

# SAFETY DATA SHEETS

According to the UN GHS revision 10

Version: 1.1  
Creation Date: July 15, 2024  
Revision Date: January 03, 2025

## SECTION 1: Identification

### 1.1 GHS Product identifier

**Product name** 7778-80-5 1K573LC5TV Potassium sulfate Sulfuric acid, dipotassium salt Potassium sulfate [USAN:JAN] Potassium sulfate (2:1) Potassium sulphate, containing in the dry state more than 52 per cent by weight of K<sub>2</sub>O Sulphuric acid, potassium salt Sulfuric acid, potassium salt Sulfuric acid potassium salt (1:2) Sulfuric acid dipotassium salt Sulfuric acid, potassium salt (1:?) Arcanum duplicatum Caswell No. 702 Dipotassium sulfate EINECS 231-915-5 EINECS 233-558-0 EPA Pesticide Chemical Code 005603 HSDB 5047 Kalium sulphuricum Potassium sulfate (K<sub>2</sub>(SO<sub>4</sub>)) Potassium sulphate Sal Polychrestum UNII-1K573LC5TV Sulfato de potasio EC 231-915-5

### 1.2 Other means of identification

**Product number** C1925794  
**Other names** -

### 1.3 Recommended use of the chemical and restrictions on use

**Identified uses** For laboratory and Industrial use only.  
**Uses advised against** no data available

### 1.4 Supplier's details

**Company** CATO Research Chemicals Inc.  
**Address** 3/F,Building B,No.179 BASIGO, Guangpu Rd East,Huangpu Dist,Guangzhou  
**Telephone** +86-20-81960175

### 1.5 Emergency phone number

**Emergency phone number** +86-20-81960175  
**Service hours** 'Monday to Friday, 9am-5pm (Standard time zone: UTC/GMT +8 hours).

## SECTION 2: Hazard identification

### 2.1 Classification of the substance or mixture

Not classified.

### 2.2 GHS label elements, including precautionary statements

**Pictogram(s)** No symbol.  
**Signal word** No signal word  
**Hazard statement(s)** none  
**Precautionary statement(s)**  
**Prevention** none  
**Response** none  
**Storage** none  
**Disposal** none

### 2.3 Other hazards which do not result in classification

no data available

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

| Chemical name | Common names and synonyms | CAS number | EC number | Concentration |
|---------------|---------------------------|------------|-----------|---------------|
|---------------|---------------------------|------------|-----------|---------------|

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                   |           |           |       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-----------|-----------|-------|
| 7778-80-5 1K573LC5TV Potassium sulfate Sulfuric acid, dipotassium salt Potassium sulfate [USAN:JAN] Potassium sulfate (2:1) Potassium sulphate, containing in the dry state more than 52 per cent by weight of K <sub>2</sub> O Sulphuric acid, potassium salt Sulfuric acid, potassium salt Sulfuric acid potassium salt (1:2) Sulfuric acid dipotassium salt Sulfuric acid, potassium salt (1:?) Arcanum duplicatum Caswell No. 702 Dipotassium sulfate EINECS 231-915-5 EINECS 233-558-0 EPA Pesticide Chemical Code 005603 HSDB 5047 Kalium sulphuricum Potassium sulfate (K <sub>2</sub> (SO <sub>4</sub> )) Potassium sulphate Sal Polychrestum UNII-1K573LC5TV Sulfato de potasio EC 231-915-5 | Potassium sulfate | 7778-80-5 | 231-915-5 | ≈ 99% |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-----------|-----------|-------|

## SECTION 4: First-aid measures

### 4.1 Description of necessary first-aid measures

#### If inhaled

Fresh air, rest.

#### Following skin contact

Rinse and then wash skin with water and soap.

#### Following eye contact

First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention.

#### Following ingestion

Give one or two glasses of water to drink.

