

编 码:

产品名称: 固体氢氧化钠



危险

儿童不得接触

使用前请读标签

吞咽有害。皮肤接触有害。造成严重皮肤灼伤和眼损伤。对水生生物有害。

预防:

不要吸入粉尘/烟/气体/烟雾/蒸气/喷雾。作业后彻底清洗…… 使用本产品时不要进食、饮水或吸烟。避免释放到环境中。戴防护手套/穿防护服/戴防护眼罩/戴防护面具。

反应:

如误吞咽: 漱口。不得诱导呕吐。如皮肤(或头发)沾染: 具体治疗(见安全数据单)。立即脱掉所有沾染的衣服。用水清洗皮肤/淋浴。沾染的衣服清洗后方可重新使用。如误吸入: 将受害人转移到空气新鲜处, 保持呼吸舒适体位。立即呼叫解毒中心或医生/……。具体治疗(见安全数据单)。如进入眼睛: 用水小心冲洗几分钟。如戴隐形眼镜并可方便地取出, 取出隐形眼镜。继续冲洗。立即呼叫解毒中心或医生/……。

储存

存放处须加锁。

处置:

处置内装物/容器……。

CODE:

PRODUCT NAME: Sodium hydroxide



Danger

Keep out of the reach of children.

Read label before use.

Harmful if swallowed. Harmful in contact with skin. Causes severe skin burns and eye damage.

Harmful to aquatic life.

Prevention:

Do not breathe dust/fume/gas/mist/ vapors / spray. Wash ... thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

Response:

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Specific treatment (see Safety Data Sheet). Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. Specific treatment (see Safety Data Sheet). IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

Storage

Store locked up.

Disposal:

Dispose of contents/container to...

化学品安全数据单

一、标识

全球统一制度产品标识符：固体氢氧化钠/ Sodium hydroxide。

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： /

紧急电话号码： /

二、危险标识

物质或混合物的分类：

急性毒性-口服类别 4，急性毒性-皮肤类别 4，皮肤腐蚀/刺激类别 1B，眼损伤/眼刺激类别 1，危害水生环境-急性危险类别 3。

全球统一制度标签要素，包括防范说明：



信号词：危险。

危险说明：吞咽有害。皮肤接触有害。造成严重皮肤灼伤和眼损伤。对水生生物有害。

防范说明：

预防：不要吸入粉尘/烟/气体/烟雾/蒸气/喷雾。作业后彻底清洗…… 使用本产品时不要进食、饮水或吸烟。避免释放到环境中。戴防护手套/穿防护服/戴防护眼罩/戴防护面具。

反应：如误吞咽：漱口。不得诱导呕吐。如皮肤（或头发）沾染：具体治疗（见下文）。立即脱掉所有沾染的衣服。用水清洗皮肤/淋浴。沾染的衣服清洗后方可重新使用。如误吸入：将受害人转移到空气新鲜处，保持呼吸舒适体位。立即呼叫解毒中心或医生/……。具体治疗（见下文）。如进入眼睛：用水小心冲洗几分钟。如戴隐形眼镜并可方便地取出，取出隐形眼镜。继续冲洗。立即呼叫解毒中心或医生/……。

储存：存放处须加锁。

处置：处置内装物/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)
氢氧化钠	1310-73-2	98.70%

四、急救措施

不同暴露途径的急救方法

吸入：如果吸入,请将患者移到新鲜空气处。如果停止了呼吸,给予人工呼吸。求医。

皮肤接触：用肥皂和大量的水冲洗。求医。

眼睛接触：用大量水彻底冲洗至少 15 分钟。就医。

摄入：禁止催吐。切勿给失去知觉者从嘴里喂食任何东西。用水漱口。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：对于急性或短时间反复接触强碱性物质：呼吸窘

迫一般少见，但有时会因软组织水肿而出现。如果不能在直视下进行气管插管，则可能需要作环甲膜切开术或气管切开术。食入：最佳稀释剂为水和牛奶。绝对不能导泄和催吐。活性炭不能吸收碱。不可进行洗胃。皮肤和眼睛接触：应冲洗损伤处 20—30 分钟。眼损伤需用生理盐水冲洗。

