

# SAFETY DATA SHEET



Conforms to regulation (EC) no. EU 453/2010

## SECTION 1 - IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1 Product Identifier

**Product Name:** Potassium Chloride, 1M Solution

**Product Number:** EC-903

### 1.2 Relevant Identified Uses of the Substance/Mixture and Uses Advised Against

Investigational research by professional users

### 1.3 Details of the Supplier of the Safety Data Sheet

#### Manufacturer

National Diagnostics  
305 Patton Drive  
Atlanta, GA 30036  
(404) 699-2121  
(800) 526-3867  
info@nationaldiagnostics.com

### 1.4 Emergency Telephone Number

#### ChemTel Inc.

Contract number MIS8894340  
1-800 255-3924 (United States, Canada, Puerto Rico & US Virgin Islands)  
01-800-099-0731 (Mexico)  
400-120-0751 (China)  
000-800-100-4086 (India)  
1-300-954-583 (Australia)  
0-800-591-6042 (Brazil)  
+1-813-255-3924 (All other regions)

## SECTION 2 - HAZARDS IDENTIFICATION

### 2.1 Classification of the Substance or Mixture

Not a hazardous substance or mixture according to regulation (EC) No. 1272/2008.

### 2.2 Label Elements

This product has no labeling elements associated with EC directives or respective national laws.

### 2.3 Other Hazards

None found.

## SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2 Mixture

#### Chemical Names/Description

Potassium chloride

#### Component List

Component	% Comp.	CAS #	EC #	1278/2008 Classification
Potassium Chloride	7.4	7447-40-7	231-211-8	N.A.

## SECTION 4 - FIRST AID MEASURES

### 4.1 Description of First Aid Measures

#### Inhalation

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

#### Ingestion

Never give anything by mouth to an unconscious person. Rinse mouth with water.

#### Skin

Wash off with soap and plenty of water

#### Eyes

Flush eyes with water as a precaution.

### 4.2 Most Important Symptoms and Effects, Both Acute and Delayed

#### Inhalation

Inhalations of high concentrations of dust may cause nasal or lung irritation.

**Ingestion**

Large quantities can produce gastrointestinal irritation and vomiting.

**Skin**

May cause skin irritation.

**Eyes**

Causes eye irritation. May cause chemical conjunctivitis.

**4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed**

Unknown/not applicable

**SECTION 5 - FIRE FIGHTING MEASURES****5.1 Extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special Hazards Arising from the Substance/Mixture****Hazardous Combustion Products**

N.A.

**Hazardous Decomposition Products**

No data available.

**Hazardous Polymerization**

Will not occur under normal conditions of use (See Sections 10.4 & 10.5).

**5.3 Advice for Firefighters**

N.A.

**5.4 Further Information**

No data available.

**SECTION 6 - ACCIDENTAL RELEASE MEASURES****6.1 Personal Precautions**

Wear appropriate protective equipment as specified in Section 8.

**6.2 Environmental Precautions**

Prevent discharge into the environment. Dike spills and stop leakage where practical. Do not allow material to enter drains.

**6.3 Methods and Materials for Containment and Cleaning Up**

Use absorbent material to collect and contain for salvage or disposal.

**6.4 References to Other Sections**

For disposal information, see Section 13. For protective clothing and equipment, see Section 8.

**SECTION 7 - HANDLING AND STORAGE****7.1 Precautions for Safe Handling**

Avoid contact and inhalation. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling.

**7.2 Conditions for Safe Storage (including any incompatibles)**

Store tightly capped in a cool, dry area

**Incompatibles**

Bromine trifluoride; potassium permanganate plus sulfuric acid.

**7.3 Specific End Uses**

Investigational research by professional users

**SECTION 8 - EXPOSURE CONTROLS/PERSONAL PRECAUTIONS****8.1 Control Parameters**

ACGIH Threshold Limit Value (TLV): 10 mg/m<sup>3</sup>

OSHA Permissible Exposure Limit (PEL): 15 mg/m<sup>3</sup>

**8.2 Exposure Controls****Engineering Controls**

N.A.

## Respiratory Protection

Not required.

## Eye Protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

## Skin Protection

Selected gloves must satisfy the specifications of EU directive 89/686/EEC and the standard EN 374 derived from it.

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on Basic Physical & Chemical Properties

a. Appearance	Clear, colorless solution	b. Odor	None
c. Odor Threshold	N.A.	d. pH	Neutral
e. Melting/Freezing Point (°C)	0	f. Boiling point (°C)	102
g. Flash Point (°C)	N.A.	h. Evaporation Rate	water
i. Flammability	N.A.	j. Upper/Lower Flammability or Explosive Limits	N.A.
k. Vapor Pressure	17	l. Vapor Density (Air = 1)	0.62
m. Relative Density	1.02	n. Water Solubility	miscible
o. Partition Coefficient n-octanol/water	Mixture	p. Autoignition Temperature (°C)	N.A.
q. Decomposition Temperature (°C)	N.A.	r. Viscosity	
s. Explosive Properties	N.A.	t. Oxidizing Properties	N.A.

