

编 码:

产品名称: 硝酸钠



危险

儿童不得触及。
使用前请读标签。

可能加剧燃烧: 氧化剂。吞咽有害。

预防:

远离热源/火花/明火/热表面。禁止吸烟。避开/贮存处远离服装/……/ 可燃材料。采取一切防范措施, 避免与可燃物/……混合。戴防护手套/穿防护服/戴防护眼罩/戴防护面具。作业后彻底清洗…… 使用本产品时不要进食、饮水或吸烟。

反应:

火灾时: 使用……灭火。如误吞咽: 如感觉不适, 呼叫解毒中心或医生/……。漱口。

储存

处置:

处置内装物/容器……。

化学品安全数据单

一、标识

全球统一制度产品标识符：硝酸钠/ Sodium nitrate。

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：

氧化性固体类别 3，急毒性（口服）类别 4。

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：可能加剧燃烧；氧化剂。吞咽有害。

防范说明：

预防：远离热源/火花/明火/热表面。禁止吸烟。避开/贮存处远离服装/可燃材料。采取一切防范措施，避免与可燃物混合。作业后彻底清洗。使用本产品时不要进食、饮水或吸烟。戴防护手套/穿防护服/戴防护眼罩/戴防护面具。

应急：如误吞咽：如感觉不适，呼叫解毒中心或医生。漱口。火灾时：使用大量的水灭火。

贮存：/

处置：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	化学文摘社登记号码 (CAS No.)	含量%
硝酸钠	7631-99-4	99.2

四、急救措施

必要的急救措施

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。

食入：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：硝酸盐(酯)和亚硝酸盐(酯)的毒性来自于它们对血管的舒张作用和生成正铁血红蛋白的倾向。这类物质大多数在暴露后 30 分钟内作用最大。因为正铁血红蛋白引起深色沉着，所以发绀的体征可在其它症状之前出现。

必要时注明立即就医及所需的特殊治疗：一般可把病人处在头低卧位并进行静脉输液来控制低血压；如果无效，需要给多巴胺。如果怀疑多次食入，应给纳洛酮、葡萄糖和硫胺。食入 2-4 小时内，可对清醒病人进行吐根糖浆催吐；如果病人神志不清，可进行洗胃。

五、消防措施

适当的灭火介质：用大量的水灭火。禁止用化学干粉，CO₂(二氧化碳)或泡沫。

化学品产生的具体危险：不燃烧，但会增强火势。受热可引起膨胀或分解，导致容器急剧破裂。受热影响的容器仍持有危险性。与木材、纸张、油类或金属粉末等可燃物质接触，能引起自燃或剧烈分解。能放出刺激性的、有毒的或腐蚀性的气体。

消防人员的特殊防护行为：喷水雾以便控制火势并冷却相邻区域。避免直接喷水到液池中。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。如果火势失控，撤退人员并防止再次进入原地。

六、意外释放措施

人身防范、保护设备和应急程序：立即清理所有泄漏物。禁止吸烟、外露灯光、点火源。避免接触任何有机物，包括燃料、溶剂、锯屑、纸张、衣料或其它禁忌物质，这些物质都可以引起点燃。防止吸入粉尘或蒸气，避免本物质与皮肤和眼睛的任何接触。使用防护设备以控制人员接触。

环境防范措施：尽可能切断泄漏源，防止进入下水道、排洪沟等限制性空间。

抑制和清理的方法和材料：小量泄漏：用干砂、土、惰性物质或蛭石来收集并吸附泄漏物。严禁用锯屑做吸附材料，因为它可引起燃烧。铲起固体残留物，收集于密封的带有标签的桶中，以便废弃处理。对沾染区域进行中和/去污。大量泄漏：用沙子、土或其它洁净的惰性物质来吸收泄漏物。严禁使用有机吸收剂，如锯屑、纸张或布料等，因为可引起火灾。防止受到有机物的任何污染。采用不产生火花并防爆的设备。收集可回收的产品于贴有标签的容器中，以便回收利用。禁止将新鲜物料和回收物质混合。收集残留物，密封于贴有标签的桶中，以便废弃处理。冲洗沾染区域，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：防止个体接触，避免吸入粉尘、烟雾或蒸气。提供充足的通风。在任何情况下都应该佩戴防护设备，并且冲洗衣物上的任何泄漏物质。远离光照、受热、易燃物质或可燃物质。保持凉爽、干燥，远离禁忌物。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：在原来的容器中储存。保持容器与提供时状态一致，严实密封。储存在阴凉、通风良好的地方。保持干燥。在有覆盖的地方储存，远离阳光直射。远离易燃或可燃物质、碎屑和废弃物储存。与其接触可能引起火灾或剧烈反应。远离不相容物质和食品容器储存。禁止堆积在木地板或货盘上。防止容器发生物理性损坏。定期检查泄漏。遵守制造商推荐的储存和处置办法。

八、接触控制/人身保护

控制参数：

紧急限制

成分	TEEL-0	TEEL-1	TEEL-2	TEEL-3
sodium nitrate	0.4(ppm)	1(ppm)	7.5(ppm)	100(ppm)