五、消防措施

适当的灭火剂：泡沫。化学干粉。BCF(当法规允许时)。二氧化碳。喷水或水雾—仅适用于大火。

化学品产生的具体危险：不燃。无重大火灾风险，但是，容器可能会燃烧。

消防人员的特殊防护行动：穿全身安全防护服并佩戴呼吸设备。用各种方法防止溢出物进入阴沟或水道。采用适合于周围环境的灭火程序。禁止靠近认为是热的容器。请从有防护的位置喷水以便冷却接触火场中的容器。在安全的条件下，把容器从火场中移走。

六、意外释放措施

人身防范、保护设备和应急程序：移除所有的点火源。立即清除所有溢出物。避免与皮肤和眼睛接触。采用防护设备来防止与身体直接接触。

环境防范措施：在确保安全的条件下，采取措施防止进一步的泄漏或溢出。不要让产物进入下水道。

抑制和清洁的方法和材料：收集可回收的产品于贴有标签的容器中，以便回收利用。中和/消除残留物。收集固体残留物，密封于贴有标签的桶中，以便废弃处理。冲洗污染区域，防止废液流入阴沟。完成清理工作后，对所有防护服和设备，在存放和再使用前，应进行去污和清洗。

七、搬运与储存

安全搬运的防范措施：避免所有的个体接触，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本物质。防止受潮。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：储存于原装容器中。保持容器密封。在凉爽、干燥、通风良好的场所储存。远离禁忌物质和食品容器储存。防止容器受到物理损伤，并定期检查泄漏情况。遵从制造商储存和处理方面的建议。

八、接触控制/人身保护

控制参数：

职业接触限值

来源	成分	物质名称	TWA	STEL	峰值
中国工作场所所有害因素职业接触限值	氢氧化钠	Sodium hydroxide	无	无	2 mg/m ³

紧急限制

成分	原 IDLH	修订 IDLH
氢氧化钠	250 mg/m ³	10 mg/m ³

适当的工程控制：般需要采取局部通风。如果有过度接触本物质的危险，佩戴认可的呼吸器。呼吸器的大小必须适中才能取得充足保护。在特殊情况下，可能需要使用供气式呼吸器。

个人防护措施

防护眼罩/面具：化学护目镜。全面部防护可以被用作眼部的辅助防护但不能做主要防护。

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)。处理腐蚀性液体时必须在靴子外穿防护服，以免泄漏物进入靴子内。

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）	白色片状固体
气味	/
气味阈值	/
pH 值	/
熔点/凝固点	318.4 ℃
初始沸点和沸腾范围	1390 ℃
闪点	/
蒸发速率	/
易燃性（固态、气态）	/
上下易燃极限或爆炸极限	/
蒸气压力	< 2 (20 ℃)
蒸气密度(空气=1)	2.3
相对密度(水= 1)	2.12 @ 20 ℃
可溶性	可溶
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： 与酸性物质接触会释放出热量。

危险反应的可能性： 避免接触强酸、酸性氯化物、酸酐以及氯甲酸酯类。避免接触铜、铝及其合金。

应避免的条件： 高温、明火、点火源等。

不相容材料： 酸类。

危险分解产物： 金属氧化物。

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： 吸入碱性腐蚀性物质能刺激呼吸道。症状包括咳嗽、堵塞呼吸道窒息、疼痛和粘膜损伤。严重时可形成肺水肿，有时可延迟数小时到数日发生。食入碱性腐蚀物可能导致口腔周围灼伤、粘膜溃疡和肿胀、唾液分泌过多以及说话和吞咽困难。皮肤直接接触本物质可造成严重的化学灼伤。如果进入眼睛，该物质会造成严重眼睛损伤。

慢性毒性或长期毒性效应： 反复或长期接触腐蚀性物质，可能导致牙齿腐蚀、口腔炎症和溃

疡以及颌骨坏死(少见)。可能引起伴有咳嗽的支气管刺激症状以及支气管肺炎频繁发作。还可能发生胃肠功能紊乱。长期接触可能引起皮炎和/或结膜炎。

毒性的数值度量 (如急性毒性估计值): Oral (rabbit) LD50: 325 mg/kg.

