编　　码：

产品名称：三氯异氰尿酸

危险

儿童不得接触

使用前请读标签

可能加剧燃烧；氧化剂。吞咽有害。造成严重眼刺激。可能造成呼吸道刺激。对水生生物毒性非常大并具有长期持续影响。

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。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。避免释放到环境中。

应急：火灾时：火灾时：使用水雾、干粉或泡沫灭火。如误吞咽：如感觉不适，呼叫解毒中心或医生。漱口。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。如仍觉眼刺激：求医/就诊。收集溢出物。

贮存：存放在通风良好的地方。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。

CODE：

PRODUCT NAME：Trichloroisocyanuric acid

Danger

Keep out of the reach of children.

Read label before use.

May intensify fire; oxidizer. Harmful if swallowed. Causes serious eye irritation. May cause respiratory irritation. Very toxic to aquatic life with long lasting effects.

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. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid breathing dust/fume/gas/mist/ vapors/spray. Use only outdoors or in a well-ventilated area. Avoid release to the environment.

Response: In case of fire: Use water, chemical powder or foam to extinction. IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Collect spillage.

Storage： Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal: Dispose of contents/container to in accordance with national regulations.

化学品安全数据单

一、标识

全球统一制度产品标识符：三氯异氰尿酸。
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 2，急毒性（口服）类别 4，严重眼损伤/眼刺激类别 2A，特定目标器官毒性——单次接触类别 3（呼吸道刺激），危害水生环境（急性）类别 1，危害水生环境（长期）类别 1。
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：可能加剧燃烧；氧化剂。吞咽有害。造成严重眼刺激。可能造成呼吸道刺激。对水生生物毒性非常大并具有长期持续影响。
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。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。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。避免释放到环境中。
应急：火灾时：火灾时：使用水雾、干粉或泡沫灭火。如误吞咽：如感觉不适，呼叫解毒中心或医生。漱口。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。如仍觉眼刺激：求医/就诊。收集溢出物。
贮存：
存放在通风良好的地方。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）
三氯异氰尿酸	87-90-1	99.52%

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：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：/

五、消防措施

适当的灭火剂：可用雾状水、干粉、泡沫灭火。

化学品产生的具体危险：不可燃，但可助长其他物质燃烧。在火焰中释放出刺激性或有毒烟雾。

消防人员的特殊防护行动：消防人员必须配戴空气呼吸器、消防衣及防护手套，在上风向灭火。灭火时尽可能将容器从火场移至空旷处。然后根据着火原因选择适当灭火剂灭火。

六、意外释放措施

人身防范、保护设备和应急程序：建议应急处理人员戴防护口罩，穿消防工作服。不要直接接触泄漏物。

环境防范措施：隔离泄漏污染区，限制出入。

抑制和清洁的方法和材料：小量泄漏：避免扬尘，小心扫起，收集运至废物处理场所处置。大量泄漏，利用围堤收容，然后收集、转移、回收或无害处理后废弃。

七、搬运与储存

安全搬运的防范措施：密闭操作，局部排风。操作人员必须经过专门培训，严格遵守操作规程。建议操作人员佩戴防护口罩，戴化学安全防护眼镜，穿防酸碱工作服，戴防酸碱手套。搬运时轻装轻卸，防止包装破损。配备泄漏应急处理设备。倒空的容器可能残留有害物。

安全存储的条件，包括任何不相容性：储存于阴凉、干燥、通风良好的库房。远离火种、热源。防止阳光直射。包装必须密封，切勿受潮。应与还原剂、易（可）燃物等分开存放，切忌混储。储区应备有合适的材料收容泄漏物。

八、接触控制/人身保护

控制参数：/

适当的工程控制：严加密闭，提供充分的局部排风。

个人保护措施

防护眼罩/面具：呼吸系统防护中已作防护。

皮肤防护：穿连衣式胶布防毒衣。

呼吸系统防护：紧急事态抢救或撤离时，应该佩戴空气呼吸器。

高温危险：/

九、物理及化学性质

外观（物理状态、颜色等）	白色柱状固体。
气味	有氯气味。
气味阈值	/
pH 值	/
熔点/凝固点	/
初始沸点和沸腾范围	/
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	/
可溶性	微溶于水。
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：加热时，该物质分解生成有毒烟雾，可能发生爆炸。该物质是一种强氧化剂，与可燃物质和还原性物质激烈反应。与氨、铵盐和胺类、碳酸钠、强酸激烈反应。

应避免的条件：高温、火星、静电。

不相容材料：还原剂、酸、潮湿空气、易（可）燃物。

危险分解产物：碳氧化物、氮氧化物、氯化氢等。

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：吸入后会导致咳嗽、咽喉疼痛。皮肤接触会导致皮肤发红、刺激。眼睛接触后会导致发红、疼痛。食入会导致恶心、头痛、头晕、呕吐、腹痛等症状。

