Safety Data Sheet
per OSHA HazCom 2012

1 Identification
Product identifier
Product name: Tripotassium citrate monohydrate
Stock number: 33222
CAS Number: 6100-05-5
EC number: 212-755-5

Relevant identified uses of the substance or mixture and uses advised against.

Details of the supplier of the safety data sheet
Manufacturer/Supplier:
Alfa Aesar
Thermo Fisher Scientific Chemicals, Inc.
30 Bond Street
Ward Hill, MA 01835-8099
Tel: 800-343-0660
Fax: 800-322-4757
Email: tech@alfa.com
www.alfa.com
Emergency telephone number:
During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660. After normal business hours, call Carechem 24 at (866) 928-0789.

2 Hazard(s) Identification
Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS)
The substance is not classified according to the Globally Harmonized System (GHS).

Hazards not otherwise classified
No information known.

2.1 Label elements
GHS label elements Not applicable
Hazard pictograms Not applicable
Signal word Not applicable
Hazard statements Not applicable
WHMIS classification Not controlled
Classification system
HMIS ratings (scale 0-4)
(Hazardous Materials Identification System)
Health (acute effects) = 1
Flammability = 1
Physical Hazard = 1

3 Composition/information on ingredients
Chemical characterization: Substances
CAS# Description: 6100-05-5 Tripotassium citrate monohydrate
Identification number(s): EC number: 212-755-5

4 First-aid measures
Description of first aid measures
After inhalation
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice.

After skin contact
Immediately wash with water and soap and rinse thoroughly. Seek immediate medical advice.

After eye contact
Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing
Seek medical treatment.

5 Fire-fighting measures
Extinguishing media
Suitable extinguishing agents Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special hazards arising from the substance or mixture
If this product is involved in a fire, the following can be released:
Carbon monoxide and carbon dioxide
Potassium oxide

Advice for firefighters
Protective equipment:
Wear self-contained respirator.
Wear fully protective impervious suit.

6 Accidental release measures
Personal precautions, protective equipment and emergency procedures
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation.

Environmental precautions: Do not allow material to be released to the environment without proper governmental permits.

Methods and material for containment and cleaning up: Pick up mechanically.

(Contd. on page 2)
7 Handling and storage

Handling
Precautions for safe handling
Keep container tightly sealed.
Store in cool, dry place in tightly closed containers.

Information about protection against explosions and fires:
No information known.

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:
Store away from oxidizing agents.

Further information about storage conditions:
Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.

Specific end use(s)
No further relevant information available.

8 Exposure controls/personal protection

Additional information about design of technical systems:
Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Control parameters
Components with limit values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information:
No data

Exposure controls
Personal protective equipment

General protective and hygienic measures
The usual precautionary measures for handling chemicals should be followed.
Keep away from foodstuffs, beverages and feed.
Remove all soiled and contaminated clothing immediately.
Wash hands before breaks and at the end of work.
Maintain an ergonomically appropriate working environment.

Breathing equipment:
Use suitable respirator when high concentrations are present.

Protection of hands:
Impervious gloves
Check protective gloves prior to each use for their proper condition.
The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer.

Penetration time of glove material (in minutes)
Not determined

Eye protection:
Safety glasses

Body protection:
Protective work clothing.

9 Physical and chemical properties

Information on basic physical and chemical properties

General information

Appearance:
Form:
Powder or granules

Color:
White

Odor:
Not determined

Odor threshold:
Not determined.

pH-value:
Not applicable.

Change in condition
Melting point/Melting range: 230 °C (446 °F) (dec)
Boiling point/Boiling range:
Not determined
Sublimation temperature / start:
Not determined

Flammability (solid, gaseous):
Not determined.

Ignition temperature:
Not determined

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):
1.98 g/cm³ (16.523 lbs/gal)

Relative density:
Not determined.

Vapor density:
Not applicable.

Evaporation rate:
Not applicable.

Solubility in / Miscibility with
Water:
Soluble

Partition coefficient (n-octanol/water):
Not determined.