十二、生态信息

毒性: /

持久性和降解性: 水/土壤: 低; 空气: 低。

生物累积潜力: 低 (LogKOW = -3.8796)

在土壤中的流动性: 低 (KOC = 14.3)

其它有害效应: /

十三、处置考虑

处置方法: 尽可能回收本物质。如果不能确定有合适的处理或废弃处置设备, 联系制造商有关回收方法, 或联系当地或地区的废物管理部门有关废弃方法。在许可的处理厂治理、中和本物质。处理方法应该包括: 在水中混合或形成泥浆; 用合适的稀酸溶液进行中和; 随后在有许可证的填埋处进行掩埋或在有许可证的焚化场进行焚化(与适当的可燃物质混合后)。对空的容器进行去污处理。遵守所有的标注规定, 直至容器被清洗或销毁为止。

十四、运输信息

联合国编号: 1823。

联合国正式运输名称: 固态氢氧化钠。

运输危险分类: 8。

包装类别 (如果适用): II。

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	2015-06-02

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: Sodium hydroxide.

Other means of identification: /

Recommended use of the chemical and restrictions on use: /

Supplier's details: /

Emergency phone number: /

Section 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture:

Acute Toxicity (Oral) Category 4, Acute Toxicity (Dermal) Category 4, Skin Corrosion/Irritation Category 1B, Serious Eye Damage/Eye Irritation Category 1, Hazardous to the Aquatic Environment (Acute) Category 3.

GHS Label elements, including precautionary statements:



Signal word: Danger

Hazard statement(s): Harmful if swallowed. Harmful in contact with skin. Causes severe skin burns and eye damage. Harmful to aquatic life.

Precautionary statement(s):

Prevention: Do not breathe dust/fume/gas/mist/ vapors / spray. Wash ... thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

Response: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Specific treatment (see below). Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. Specific treatment (see below). IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

Storage: Store locked up.

Disposal: Dispose of contents/container to...

Other hazards which do not result in classification: /

Section 3 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Concentration%
Sodium hydroxide	1310-73-2	98.70%

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: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. 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: For acute or short-term repeated exposures to highly alkaline materials: Respiratory stress is uncommon but present occasionally because of soft tissue edema. Unless endotracheal intubation can be accomplished under direct vision, cricothyroidotomy or tracheotomy may be necessary. INGESTION: Milk and water are the preferred diluents. Catharsis and emesis are absolutely contra-indicated. Activated charcoal does not absorb alkali. Gastric lavage should not be used. SKIN AND EYE: Injury should be irrigated for 20-30 minutes. Eye injuries require saline.

Section 5 FIREFIGHTING MEASURES

Suitable extinguishing media: Foam. Dry chemical powder. BCF (where regulations permit). Carbon dioxide. Water spray or fog - Large fires only.

Special hazards arising from the chemical: Non combustible. Not considered a significant fire risk, however containers may burn.

Special protective actions for fire-fighters: Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water course. Use fire fighting procedures suitable for surrounding area. 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: Remove all ignition sources. Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up: Collect recoverable product into labelled containers for recycling. Collect solid residues and seal in labelled drums for disposal. Wash area and prevent runoff into drains. After clean up operations, decontaminate and launder all protective clothing and equipment before storing and re-using.

Section 7 HANDLING AND STORAGE

Precautions for safe handling: Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Avoid contact with moisture. 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. Keep containers securely sealed. Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storage and handling recommendations contained within this MSDS.

