒性或长期毒性效应：长期接触呼吸道刺激物可能导致气管疾病，包括呼吸困难和相关全身性疾病。

毒性的数值度量（如急性毒性估计值）：

/

十二、生态信息

毒性： /

持久性和降解性：低。

生物累积潜力：低。

在土壤中的流动性：低。

其它有害效应： /

十三、处置考虑

处置方法：用安全掩埋法处置。破损容器禁止重新使用，要在规定场所掩埋。

十四、运输信息

联合国编号：1105。

联合国正式运输名称：戊醇。

运输危险分类：3。

包装类别（如果适用）：III。

环境危险： /

用户的特殊防范措施： /

十五、管理信息

国内化学品安全法规：本化学品安全数据单遵照了以下相关国家标准：GB 16483-2008、GB 13690-2009、GB 6944-2012、GB/T 15098-2008、GB 18218-2009、GB 15258-2009、GB 190-2009、GB 191-2009、GB 12268-2008、GA 57-1993、GBZ 2-2007 以及相关法规：《铁路危险货物运输管理规则》、《危险化学品安全管理条例》。

十六、其它信息

| | |
|-------------|---|
| 参考文献 | 联合国《关于危险货物运输的建议书·规章范本》 联合国《全球化学品统一分类和标签制度》 |
|-------------|---|

| | |
|-------------|------------|
| 制表日期 | 2019-12-16 |
|-------------|------------|

注 1：当产品为含有两种以上危险物质的混合物时，应依据其混合后的危险性，制作安全数据单。

注 2：制造商/供应商应根据实际情况确保安全数据单所含信息的正确性，并适时更新。

注 3：如由于产品特性而不存在或不可得某些信息时（如固体不存在沸点），应在表格中以“/”标识。

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.