

Revision Date: 06-20-2018

# SAFETY DATA SHEET

According to US Regulation 29 CFR 1910.1200 (HazCom 2012)

# 1. Identification

Product identifier: Potassium Chloride

Other means of identification

**Product No.:** 6846, 6856, 4001, 3045, 3052, 3040, 6858, 6845, 6841, 6838,

3046

Recommended restrictions

Recommended use: For Laboratory, Research or Manufacturing Use.

Restrictions on use: Not determined.

# Details of the supplier of the safety data sheet

#### Manufacturer

Company Name: Avantor Performance Materials, LLC.

Address: 3477 Corporate Parkway

Center Valley, PA 18034

Telephone: Customer Service: 855-282-6867

Fax: 610-573-2610

Contact Person: Environmental Health & Safety E-mail: info@avantormaterials.com

# **Emergency telephone number:**

CHEMTREC: 1-800-424-9300 within US and Canada

# 2. Hazard(s) identification

#### **Hazard Classification**

## **Health Hazards**

Serious Eye Damage/Eye Irritation Category 2B

## **Unknown toxicity - Health**

Acute toxicity, dermal 100 %
Acute toxicity, inhalation, vapor 100 %
Acute toxicity, inhalation, dust 100 %

or mist

# **Environmental Hazards**

Acute hazards to the aquatic Category 3

environment

# **Unknown toxicity - Environment**

Acute hazards to the aquatic 0 %

environment



Revision Date: 06-20-2018

Chronic hazards to the aquatic

environment

tic 100 %

#### **Label Elements**

Hazard Symbol: No symbol

Signal Word: Warning

Hazard Statement: Causes eye irritation.

Harmful to aquatic life.

Precautionary Statements

**Prevention:** Wash thoroughly after handling. Avoid release to the environment.

**Response:** 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.

**Disposal:** Dispose of contents/container to an appropriate treatment and disposal

facility in accordance with applicable laws and regulations, and product

characteristics at time of disposal.

Hazard(s) not otherwise classified (HNOC):

None.

# 3. Composition/information on ingredients

## **Substances**

Chemical Identity	CAS number	Content in percent (%)*
Potassium chloride	7447-40-7	99 - 100%

<sup>\*</sup> All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

#### 4. First-aid measures

General information: Get medical advice/attention if you feel unwell. Show this safety data sheet

to the doctor in attendance.

Ingestion: Rinse mouth. Drink a few glasses of water or milk. Call a POISON

CENTER/doctor if you feel unwell.

**Inhalation:** Move to fresh air. Get medical attention if symptoms persist.

**Skin Contact:** Wash skin thoroughly with soap and water. Get medical attention if irritation

persists after washing. Wash contaminated clothing before reuse. Destroy

contaminated clothing and shoes.

**Eye contact:** Immediately flush with plenty of water for at least 15 minutes. If easy to do,

remove contact lenses. Get medical attention if irritation persists after

washing.

# Most important symptoms/effects, acute and delayed

**Symptoms:** Irritating to eyes, respiratory system and skin.



Revision Date: 06-20-2018

Hazards: None known.

# Indication of immediate medical attention and special treatment needed

**Treat symptomatically.** Symptoms may be delayed.

# 5. Fire-fighting measures

**General Fire Hazards:** The product is non-combustible.

#### Suitable (and unsuitable) extinguishing media

Suitable extinguishing

media:

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing

media:

None known.

Specific hazards arising from

the chemical:

During fire, gases hazardous to health may be formed.

# Special protective equipment and precautions for firefighters

Special fire fighting

procedures:

In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool. Cool containers exposed to flames with water until well

after the fire is out.

Special protective equipment

for fire-fighters:

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in

enclosed spaces, SCBA.

## 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Keep unauthorized personnel away. Keep upwind. Ventilate closed spaces before entering them. Avoid inhalation of dust. Use personal protective equipment. See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing

appropriate protective clothing.

Methods and material for containment and cleaning

up:

Sweep up and place in a clearly labeled container for chemical waste.

Clean surface thoroughly to remove residual contamination.

Notification Procedures: Dike for later disposal. Prevent entry into waterways, sewer, basements or

confined areas. Stop the flow of material, if this is without risk. Inform

authorities if large amounts are involved.

**Environmental Precautions:** Do not contaminate water sources or sewer. Prevent further leakage or

spillage if safe to do so.

# 7. Handling and storage

**Precautions for safe handling:** Avoid generation and spreading of dust. Avoid inhalation of dust. Avoid

contact with eyes, skin, and clothing. Do not taste or swallow. Use only with adequate ventilation. Wash hands thoroughly after handling. See Section 8

of the SDS for Personal Protective Equipment.



Revision Date: 06-20-2018

Conditions for safe storage,

including any incompatibilities:

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

place.

# 8. Exposure controls/personal protection

#### **Control Parameters**

**Occupational Exposure Limits** 

None of the components have assigned exposure limits.

**Appropriate Engineering** 

**Controls** 

No data available.