### 4.2 Most important symptoms/effects, acute and delayed

no data available

### 4.3 Indication of immediate medical attention and special treatment needed, if necessary

no data available

## SECTION 5: Fire-fighting measures

### 5.1 Suitable extinguishing media

In case of fire in the surroundings, use appropriate extinguishing media.

### 5.2 Specific hazards arising from the chemical

Not combustible.

### 5.3 Special protective actions for fire-fighters

In case of fire in the surroundings, use appropriate extinguishing media.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Sweep spilled substance into covered containers. Personal protection: particulate filter respirator adapted to the airborne concentration of the substance.

### 6.2 Environmental precautions

Sweep spilled substance into covered containers. Personal protection: particulate filter respirator adapted to the airborne concentration of the substance.

### 6.3 Methods and materials for containment and cleaning up

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

### 7.2 Conditions for safe storage, including any incompatibilities

Store the container tightly closed in a dry, cool and well-ventilated place. Store apart from foodstuff containers or incompatible materials.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational Exposure limit values

|           |                           |                   |                          |                   |
|-----------|---------------------------|-------------------|--------------------------|-------------------|
| Component | Potassium sulfate         |                   |                          |                   |
| CAS No.   | 7778-80-5                 |                   |                          |                   |
|           | Limit value - Eight hours |                   | Limit value - Short term |                   |
|           | ppm                       | mg/m <sup>3</sup> | ppm                      | mg/m <sup>3</sup> |
| Latvia    |                           | 10                |                          |                   |
|           | Remarks                   |                   |                          |                   |

#### Biological limit values

no data available

### 8.2 Appropriate engineering controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

### 8.3 Individual protection measures, such as personal protective equipment (PPE)

#### Eye/face protection

Wear safety goggles.

#### Skin protection

Protective gloves.

#### Respiratory protection

Use local exhaust.

#### Thermal hazards

no data available

## SECTION 9: Physical and chemical properties and safety characteristics

|                                                          |                                                          |
|----------------------------------------------------------|----------------------------------------------------------|
| Physical state                                           | Solid.                                                   |
| Colour                                                   | COLORLESS OR WHITE CRYSTALS, OR WHITE GRANULES OR POWDER |
| Odour                                                    | ODORLESS                                                 |
| Melting point/freezing point                             | 1 067 °C.                                                |
| Boiling point or initial boiling point and boiling range | 1 689 °C.                                                |
| Flammability                                             | Not combustible.                                         |
| Lower and upper explosion limit/flammability limit       | no data available                                        |
| Flash point                                              | 1689°C                                                   |
| Auto-ignition temperature                                | no data available                                        |
| Decomposition temperature                                | no data available                                        |
| pH                                                       | Ca. 7. Remarks: Aqueous solution.                        |
| Kinematic viscosity                                      | no data available                                        |
| Solubility                                               | Freely soluble in water, insoluble in ethanol            |
| Partition coefficient n-octanol/water                    | no data available                                        |
| Vapour pressure                                          | no data available                                        |
| Density and/or relative density                          | 2.66 g/cm <sup>3</sup> .                                 |
| Relative vapour density                                  | no data available                                        |
| Particle characteristics                                 | no data available                                        |

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Decomposes on heating. This produces sulfur oxides.

### 10.2 Chemical stability

Permanent in air

### 10.3 Possibility of hazardous reactions

Decomposes on heating. This produces sulfur oxides.

### 10.4 Conditions to avoid

no data available

## 10.5 Incompatible materials

no data available

## 10.6 Hazardous decomposition products

no data available

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## SECTION 11: Toxicological information

### Acute toxicity

- Oral: no data available
- Inhalation: LC0 - rat (male) - 3.6 mg/m<sup>3</sup> air.
- Dermal: LD50 - rat (male/female) - > 2 000 mg/kg bw.

### Skin corrosion/irritation

no data available

### Serious eye damage/irritation

no data available

### Respiratory or skin sensitization

no data available

### Germ cell mutagenicity

no data available

### Carcinogenicity

no data available

### Reproductive toxicity

no data available

### STOT-single exposure

The substance is mildly irritating to the eyes, skin and respiratory tract.

