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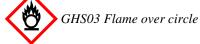
Reviewed on 02/13/2014

### **1** Identification

- · Product identifier
- · Trade name: Sodium Nitrate, Reagent ACS Crystal
- Article number: S3222
- · CAS Number: 7631-99-4
- · EC number:
- 231-554-3
- · Details of the supplier of the safety data sheet · Manufacturer/Supplier: Aqua Solutions, Inc. 6913 Highway 225 DEER PARK, TX 77536 USA 800-256-2586
- · Information department: Product safety department Technical Coordinator Sherman Nelson sherman@aquasolutions.org
- Emergency telephone number: Chemtrec: 800-424-9300 Canutec: 613-996-6666

## 2 Hazard(s) identification

· Classification of the substance or mixture



H272 May intensify fire; oxidizer.

GHS07

Ox. Sol. 2

- Eye Irrit. 2A H319 Causes serious eye irritation.
- · Label elements
- GHS label elements The substance is classified and labeled according to the Globally Harmonized System (GHS). · Hazard pictograms

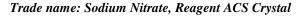


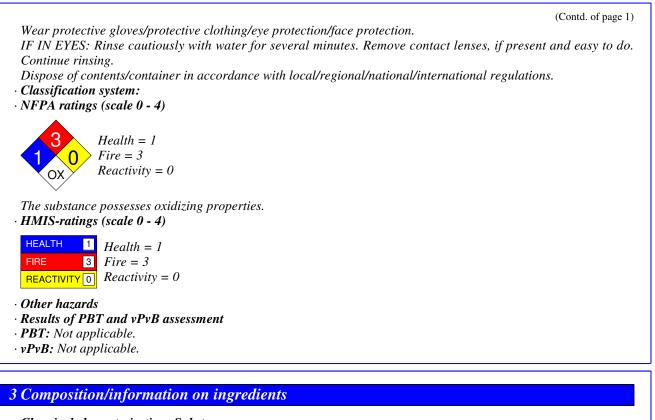
- · Signal word Danger · Hazard statements
- May intensify fire; oxidizer. Causes serious eye irritation.
- · Precautionary statements Take any precaution to avoid mixing with combustibles. Keep away from heat/sparks/open flames/hot surfaces. No smoking. Keep/Store away from clothing/combustible materials.



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- · Chemical characterization: Substances
- CAS No. Description 7631-99-4 Sodium Nitrate
- · Identification number(s)
- EC number: 231-554-3

### 4 First-aid measures

- · Description of first aid measures
- · General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- · After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- · After swallowing: Immediately call a doctor.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed

No further relevant information available.

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#### **5** Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents:
- *CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.* • *Special hazards arising from the substance or mixture*
- During heating or in case of fire poisonous gases are produced.
- · Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

## 6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Mount respiratory protective device.
- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- *Methods and material for containment and cleaning up:* Dispose contaminated material as waste according to item 13.
- Dispose contaminatea material as waste according
- Reference to other sections
- See Section 7 for information on safe handling.
- See Section 8 for information on personal protection equipment.
- See Section 13 for disposal information.

### 7 Handling and storage

- · Handling:
- Precautions for safe handling Prevent formation of dust.
- Information about protection against explosions and fires: Keep respiratory protective device available.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed.
- · Specific end use(s) No further relevant information available.

### 8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace: Not required.
- Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes. Avoid contact with the eyes and skin.
- · Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

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• Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the

chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation  $\cdot$  *Material of gloves* 

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

• Eye protection:



Tightly sealed goggles

Information on basic physical and	chemical properties	
General Information		
Appearance:		
Form:	Powder	
Color:	Colorless	
Odor:	<i>Odorless</i>	
Odour threshold:	Not determined.	
pH-value:	Not applicable.	
Change in condition		
Melting point/Melting range:	312 °C (594 °F)	
Boiling point/Boiling range:	600-700 °C (1112-1292 °F) (Spaltu)	
Flash point:	Not applicable.	
Flammability (solid, gaseous):	Contact with combustible material may cause fire.	
Ignition temperature:		
Decomposition temperature:	Not determined.	
Auto igniting:	Not determined.	
Danger of explosion:	Not determined.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapor pressure:	Not applicable.	
Density at 20 °C (68 °F):	2.26 g/cm <sup>3</sup> (18.86 lbs/gal)	
Relative density	Not determined.	