#### Individual protection measures, such as personal protective equipment

**General information:** Good general ventilation (typically 10 air changes per hour) should be used.

Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls

to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the

immediate work area.

**Eye/face protection:** Wear safety glasses with side shields (or goggles). Use tight fitting goggles

if dust is generated.

**Skin Protection** 

Hand Protection: Chemical resistant gloves

Other: Wear suitable protective clothing.

**Respiratory Protection:** In case of inadequate ventilation use suitable respirator. During dust-raising

work: Dust mask/respirator.

**Hygiene measures:** Provide eyewash station and safety shower. Always observe good personal

hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Avoid contact with eyes,

skin, and clothing.

#### 9. Physical and chemical properties

# **Appearance**

Physical state: Solid

Form: Crystals or powder Color: White, Colorless

Odor: Odorless

Odor threshold: No data available.

pH: 7 (15 °C) Saturated solution in water

Melting point/freezing point:770 - 776 °CInitial boiling point and boiling range:1,500 °CFlash Point:Not applicableEvaporation rate:No data available.Flammability (solid, gas):No data available.

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%): No data available.



Revision Date: 06-20-2018

Flammability limit - lower (%):

Explosive limit - upper (%):

No data available.

1.99 g/ml (20 °C)

Relative density:

1.99 (20 °C)

Solubility(ies)

Solubility in water: 344 g/l (20 °C)
Solubility (other): ether: Insoluble

glycerol: 0.071 g/ml

Partition coefficient (n-octanol/water):

Auto-ignition temperature:

No data available.

Other information

Molecular weight: 74.55 g/mol (CIK)

# 10. Stability and reactivity

**Reactivity:** No dangerous reaction known under conditions of normal use.

**Chemical Stability:** Material is stable under normal conditions.

Possibility of hazardous

reactions:

Hazardous polymerization does not occur.

**Conditions to avoid:** Excessive heat. Contact with incompatible materials.

**Incompatible Materials:** Strong oxidizing agents.

**Hazardous Decomposition** 

Products:

Thermal decomposition emits toxic fumes of chlorine. Oxides of potassium.

# 11. Toxicological information

Information on likely routes of exposure

**Inhalation:** May be harmful if inhaled.

**Skin Contact:** May cause irritation.

**Eye contact:** Causes eye irritation.

**Ingestion:** May be harmful if swallowed.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

**Product:** LD 50 (Rat): 2,600 - 3,020 mg/kg

**Dermal** 

**Product:** No data available.



Revision Date: 06-20-2018

Inhalation

**Product:** No data available.

Repeated dose toxicity

**Product:** No data available.

Skin Corrosion/Irritation

**Product:** May cause skin irritation.

Serious Eye Damage/Eye Irritation

**Product:** Causes eye irritation.

Respiratory or Skin Sensitization

**Product:** Not a skin sensitizer.

Carcinogenicity

**Product:** This substance has no evidence of carcinogenic properties.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

**US. National Toxicology Program (NTP) Report on Carcinogens:** 

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

**Germ Cell Mutagenicity** 

In vitro

**Product:** No mutagenic components identified

In vivo

**Product:** No mutagenic components identified

Reproductive toxicity

**Product:** No components toxic to reproduction

**Specific Target Organ Toxicity - Single Exposure** 

**Product:** None known.

**Specific Target Organ Toxicity - Repeated Exposure** 

**Product:** None known.

**Aspiration Hazard** 

Product: Not classified

Other effects: None known.



Revision Date: 06-20-2018

# 12. Ecological information

# **Ecotoxicity:**

## Acute hazards to the aquatic environment:

Fish

**Product:** No data available.

Specified substance(s):

Potassium chloride LC 50 (Bluegill (Lepomis macrochirus), 96 h): 950 - 2,010 mg/l

LC 50 (Western mosquitofish (Gambusia affinis), 96 h): 435 - 485 mg/l LC 50 (Fathead minnow (Pimephales promelas), 96 h): 750 - 1,020 mg/l

**Aquatic Invertebrates** 

Product: No data available.

Specified substance(s):

Potassium chloride EC 50 (Water flea (Daphnia magna), 48 h): 83 - 170.7 mg/l

EC 50 (Tubificid worm (Tubifex tubifex), 48 h): 1,026 - 1,671 mg/l LC 50 (Water flea (Daphnia magna), 48 h): 337 - 880 mg/l

LC 50 (Oligochaete (Nais variabilis), 48 h): 67 - 75 mg/l

EC 50 (Zebra mussel (Dreissena polymorpha), 48 h): 147 - 150 mg/l

## Chronic hazards to the aquatic environment:

Fish

**Product:** No data available.

**Aquatic Invertebrates** 

**Product:** No data available.

**Toxicity to Aquatic Plants** 

**Product:** No data available.

## Persistence and Degradability

Biodegradation

**Product:** The product is readily biodegradable.

**BOD/COD Ratio** 

**Product:** No data available.

Bioaccumulative potential

**Bioconcentration Factor (BCF)** 

**Product:** No data available on bioaccumulation.

Partition Coefficient n-octanol / water (log Kow)

**Product:** No data available.

**Mobility in soil:** The product is water soluble and may spread in water systems.

Other adverse effects: Harmful to aquatic organisms.

