

# **Material Safety Data Sheet**

Creation Date 05-Aug-2010

Revision Date 19-Oct-2011

**Revision Number 2** 

# 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name Potassium nitrate

Cat No. AC424150000; AC424150025; AC424150050; AC424151000;

AC424155000

Synonyms Saltpeter.; Nitric acid potassium salt; Niter

Recommended Use Laboratory chemicals

Company Entity / Business Name

Fisher Scientific Acros Organics
One Reagent Lane One Reagent Lane
Fair Lawn, NJ 07410 Fair Lawn, NJ 07410

For information in the US, call: 001-800-ACROS-01

**Emergency Telephone Number** 

For information in Europe, call: +32 14 57 52

11

Emergency Number, Europe: +32 14 57 52 99 Emergency Number, US: 001-201-796-7100

CHEMTREC Phone Number, US: 001-800-

424-9300

CHEMTREC Phone Number, Europe: 001-

703-527-3887

# 2. HAZARDS IDENTIFICATION

#### DANGER!

Tel: (201) 796-7100

## **Emergency Overview**

Oxidizer: Contact with combustible/organic material may cause fire. May cause skin, eye, and respiratory tract irritation.

The toxicological properties have not been fully investigated.

Appearance White Physical State Solid odor odorless

Target Organs None known.

**Potential Health Effects** 

**Acute Effects** 

## **Principle Routes of Exposure**

**Eyes** May cause irritation. **Skin** May cause irritation.

**Inhalation** May cause irritation of respiratory tract.

**Ingestion** May cause irritation.

Chronic Effects

None known.

See Section 11 for additional Toxicological information.

Aggravated Medical Conditions No information available.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Haz/Non-haz

Component	CAS-No	Weight %		
Potassium nitrate	7757-79-1	>95		

## 4. FIRST AID MEASURES

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain

medical attention.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. Get medical attention

immediately if symptoms occur.

**Inhalation** Move to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately if

symptoms occur.

**Ingestion** Do not induce vomiting. Obtain medical attention.

Notes to Physician Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

Flash Point No information available.

Method No information available.

Autoignition Temperature No information available.

Explosion Limits

UpperNo data availableLowerNo data available

Suitable Extinguishing Media Use water spray, alcohol-resistant foam, dry chemical or carbon

dioxide.

Unsuitable Extinguishing Media No information available.

**Hazardous Combustion Products**No information available.

Sensitivity to mechanical impact
Sensitivity to static discharge
No information available.
No information available.

**Specific Hazards Arising from the Chemical** 

May ignite combustibles (wood paper, oil, clothing, etc.).

#### **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA Health 1 Flammability 1 Instability 2 Physical hazards OX

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions** Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation.

**Environmental Precautions** Should not be released into the environment.

Methods for Containment and Clean

Up

Sweep up or vacuum up spillage and collect in suitable container for disposal. Keep away from clothing and other combustible materials. Avoid dust formation.

#### 7. HANDLING AND STORAGE

**Handling** Wear personal protective equipment. Ensure adequate ventilation. Avoid contact with skin,

eyes and clothing. Avoid ingestion and inhalation. Keep away from clothing and other

combustible materials. Avoid dust formation.

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Do not store near

combustible materials.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Measures Ensure that eyewash stations and safety showers are close to the workstation location. Ensure

adequate ventilation, especially in confined areas.

**Exposure Guidelines**This product does not contain any hazardous materials with occupational exposure limits

established by the region specific regulatory bodies.

NIOSH IDLH: Immediately Dangerous to Life or Health

**Personal Protective Equipment** 

Eye/face Protection

Skin and body protection Respiratory Protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Wear appropriate protective gloves and clothing to prevent skin exposure.

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits

are exceeded or if irritation or other symptoms are experienced.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Solid
Appearance White
odor odorless

Odor Threshold<br/>pHNo information available.Vapor PressureNo information available.Vapor DensityNo information available.ViscosityNo information available.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point/Range 400°C / 752°F@ 760 mmHg

Melting Point/Range 334°C / 633.2°F

**Decomposition temperature** > 400°C

Flash Point

Evaporation Rate

Specific Gravity

Solubility

log Pow

No information available.
No information available.
No information available.
No information available.
No data available

Molecular Weight101.1Molecular FormulaK N O3

## 10. STABILITY AND REACTIVITY

Stability Oxidizer: Contact with combustible/organic material may cause fire.