### STOT-repeated exposure

no data available

### Aspiration hazard

Evaporation at 20°C is negligible; a nuisance-causing concentration of airborne particles can, however, be reached quickly when dispersed, especially if powdered.

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## SECTION 12: Ecological information

### 12.1 Toxicity

- Toxicity to fish: LC50 - Pimephales promelas - 680 mg/L - 96 h.
- Toxicity to daphnia and other aquatic invertebrates: LC50 - Daphnia magna - 720 mg/L - 48 h.
- Toxicity to algae: EC50 - Chlorella vulgaris - 2 700 mg/L - 18 d.
- Toxicity to microorganisms: no data available

### 12.2 Persistence and degradability

no data available

### 12.3 Bioaccumulative potential

no data available

### 12.4 Mobility in soil

no data available

### 12.5 Other adverse effects

no data available

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## SECTION 13: Disposal considerations

### 13.1 Disposal methods

#### Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

#### Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

## SECTION 14: Transport information

### 14.1 UN Number

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

### 14.2 UN Proper Shipping Name

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

### 14.3 Transport hazard class(es)

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

### 14.4 Packing group, if applicable

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

### 14.5 Environmental hazards

ADR/RID: No

IMDG: No

IATA: No

### 14.6 Special precautions for user

no data available

### 14.7 Transport in bulk according to IMO instruments

no data available

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations specific for the product in question

| Chemical name                                                            | Common names and synonyms | CAS number | EC number   |
|--------------------------------------------------------------------------|---------------------------|------------|-------------|
| Potassium sulfate                                                        | Potassium sulfate         | 7778-80-5  | 231-915-5   |
| European Inventory of Existing Commercial Chemical Substances (EINECS)   |                           |            | Listed.     |
| EC Inventory                                                             |                           |            | Listed.     |
| United States Toxic Substances Control Act (TSCA) Inventory              |                           |            | Listed.     |
| China Catalog of Hazardous chemicals 2015                                |                           |            | Not Listed. |
| New Zealand Inventory of Chemicals (NZIoC)                               |                           |            | Listed.     |
| Philippines Inventory of Chemicals and Chemical Substances (PICCS)       |                           |            | Listed.     |
| Vietnam National Chemical Inventory                                      |                           |            | Listed.     |
| Chinese Chemical Inventory of Existing Chemical Substances (China IECSC) |                           |            | Listed.     |
| Korea Existing Chemicals List (KECL)                                     |                           |            | Listed.     |

## SECTION 16: Other information

#### Information on revision

Creation Date July 15, 2024  
Revision Date January 03, 2025

#### Abbreviations and acronyms

- CAS: Chemical Abstracts Service
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- RID: Regulation concerning the International Carriage of Dangerous Goods by Rail
- IMDG: International Maritime Dangerous Goods
- IATA: International Air Transportation Association
- TWA: Time Weighted Average
- STEL: Short term exposure limit
- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- EC50: Effective Concentration 50%

#### References

- IPCS - The International Chemical Safety Cards (ICSC), website: <http://www.ilo.org/dyn/icsc/showcard.home>



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- HSDB - Hazardous Substances Data Bank, website: <https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm>
  - IARC - International Agency for Research on Cancer, website: <http://www.iarc.fr/>
  - eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: [http://www.echemportal.org/echemportal/index?pageID=0&request\\_locale=en](http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en)
  - CAMEO Chemicals, website: <http://cameochemicals.noaa.gov/search/simple>
  - ChemIDplus, website: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>
  - ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: <http://www.phmsa.dot.gov/hazmat/library/erg>
  - Germany GESTIS-database on hazard substance, website: <http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp>
  - ECHA - European Chemicals Agency, website: <https://echa.europa.eu/>

**Any questions regarding this SDS, Please send your inquiry to [info@cato-chem.com](mailto:info@cato-chem.com)**

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