适当的工程控制：一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。

个人保护措施

防护眼罩/面具：带侧边的安全护目镜。化学护目镜。

皮肤防护：戴化学防护手套(如聚氯乙烯 PVC)。穿安全鞋或安全靴(如橡胶材料)。手套类型的适用性和耐用性取决于使用方法。

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）	白色颗粒。
气味	/
气味阈值	/
pH 值（1% 溶液）	/
熔点/凝固点	308°C
初始沸点和沸腾范围	380°C
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	/
蒸气密度	/
相对密度（水=1）	2.26
可溶性	与水混溶
分配系数：n-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：在正常操作条件下，物质被认为是稳定的。

危险反应的可能性：不会发生危害性的聚合反应。

应避免的条件：高温。

不相容材料：还原剂、活性金属粉末。

危险分解产物：氮氧化合物(NO_x)，金属氧化物。

十一、毒理学信息

暴露途径：吸入、经口、皮肤、眼睛。

有关物理、化学和毒理学特点的症状： /

急性毒性效应：

吸入：本物质能够对一些人造成呼吸道刺激。

食入：意外摄入本物质可能有害。

皮肤：对于一些人，皮肤接触本物质可能会引发炎症。

眼睛：本物质能刺激并损害某些人的眼睛。

慢性毒性或长期毒性效应：长期接触呼吸道刺激物可能会导致气管疾病，包括呼吸困难和相关身体组织的疾病。

毒性的数值度量（如急性毒性估计值）： Oral (rat) LD50: 1267 mg/kg, Oral (child) LDLo: 22.5 mg/kg, Oral (woman) TDLo: 14 mg/kg。

十二、生态信息

毒性：/
持久性及降解性：/
生物累积潜力：/
在土壤中的流动性：/
其它有害效应：/

十三、处置考虑

处置方法：尽量回收泄漏物，或咨询制造商有关回收的方法。联系土地废弃物处理部门有关物质的废弃方法。将残留物掩埋在批准的填埋处。如有可能请回收容器，否则在批准的填埋处废弃。

十四、运输信息

联合国编号：1498。
联合国运输名称：硝酸钠。
运输危险种类：5.1。
包装类别：Ⅲ。
环境危害：/
特殊运送方法及注意事项：/

十五、管理信息

国内化学品安全法规：
本化学品安全技术说明书遵照了以下相关国家标准：GB16483-2008，GB13690-2009，GB/T15098-2008，GB18218-2009，GB15258-2009，GB6944-2012，GB190-2009，GB191-2009，GB12268-2008，GA57-1993，GBZ 2-2007以及相关法规：《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	2014年03月07日

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

Product Name: Sodium nitrate.

Synonyms: /

Recommended Use of the Chemical and Restrictions on Use: /

Supplier's Name/Address/Phone Number: /

Emergency Phone Number/Fax: /

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

Oxidizing Solids Category 3.

Acute Toxicity - Oral Category 4.

GHS Label Elements, Including Precautionary Statements:



Signal Word(s): Warning

Hazard Statement(s): May intensify fire; oxidizer. Harmful if swallowed.

Precautionary Statement(s):

Prevention: Keep away from heat/sparks/open flames/hot surfaces. No smoking. Keep/Store away from clothing/combustible materials. Take any precaution to avoid mixing with combustibles. Wash ... thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection.

Response: IF SWALLOWED: Call a POISON CENTER/doctor/.../if you feel unwell. Rinse mouth. In case of fire: Use quantities of water to extinguish.

Storage: /

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 nitrate	7631-99-4	99.2

SECTION 4 FIRST AID MEASURES

Description of necessary first aid measures

If inhaled: If fumes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested.

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 swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Most important symptoms and effects, both acute and delayed: The toxicity of nitrates and nitrites result from their vasodilating properties and their propensity to form methaemoglobin. Most produce a peak effect within 30 minutes. Clinical signs of cyanosis appear before other symptoms because of the dark pigmentation of methaemoglobin.

Indication of immediate medical attention and special treatment needed: Hypotension should respond to Trendelenburg's position and intravenous fluids; otherwise dopamine may be needed. Naloxone, glucose and thiamine should be given if a multiple ingestion is suspected. Decontaminate using Ipecac Syrup for alert patients or lavage for obtunded patients who present within 2-4 hours of ingestion.

SECTION 5 FIREFIGHTING MEASURES

Suitable extinguishing media: USE FLOODING QUANTITIES OF WATER. DO NOT use dry chemical, CO₂, foam or halogenated-type extinguishers.

Special hazards arising from the chemical: Will not burn but increases intensity of fire. Heating may cause expansion or decomposition leading to violent rupture of containers. Heat affected containers remain hazardous. Contact with combustibles such as wood, paper, oil or finely divided metal may produce spontaneous combustion or violent decomposition. May emit irritating, poisonous or corrosive fumes.

Special protective actions for fire-fighters: 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. If fire gets out of control withdraw personnel and warn against entry.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Clean up all spills immediately. No smoking, naked lights, ignition sources. Avoid all contact with any organic matter including fuel, solvents, sawdust, paper or cloth and other incompatible materials, as ignition may result.