## SECTION 10 - STABILITY AND REACTIVITY

### 10.1 Reactivity

N.A.

### 10.2 Chemical Stability

Stable

### 10.3 Possibility of Hazardous Reactions

Will not occur under normal conditions of use (See Sections 10.4 & 10.5).

### 10.4 Conditions to Avoid

N.A.

### 10.5 Incompatible Materials

Bromine trifluoride; potassium permanganate plus sulfuric acid.

### 10.6 Hazardous Decomposition Products

No data available.

## SECTION 11 - TOXICOLOGICAL INFORMATION

### Product LD50 Values

#### Oral Rat LD50 (mg/kg)

>5000

#### Dermal Rabbit LD50 (mg/kg)

### Component Cancer List Status

	NTP Carcinogen		IARC Category
	Known	Anticipated	
Potassium Chloride	No	No	None

### Potential Health Effects

#### Inhalation

May cause respiratory tract irritation. Can produce delayed pulmonary edema.

#### Ingestion

May produce weakness and circulatory problems. May affect heart. In severe cases, ingestion may be fatal.

#### Skin

Contact may cause irritation or rash, particularly with moist skin.

#### Eyes

Potassium chloride is moderate eye irritant. Redness, tearing, possible abrasion can occur.

**Carcinogenicity**

Not listed by ACGIH, IARC, NIOSH, NTP, OR OSHA.

**Mutagenicity**

Unscheduled DNA Synthesis: Oral, rat = 1500 ug/kg.; Mutation in Microorganisms = Mouse, Lymphocyte = 2048 mg/L.; DNA Damage = Hamster, Ovary = 260 mmol/L.; Cytogenetic Analysis: Hamster, Lung = 12 gm/L

**Reproductive Toxicity**

No information available.

**Teratogenic Effects**

No information available.

**Routes of Entry**

Ingestion, inhalation, skin and eye contact.

**Target Organ Statement**

**SECTION 12 - ECOLOGICAL INFORMATION**

**12.1 Toxicity**

	Vertebrates	Invertebrates	Algae	Microorganisms
Aquatic Toxicity (ppm unless otherwise noted)	LC50 (96hr, Fathead minnow) 880mg/L	EC50 (48hr, Daphnia) 440-880 mg/L	EC50 (72hrs) >100mg/L	EC50 (3hr) >1000mg/L
	Birds	Arthropods	Plants	Microorganisms
Terrestrial Environment Toxicity (ppm unless otherwise noted)	No data	No data	No data	No data

**12.2 Persistence and Degradability**

No data

**12.3 Bioaccumulative Potential**

No data

**12.4 Mobility in Soil**

No data

**12.5 Results of PBT and vPvB Assessment**

No data

**12.6 Other Adverse Effects**

None

**SECTION 13 - DISPOSAL CONSIDERATIONS**

**13.1 Waste Treatment Methods**

Offer surplus or non-recyclable product to licensed disposal company. Disposal is subject to user compliance with applicable law and product characteristics at time of disposal. Dispose of packaging as product.

**SECTION 14 - TRANSPORT INFORMATION**

	ADR/RID	IATA	IMO	DOT
14.1 UN Number	N.A.	N.A.	N.A.	N.A.
14.2 Shipping Name	Not dangerous goods	Not dangerous goods	Not dangerous goods	N.A.
14.3 Hazard Class	N.A.	N.A.	N.A.	N.A.
14.4 Packing Group	N.A.	N.A.	N.A.	N.A.
14.5 Environmental Hazards	N.A.	N.A.	N.A.	N.A.
14.6 Special Precautions	N.A.	N.A.	N.A.	N.A.

**SECTION 15 - REGULATORY INFORMATION**

**15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance/Mixture**

**United States**

**TSCA Regulatory Statement**

All international ingredients are listed in the TSCA inventory.

**SARA 311/312 Hazard Categories**

Component	Fire	Pressure	Reactivity	Acute	Chronic
Potassium Chloride	No	No	No	Yes	No

**Europe****EEC Regulatory**

All of the components of this product are listed on the European Inventory of New and Existing Chemical Substances (EINECS) inventory.

**SECTION 16 - OTHER INFORMATION****Revisional Updates**

4/26/2019 - Updated Section 1.4

5/29/2015 - Updated Sections 2.1 and 3.2

4/16/2013 - Released Version 1.0

**NFPA Codes**

Health 0 Flammability 0 Reactivity 0

**Dangers**

Potassium Chloride

None

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