## 13. Disposal considerations



Revision Date: 06-20-2018

**Disposal instructions:** Discharge, treatment, or disposal may be subject to national, state, or local

laws. Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and

product characteristics at time of disposal.

**Contaminated Packaging:** Since emptied containers retain product residue, follow label warnings even

after container is emptied.

# 14. Transport information

#### DOT

Not regulated.

#### **IMDG**

Not regulated.

#### **IATA**

Not regulated.

# 15. Regulatory information

#### **US Federal Regulations**

## TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.

## US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

# **CERCLA Hazardous Substance List (40 CFR 302.4):**

None present or none present in regulated quantities.

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)

## **Hazard categories**

Serious eye damage or eye irritation

# SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

## SARA 304 Emergency Release Notification

None present or none present in regulated quantities.

## SARA 311/312 Hazardous Chemical

Chemical Identity Threshold Planning Quantity

Potassium chloride 10000 lbs.

#### SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

# Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

## Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3):

None present or none present in regulated quantities.

## **US State Regulations**



Revision Date: 06-20-2018

## **US. California Proposition 65**

No ingredient regulated by CA Prop 65 present.

## US. New Jersey Worker and Community Right-to-Know Act

No ingredient regulated by NJ Right-to-Know Law present.

#### **US. Massachusetts RTK - Substance List**

No ingredient regulated by MA Right-to-Know Law present.

## US. Pennsylvania RTK - Hazardous Substances

No ingredient regulated by PA Right-to-Know Law present.

## **US. Rhode Island RTK**

No ingredient regulated by RI Right-to-Know Law present.

#### International regulations

# Montreal protocol

Not applicable

#### Stockholm convention

Not applicable

#### Rotterdam convention

Not applicable

#### **Kyoto protocol**

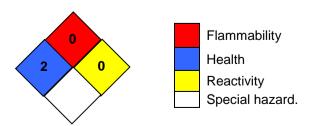
Not applicable

# **Inventory Status:**

Australia AICS: On or in compliance with the inventory Canada DSL Inventory List: On or in compliance with the inventory EINECS, ELINCS or NLP: On or in compliance with the inventory On or in compliance with the inventory Japan (ENCS) List: China Inv. Existing Chemical Substances: On or in compliance with the inventory Korea Existing Chemicals Inv. (KECI): On or in compliance with the inventory Philippines PICCS: On or in compliance with the inventory US TSCA Inventory: On or in compliance with the inventory New Zealand Inventory of Chemicals: On or in compliance with the inventory Mexico INSQ: On or in compliance with the inventory On or in compliance with the inventory Taiwan Chemical Substance Inventory:

## 16.Other information, including date of preparation or last revision

# **NFPA Hazard ID**



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible



Revision Date: 06-20-2018

**Issue Date:** 06-20-2018

**Revision Information:** Not relevant.

Version #: 1.3

**Source of information:** Sources of information used in preparing this SDS included one or more of

the following: results from in house or supplier toxicology studies, information from the Toxicology Data Network (TOXNET), European Chemical Agency (ECHA) substance dossiers, IARC Monographs, US National Toxicology Program data, the Agency for Toxic Substances and Disease Registry, other

manufacturer's SDSs and other sources, as appropriate.

Further Information: No data available.

**Disclaimer:** The information provided in this Safety Data Sheet (SDS) was prepared

based on data believed to be accurate as of the date of this SDS. TO THE GREATEST EXTENT PERMITTED BY LAW, AVANTOR PERFORMANCE MATERIALS ("AVANTOR") EXPRESSLY DISCLAIMS ANY AND ALL

REPRESENTATIONS AND WARRANTIES REGARDING THE INFORMATION CONTAINED HEREIN INCLUDING, WITHOUT

LIMITATION, AS TO ACCURACY, COMPLETENESS, FITNESS FOR PURPOSE OR USE, MERCHANTABILITY, NON-INFRINGEMENT, PERFORMANCE, SAFETY, SUITABILITY AND STABILITY. This SDS is intended as a guide to the appropriate use, handling, storage and disposal of the product to which it relates by properly trained personnel, and is not intended to be comprehensive. Users of Avantor's products are advised to perform their own tests and to exercise their own judgment to determine the safety, suitability and appropriate use, handling, storage and disposal of each product and product combination for their own purposes and uses. TO THE

GREATEST EXTENT PERMITTED BY LAW, AVANTOR DISCLAIMS LIABILITY FOR, AND BY USING AVANTOR'S PRODUCTS PURCHASER AGREES THAT UNDER NO CIRCUMSTANCES SHALL AVANTOR BE LIABLE FOR, SPECIAL, INDIRECT, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES OF ANY TYPE OR KIND, INCLUDING WITHOUT LIMITATION, FOR LOSS OF PROFITS, REPUTATIONAL DAMAGE, PRODUCT RECALL OR BUSINESS INTERRUPTION.