Section 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters:
OCCUPATIONAL EXPOSURE LIMITS (OEL)

Source	Ingredient	Material name	TWA	STEL	Peak
China Occupational Exposure Limits for Hazardous Agents in the Workplace	sodium hydroxide	Sodium hydroxide	Not Available	Not Available	2 mg/m ³
Ingredient	Original IDLH	Revised IDLH			
sodium hydroxide	250 mg/m ³	10 mg/m ³			

Appropriate engineering controls: Local exhaust ventilation usually required. If risk of overexposure exists, wear approved respirator. Correct fit is essential to obtain adequate protection. Supplied-air type respirator may be required in special circumstances.

Individual protection measures

Eye/face protection: Chemical goggles. Full face shield may be required for supplementary but never for primary protection of eyes.

Skin protection: Wear chemical protective gloves, e.g. PVC. Wear safety footwear or safety gumboots, e.g. Rubber. When handling corrosive liquids, wear trousers or overalls outside of boots, to avoid spills entering boots.

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)	White flaky solid
Odour	/
Odour Threshold	/
pH	/
Melting point/freezing point	318.4 °C
Initial boiling point and boiling range	1390 °C
Flash point	/
Evaporation rate	/
Flammability (solid, gas)	/
Upper/lower flammability or explosive limits	/
Vapour pressure	< 2 (20 °C)
Vapour density (air=1)	2.3
Relative density (water=1)	2.12 @ 20 °C
Solubility(ies)	Miscible

Partition coefficient: n-octanol/water	/
Auto-ignition temperature	/
Decomposition temperature	/
Viscosity	/

Section 10 STABILITY AND REACTIVITY

Reactivity: /

Chemical stability: Contact with acidic material liberates heat.

Possibility of hazardous reactions: Inhalation of alkaline corrosives may produce irritation of the respiratory tract with coughing, choking, pain and mucous membrane damage. Pulmonary oedema may develop in more severe cases; this may be immediate or in most cases following a latent period of 5-72 hours.

Conditions to avoid: Heat, flames and sparks.

Incompatible materials: Acids.

Hazardous decomposition products: Metal oxides.

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: Acidic corrosives produce respiratory tract irritation with coughing, choking and mucous membrane damage. Symptoms of exposure may include dizziness, headache, nausea and weakness. The material can produce chemical burns within the oral cavity and gastrointestinal tract following ingestion. The material can produce chemical burns following direct contact with the skin. The material can produce chemical burns to the eye following direct contact. Vapours or mists may be extremely irritating. Ingestion of alkaline corrosives may produce immediate pain, and circumoral burns. Mucous membrane corrosive damage is characterised by a white appearance and soapy feel; this may then become brown, oedematous and ulcerated. Profuse salivation with an inability to swallow or speak may also result. The material can produce severe chemical burns following direct contact with the skin. The material produces severe ocular lesions after instillation.

Chronic health effects: Repeated or prolonged exposure to corrosives may result in the erosion of teeth, inflammatory and ulcerative changes in the mouth and necrosis (rarely) of the jaw. Bronchial irritation, with cough, and frequent attacks of bronchial pneumonia may ensue. Gastrointestinal disturbances may also occur. Chronic exposures may result in dermatitis and/or conjunctivitis.

Numerical measures of toxicity(such as acute toxicity estimates): Oral (rabbit) LD50: 325 mg/kg.

Section 12 ECOLOGICAL INFORMATION

Toxicity: /

Persistence and degradability: Water/Soil: LOW; Air: LOW.

Bioaccumulative potential: LOW (LogKOW = -3.8796)

Mobility in soil: LOW (KOC = 14.3)

Other adverse effects: /

Section 13 DISPOSAL CONSIDERATIONS

Disposal methods: Recycle wherever possible. Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified. Treat and neutralise at an approved treatment plant. Treatment should involve: Mixing or slurring in water; Neutralisation with suitable dilute acid followed by: burial in a land-fill specifically licenced to accept chemical and / or pharmaceutical wastes or Incineration in a licenced apparatus (after admixture with suitable combustible material). Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.

Section 14 TRANSPORT INFORMATION

UN number: 1823.
UN proper shipping name: SODIUM HYDROXIDE, SOLID.
Transport hazard class(es) : 8.
Packing group, if applicable: II.
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	02-June-2015

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.



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