Viscosity:
Dynamic:
Not applicable.

Kinematic:
Not applicable.

Other information
No further relevant information available.

10 Stability and reactivity

Reactivity
No information known.

Chemical stability
Stable under recommended storage conditions.

Thermal decomposition / conditions to be avoided:
Decomposition will not occur if used and stored according to specifications.

Possibility of hazardous reactions
Reacts with strong oxidizing agents

Conditions to avoid
No further relevant information available.

Incompatible materials:
Oxidizing agents
### 11 Toxicological information

**Hazardous decomposition products:**
- Carbon monoxide and carbon dioxide
- Potassium oxide

**11.1 Acute toxicity**

The following RTECS statement/statements refer to the anhydrous compound:

**LD/LC50 values that are relevant for classification:** No data

**Skin irritation or corrosion:** May cause irritation

**Eye irritation or corrosion:** May cause irritation

**Sensitization:** No sensitizing effects known.

**Carcinogenicity:** No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

**Reproductive toxicity:** No effects known.

**Specific target organ system toxicity - repeated exposure:** No effects known.

**Aspiration hazard:** No effects known.

**Subacute to chronic toxicity:** No effects known.

**Additional toxicological information:**

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

### 12 Ecological information

**Toxicity**

Aquatic toxicity: No further relevant information available.

Persistence and degradability: No further relevant information available.

Bioaccumulative potential: No further relevant information available.

Mobility in soil: No further relevant information available.

**Additional ecological information:**

- General notes:
  - Do not allow material to be released to the environment without proper governmental permits.
  - Do not allow undiluted product or large quantities to reach ground water, water course or sewage system.
  - Avoid transfer into the environment.

**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:** Consult state, local or national regulations to ensure proper disposal.

**Uncleaned packagings:**

**Recommendation:** Disposal must be made according to official regulations.

**Recommended cleansing agent:** Water, if necessary with cleansing agents.

### 14 Transport information

**UN-Number**

- DOT, ADN, IMDG, IATA: Not applicable

**UN proper shipping name**

- DOT, ADN, IMDG, IATA: Not applicable

**Transport hazard class(es)**

- DOT, ADR, ADN, IMDG, IATA: Not applicable

**Class**

- Not applicable

**Packing group**

- DOT, IMDG, IATA: Not applicable

**Environmental hazards:**

- Not applicable.

**Special precautions for user**

- Not applicable.

**Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

- Not applicable.

**Transport/Additional information:**

- DOT: No

- Marine Pollutant (DOT): No

- UN “Model Regulation”: -

### 15 Regulatory information

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

**GHS label elements:** Not applicable

**Hazard pictograms:** Not applicable

**Signal word:** Not applicable

**Hazard statements:** Not applicable

**National regulations:**

- All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.
- All components of this product are listed on the Canadian Domestic Substances List (DSL).
- SARA Section 313 (specific toxic chemical listings) Substance is not listed.

**California Proposition 65**

- Prop 65 - Chemicals known to cause cancer: Substance is not listed.
- Prop 65 - Developmental toxicity: Substance is not listed.
- Prop 65 - Developmental toxicity, female: Substance is not listed.
- Prop 65 - Developmental toxicity, male: Substance is not listed.
- Information about limitation of use: For use only by technically qualified individuals.

**Other regulations, limitations and prohibitive regulations**

- Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006. Substance is not listed.
- The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed.

- Substance is not listed.
16 Other information

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Department issuing SDS: Global Marketing Department

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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)
DOT: US Department of Transportation
EINECS: European Inventory of Existing Commercial Chemical Substances
HMIS: Hazardous Materials Identification System (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
vPvB: very Persistent and very Bioaccumulative
ACGIH: American Conference of Governmental Industrial Hygienists (USA)
OSHA: Occupational Safety and Health Administration (USA)
NTP: National Toxicology Program (USA)
IARC: International Agency for Research on Cancer
EPA: Environmental Protection Agency (USA)