慢性毒性或长期毒性效应：长期接触高浓度粉尘能引起肺功能病变，称为尘肺病。长期或重复接触本物质可能导致严重皮肤刺激。

毒性的数值度量（如急性毒性估计值）：

三氯异氰尿酸：

毒性	**刺激性**
经口 LDLo (半致死剂量) 3570 mg/kg	皮肤 500 mg/24h-中等
经口 LD_{50} (半致死剂量): 406 mg/kg	皮肤 500 mg - 严重的
Oral (Rabbit) LD_{50}: 1900 mg/kg	眼睛 50 μg/24h 严重的

十二、生态信息

毒性：对水生生物毒性非常大并具有长期持续影响。
持久性和降解性：/
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：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：2468。
联合国正式运输名称：三氯异氰脲酸，干的。
运输危险分类：5.1。
包装类别（如果适用）：II。
环境危险：海洋污染物。
用户的特殊防范措施：/

十五、管理信息

国内化学品安全管理法规：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	2015-03-13

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: Trichloroisocyanuric acid.

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:

Oxidizing Solid Category 2, Acute toxicity, oral Category 4, Serious eye damage /eye irritation Category 2A, Specific target organ toxicity, single exposure Category 3 (Respiratory tract irritation), Hazardous to the aquatic environment, acute hazard Category 1, Hazardous to the aquatic environment, long-term hazard Category 1

GHS Label elements, including precautionary statements:

Signal word: Danger

Hazard statement(s): May intensify fire; oxidizer. Harmful if swallowed. Causes serious eye irritation. May cause respiratory irritation. Very toxic to aquatic life with long lasting effects.

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. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid breathing dust/fume/gas/mist/ vapors/spray. Use only outdoors or in a well-ventilated area. Avoid release to the environment.

Response: In case of fire: Use water, chemical powder or foam to extinction. IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Collect spillage.

Storage:

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

Disposal:

Dispose of contents/container to in accordance with national regulations.

Other hazards which do not result in classification: /

Section 3 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Concentration%
Trichloroisocyanuric acid	87-90-1	99.52%

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 foam, chemical power or water spray.

Special hazards arising from the chemical: This material is non-flammable and can help combustion. It may decompose at high temperature and fire and release toxic fumes.

Special protective actions for fire-fighters: Wear self-contained breathing apparatus for firefighting if necessary. Use water spray to cool unopened containers.

Section 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas.

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

Methods and materials for containment and cleaning up: Contain spillage, and then collect in an clean container according to local regulations

Section 7 HANDLING AND STORAGE

Precautions for safe handling: Wear protective gloves/eye protection/face protection/protective clothing. Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Keep away from sources of ignition - No smoking.

Conditions for safe storage, including any incompatibilities: Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters: /

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. Impervious clothing,

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 cylindrical solid. Chlorine odour.
Odour	/
Odour Threshold	/
pH	/
Melting point/freezing point	/
Initial boiling point and boiling range	/
Flash point	/
Evaporation rate	/
Flammability (solid, gas)	/
Upper/lower flammability or explosive limits	/
Vapour pressure	/
Vapour density	/
Relative density	Slightly soluble in water.
Solubility(ies)	/
Partition coefficient: n-octanol/water	/
Auto-ignition temperature	/
Decomposition temperature	/
Viscosity	

Section 10 STABILITY AND REACTIVITY

Reactivity: /

Chemical stability: The material is stable in normal temperature.

Possibility of hazardous reactions: This material may decompose and explode at high temperature and fire and release toxic fumes. It can react with flammable materials and reducing agents violently. It can also react with ammonia, ammonium salt, amine, sodium carbonate and strong acid violently.

Conditions to avoid: High temperature, spark and static electricity.

Incompatible materials: Reducing agent, acid, moisture air and flammable materials.

Hazardous decomposition products: Oxycarbides, nitrogen oxides and chlorides.

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: Accidental ingestion of the material may be harmful and cause cough and throat pain. Oral intake is corrosive to the mouth and cause headache, giddiness, vomit and other symptoms. This material may produce skin and eyes irritation.

Chronic health effects: Long term exposure to high dust concentrations may cause changes in lung function i.e. pneumoconiosis. The material may produce severe skin irritation after prolonged or repeated exposure.

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

Trichloroisocyanuric acid：

TOXICITY	IRRITATION
Oral LDLo 3570 mg/kg	Skin 500 mg/24h-medium
Oral LD_{50}: 406 mg/kg	Skin 500 mg - Serious
Oral (Rabbit) LD_{50}: 1900 mg/kg	Eye 50 μg/24h Serious

Section 12 ECOLOGICAL INFORMATION

Toxicity: Very toxic to aquatic life with long lasting effects.
Persistence and degradability: /
Bioaccumulative potential: /
Mobility in soil: /
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: 2468.
UN proper shipping name: TRICHLOROISOCYANURIC ACID, DRY.
Transport hazard class(es) : 5.1.
Packing group, if applicable: II.
Environmental hazards: marine pollutant.
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， GB6944-2005，GB/T15098-2008，GB18218-2009，GB15258-2009，GB6944-2005，GB190-2009，GB191-2009，GB12268-2008，GA57-1993，GB/T 15098-2008，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	13-Mar-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.

三氯异氰脲酸，干的

TRICHLOROISOCYANURICACID, DRY

UN 2468