Conditions to Avoid Incompatible products. Excess heat. Combustible material. Avoid

dust formation.

Incompatible Materials Strong oxidizing agents

Hazardous Decomposition Products Oxides of potassium

Hazardous Polymerization Hazardous polymerization does not occur.

**Hazardous Reactions.** None under normal processing..

# 11. TOXICOLOGICAL INFORMATION

# **Acute Toxicity**

**Component Information** 

Component LD50 Oral		LD50 Dermal	LC50 Inhalation
Potassium nitrate	3015 mg/kg (Rat)	Not listed	Not listed

**Irritation** No information available.

**Toxicologically Synergistic** 

**Products** 

No information available.

## **Chronic Toxicity**

Carcinogenicity There are no known carcinogenic chemicals in this product

Component	ACGIH	IARC	NTP	OSHA	Mexico
Potassium nitrate	Not listed	Group 2A	Not listed	Not listed	Not listed

**Sensitization** No information available.

Mutagenic EffectsNo information available.Reproductive EffectsNo information available.Developmental EffectsNo information available.TeratogenicityNo information available.

Other Adverse Effects The toxicological properties have not been fully investigated.. See actual entry in RTECS for

complete information.

**Endocrine Disruptor Information** No information available

# 12. ECOLOGICAL INFORMATION

**Ecotoxicity** 

Do not empty into drains

Persistence and Degradability

Bioaccumulation/ Accumulation

No information available

Mobility

No information available

# 13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a

hazardous waste. Chemical waste generators must also consult local, regional, and national

hazardous waste regulations to ensure complete and accurate classification.

## 14. TRANSPORT INFORMATION

DOT

UN-No UN1486

Proper Shipping Name POTASSIUM NITRATE

Hazard Class 5.1 Packing Group III

TDG

UN-No UN1486

Proper Shipping Name POTASSIUM NITRATE

Hazard Class 5.1
Packing Group

**IATA** 

**UN-No** 1486

## 14. TRANSPORT INFORMATION

Proper Shipping Name POTASSIUM NITRATE

Hazard Class 5.1 Packing Group

## IMDG/IMO

**UN-No** 1486

Proper Shipping Name POTASSIUM NITRATE

Hazard Class 5.1 Packing Group

## 15. REGULATORY INFORMATION

#### **International Inventories**

Component	TSCA	DSL	NDSL	<b>EINECS</b>	<b>ELINCS</b>	NLP	PICCS	<b>ENCS</b>	AICS	CHINA	KECL
Potassium nitrate	Х	Χ	-	231-818-	-		Х	Χ	Х	X	Χ
				8							

#### Legend:

- X Listed
- E Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.
- F Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
- N Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
- P Indicates a commenced PMN substance
- R Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
- S Indicates a substance that is identified in a proposed or final Significant New Use Rule
- T Indicates a substance that is the subject of a Section 4 test rule under TSCA.
- XU Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).
- Y1 Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.
- Y2 Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

#### **U.S. Federal Regulations**

TSCA 12(b) Not applicable

#### **SARA 313**

Not applicable

Component	CAS-No	Weight %	SARA 313 - Threshold Values %
Potassium nitrate	7757-79-1	>95	1.0

#### SARA 311/312 Hazardous Categorization

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	Yes

#### **Clean Water Act**

Not applicable

## Clean Air Act

Not applicable

#### **OSHA**

Not applicable

#### **CERCLA**

Not Applicable

## **California Proposition 65**

This product does not contain any Proposition 65 chemicals.

## State Right-to-Know

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Potassium nitrate	X	Χ	Х	-	X

# **U.S. Department of Transportation**

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

## **U.S. Department of Homeland Security**

This product contains the following DHS chemicals:

Component	DHS Chemical Facility Anti-Terrorism Standard
Potassium nitrate	2000 lb STQ

# **Other International Regulations**

Mexico - Grade No information available

## Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

## **WHMIS Hazard Class**

C Oxidizing materials



# **16. OTHER INFORMATION**

Prepared By Regulatory Affairs

Thermo Fisher Scientific

Email: EMSDS.RA@thermofisher.com

Creation Date 05-Aug-2010

Print Date 19-Oct-2011

**Revision Summary** "\*\*\*", and red text indicates revision

#### **Disclaimer**

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of MSDS**