Avoid breathing dust or vapours and all 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: MINOR SPILLS: Contain and absorb spill with dry sand, earth, inert material or vermiculite. DO NOT use sawdust as fire may result. Scoop up solid residues and seal in labelled drums for disposal. Neutralise/decontaminate area. MAJOR SPILLS: Contain spill with sand, earth or other clean, inert materials. NEVER use organic absorbents such as sawdust, paper, cloth; as fire may result. Avoid any contamination by organic matter. Use spark-free and explosion-proof equipment. Collect any recoverable product into labelled containers for possible recycling. DO NOT mix fresh with recovered material. Collect residues and seal in labelled drums for disposal. Wash area and prevent runoff into drains. Decontaminate equipment and launder all protective clothing before storage and re-use.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling: Avoid personal contact and inhalation of dust, mist or vapours. Provide adequate ventilation. Always wear protective equipment and wash off any spillage from clothing. Keep material away from light, heat, flammables or combustibles. Keep cool, dry and away from incompatible materials. Avoid physical damage to containers.

Conditions for safe storage, including any incompatibilities: Store in original containers. Keep containers securely sealed as supplied. Store in a cool, well ventilated area. Keep dry. Store under cover and away

from sunlight. Store away from flammable or combustible materials, debris and waste. Contact may cause fire or violent reaction. Store away from incompatible materials and foodstuff containers. DO NOT stack on wooden floors or pallets. Protect containers from physical damage. Check regularly for leaks. Observe manufacturer's storage and handling recommendations contained within this MSDS.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters:

EMERGENCY LIMITS

Ingredient	TEEL-0	TEEL-1	TEEL-2	TEEL-3
sodium nitrate	0.4(ppm)	1(ppm)	7.5(ppm)	100(ppm)

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.

Personal protective equipment

Eye/face protection: Safety glasses with side shields. Chemical goggles.

Skin protection: Wear chemical protective gloves, eg. PVC. Wear safety footwear or safety gumboots, eg. Rubber. Impervious clothing, Flame retardant antistatic protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

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	White powder.
Odour	/
Odour Threshold	/
pH (1% solution)	/
Melting point/freezing point	308°C
Initial boiling point and boiling range	380°C
Flash point	/
Evaporation rate	/
Flammability (solid, gas)	/
Upper/lower flammability or explosive limits	/
Vapour pressure	/
Vapour density	/
Relative density (water=1)	2.26
Water solubility	Miscible
Partition coefficient: octanol/water	/
Autoignition temperature	/
Decomposition temperature	/

SECTION 10 STABILITY AND REACTIVITY

Reactivity: /

Chemical stability: Product is considered stable under normal handling conditions.

Possibility of hazardous reactions: Hazardous polymerisation will not occur.

Conditions to avoid: High temperature.

Incompatible materials: Reducing agents. Active metals powder.

Hazardous decomposition products: Nitrogen oxides (NO_x), metal oxides.

SECTION 11 TOXICOLOGICAL INFORMATION

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

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

Acute health effects

Inhalation: The material produces irritation of the respiratory system, in a substantial number of individuals, following inhalation.

Ingestion: Accidental ingestion of the material may be harmful.

Skin: The material either produces inflammation of the skin in a substantial number of individuals following direct contact

Eye: The material may cause eye irritation in a substantial number of individuals and/or may produce significant ocular lesions.

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): Oral (rat) LD50: 1267 mg/kg, Oral (child) LDLo: 22.5 mg/kg, Oral (woman) TDLo: 14 mg/kg.

SECTION 12 ECOLOGICAL INFORMATION

Toxicity: /

Persistence and degradability: /

Bioaccumulative potential: /

Mobility in soil: /

Other adverse effects: /

SECTION 13 DISPOSAL CONSIDERATIONS

Disposal methods: Recycle wherever possible or consult manufacturer for recycling options. Consult State Land Waste Management Authority for disposal. Bury residue in an authorised landfill. Recycle containers if possible, or dispose of in an authorised landfill.

SECTION 14 TRANSPORT INFORMATION

UN number: 1498.

UN proper shipping name: SODIUM NITRATE.

Transport hazard class(es): 5.1.

Packaging group: III.

Environmental hazards: /

Special precautions for user: /

SECTION 15 REGULATORY INFORMATION

Regulations:

This safety data sheet is in compliance with the following national standards: GB16483-2008,

GB13690-2009 , GB/T15098-2008 , GB18218-2009 , GB15258-2009 , GB6944-2012 , GB190-2009 , GB191-2009 , GB12268-2008 , GA57-1993 , GBZ 2-2007as well as the following national regulations: Dangerous Goods Transport Administrative Regulation, Dangerous Chemicals Safety Administrative Regulation.

SECTION 16 OTHER INFORMATION

References	"Model Regulations on the Transport of Dangerous Goods" "The Globally Harmonized System of Classification and Labelling of Chemicals"
Form Date	07-March-2014

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.



硝酸钠

Sodium nitrate

UN 1498