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· Vapour density	Not applicable.	
· Evaporation rate	Not applicable.	
· Solubility in / Miscibility with	1	
Water:	Soluble.	
· Partition coefficient (n-octan	ol/water): Not determined.	
· Viscosity:		
Dynamic:	Not applicable.	
Kinematic:	Not applicable.	
• Other information	No further relevant information available.	

## **10 Stability and reactivity**

- · Reactivity
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- $\cdot \textit{Incompatible materials: } No \ further \ relevant \ information \ available.$
- · Hazardous decomposition products: No dangerous decomposition products known.

### **11** Toxicological information

- · Information on toxicological effects
- Acute toxicity:

· LD/LC50 values that are relevant for classification:

Oral LD50 3236 mg/kg (rat)

- · Primary irritant effect:
- on the skin: No irritant effect.

• on the eye: Irritating effect.

- Sensitization: No sensitizing effects known.
- $\cdot$  Additional toxicological information:
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer) Substance is not listed.
- · NTP (National Toxicology Program) Substance is not listed.

# **12 Ecological information**

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- $\cdot$  Additional ecological information:
- · General notes:

Water hazard class 1 (Assessment by list): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- Other adverse effects No further relevant information available.

# **13 Disposal considerations**

· Waste treatment methods

· Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

UN-Number		
DOT, IMDG	UN1498	
UN proper shipping name		
DOT	Sodium nitrate	
·IMDG	SODIUM NITRATE	
· Transport hazard class(es)		
DOT		
A		
CINIZINA AGENT		
<b>1</b>		
· Class	5.1 Oxidising substances.	
· Label	5.1	
Class	5.1 Oxidising substances.	
Label	5.1	
Packing group		
· DOT, IMDG, IATA	III	
Environmental hazards:		
Marine pollutant:	No	
Special precautions for user	Warning: Oxidizing substances	
Danger code (Kemler):	50	
EMS Number:	F-A,S-Q	
Transport in bulk according to Annex	II of	

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• UN "Model Regulation":

UN1498, Sodium nitrate, 5.1, III

#### **15 Regulatory information**

 $\cdot$  Safety, health and environmental regulations/legislation specific for the substance or mixture  $\cdot$  Sara

• Section 355 (extremely hazardous substances): Substance is not listed.

• Section 313 (Specific toxic chemical listings): Substance is not listed.

· TSCA (Toxic Substances Control Act): Substance is listed.

· Proposition 65

- · Chemicals known to cause cancer: Substance is not listed.
- · Chemicals known to cause reproductive toxicity for females: Substance is not listed.
- · Chemicals known to cause reproductive toxicity for males: Substance is not listed.
- · Chemicals known to cause developmental toxicity: Substance is not listed.
- · Carcinogenic categories
- · EPA (Environmental Protection Agency) Substance is not listed.
- TLV (Threshold Limit Value established by ACGIH) Substance is not listed.
- · NIOSH-Ca (National Institute for Occupational Safety and Health) Substance is not listed.
- · OSHA-Ca (Occupational Safety & Health Administration) Substance is not listed.

• *GHS label elements* The substance is classified and labeled according to the Globally Harmonized System (GHS). • *Hazard pictograms* 



· Signal word Danger

· Hazard statements

May intensify fire; oxidizer. Causes serious eye irritation.

· Precautionary statements

Take any precaution to avoid mixing with combustibles.

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

Keep/Store away from clothing/combustible materials.

Wear protective gloves/protective clothing/eye protection/face protection.

*IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.* 

Dispose of contents/container in accordance with local/regional/national/international regulations. • Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### **16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing MSDS: Environment protection department.

· Contact: Mr. Nelson

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods

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#### Trade name: Sodium Nitrate, Reagent ACS Crystal

DOT: US Department of Transportation IATA: International Air Transport Association ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent Ox. Sol. 2: Oxidising Solids, Hazard Category 2 Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A (Contd. of page 7)

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