



Ultrasol SOP

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 11/13/2018

Revision date: 10/29/2018

Supersedes: 11/15/2012

Version: 4.1

SECTION 1: Identification

1.1. Identification

Product form : Substance
Trade name : Ultrasol SOP
Chemical name : Potassium Sulfate
CAS-No. : 7778-80-5
Product code : 005_USA
Formula : H2O4S.2K
Other means of identification : Sulphate of Potash
Ultrasol SOP
Ultrasol SOP 52
Ultrasol SOP-WS

1.2. Recommended use and restrictions on use

Recommended use : Fertilizers, Formulation [mixing] of preparations and/or re-packaging (excluding alloys),
Industrial uses: Uses of substances as such or in preparations at industrial sites

1.3. Supplier

Supplier

SQM North America
2727 Paces Ferry Rd, Building Two, Suite 1425
Atlanta, GA 30339 - United States
T (770) 916 9400 - F (700) 916 9404
product_safety@sqm.com; spn-northamerica@sqm.com; ind-northamerica@sqm.com; www.sqm.com

1.4. Emergency telephone number

Emergency number : For Chemical Emergency Call CHEMTREC 24hr/day 7days/week

Within USA and Canada: 1-800-424-9300
Outside USA and Canada: +1 703-741-5970
(collect calls accepted)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Not classified

2.2. GHS Label elements, including precautionary statements

GHS US labeling

No labeling applicable

2.3. Other hazards which do not result in classification

Other hazards not contributing to the classification : None known.

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Substance type : Mono-constituent

| Name | Product identifier | % | GHS-US classification |
|-----------------------------------------|---------------------|------|-----------------------|
| Potassium Sulfate (Main constituent) | (CAS-No.) 7778-80-5 | > 94 | Not classified |

Full text of hazard classes and H-statements : see section 16

3.2. Mixtures

Not applicable

Ultrasol SOP

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 4: First-aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. In all cases of doubt, or when symptoms persist, seek medical attention.
- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell.
- First-aid measures after skin contact : Wash skin with plenty of water. If skin irritation occurs: Get medical advice/attention.
- First-aid measures after eye contact : Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : Rinse mouth. Drink plenty of water. Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

- Symptoms/effects after inhalation : May cause respiratory irritation.
- Symptoms/effects after skin contact : May cause slight irritation to the skin.
- Symptoms/effects after eye contact : May cause eye irritation.
- Symptoms/effects after ingestion : On ingestion in large quantities: May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.
- Unsuitable extinguishing media : None known.

5.2. Specific hazards arising from the chemical

- Explosion hazard : Not explosive.
- Reactivity in case of fire : Thermal decomposition generates : Sulphur oxides.

5.3. Special protective equipment and precautions for fire-fighters

- Firefighting instructions : Use extinguishing media appropriate for surrounding fire. Dilute toxic gases with water spray.
- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
- Other information : Thermal decomposition generates : Sulphur oxides.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Use personal protective equipment as required. Ventilate area. Avoid dust formation.

6.1.1. For non-emergency personnel

- Protective equipment : For further information refer to section 8: "Exposure controls/personal protection".
- Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. Use personal protective equipment as required. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Do not allow into drains or water courses.

6.3. Methods and material for containment and cleaning up

- For containment : Take up mechanically (sweeping, shoveling) and collect in suitable container for disposal.
- Methods for cleaning up : Mechanically recover the product. Do not absorb with saw-dust or any other combustible absorbent material. Notify authorities if product enters sewers or public waters.
- Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

Ultrasol SOP

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Avoid dust formation. Ensure good ventilation of the work station. Do not breathe dust. Wear personal protective equipment.
- Hygiene measures : General protective and hygienic measures. Keep away from food, drink and animal feedingstuffs. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Containers which are opened should be properly resealed and kept upright to prevent leakage.
- Storage conditions : Store in a closed container. Store in a dry place. Store in a well-ventilated place. Keep cool.
- Incompatible materials : None known.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| Ultrasol SOP (7778-80-5) | | |
|--------------------------|-----------------------------------------|-----------------|
| ACGIH | ACGIH TWA (mg/m ³) | Not established |
| ACGIH | ACGIH Ceiling (mg/m ³) | Not established |
| OSHA | OSHA PEL (TWA) (mg/m ³) | Not established |
| OSHA | OSHA PEL (Ceiling) (mg/m ³) | Not established |

8.2. Appropriate engineering controls

- Appropriate engineering controls : Local exhaust is recommended where dust may occur.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves. nitrile rubber gloves. (recommended)

Eye protection:

Protective goggles

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of inadequate ventilation wear respiratory protection. Dust production: dust mask with filter type P1

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Solid
- Appearance : Crystalline powder.
- Color : White
- Odor : odorless
- Odor threshold : Not applicable
- pH : 4.5 - 8.5 Aqueous solution: 5%
- Melting point : 1067 °C / 1953° F
- Freezing point : Not applicable
- Boiling point : 1689 °C / 3072°F
- Flash point : Not applicable
- Relative evaporation rate (butyl acetate=1) : Not volatile
- Flammability (solid, gas) : Not flammable.
- Vapor pressure : Not applicable
- Relative vapor density at 20 °C : Not applicable
- Relative density : No data available

Ultrasol SOP

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| | |
|---------------------------|-------------------------------------------------|
| Molecular mass | : 174.26 g/mol |
| Solubility | : Soluble in water. Water: > 100 g/l at 68°F |
| Log Pow | : Not applicable Not applicable |
| Auto-ignition temperature | : Not applicable |
| Decomposition temperature | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : Not applicable |
| Explosion limits | : Not applicable |
| Explosive properties | : Product is not explosive. |
| Oxidizing properties | : Non oxidizing material. |

9.2. Other information

| | |
|--------------|---------------------------------|
| Bulk density | : 1100 - 1600 kg/m ³ |
|--------------|---------------------------------|

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

None under recommended storage and handling conditions (see section 7). None known.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

thermal decomposition may produce : Sulphur oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

| | |
|-----------------------------|------------------|
| Acute toxicity (oral) | : Not classified |
| Acute toxicity (dermal) | : Not classified |
| Acute toxicity (inhalation) | : Not classified |

| Ultrasol SOP (7778-80-5) | |
|--------------------------|-----------------------------------------------------|
| LD50 oral rat | > 2000 mg/kg body weight (OECD 423 method) |
| LD50 dermal rat | > 2000 mg/kg body weight (OECD 402 method) / EU B.3 |

| | |
|-----------------------------------|-------------------------------------------------------------------------------------|
| Skin corrosion/irritation | : Not classified pH: 4.5 - 8.5 Aqueous solution: 5% |
| Serious eye damage/irritation | : Not classified pH: 4.5 - 8.5 Aqueous solution: 5% |
| Respiratory or skin sensitization | : Not classified |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified (Based on available data, the classification criteria are not met) |

| Ultrasol SOP (7778-80-5) | |
|------------------------------------------|------------|
| IARC group | Not listed |
| National Toxicology Program (NTP) Status | Not listed |

| | |
|----------------------------------------------------|------------------|
| Reproductive toxicity | : Not classified |
| Specific target organ toxicity – single exposure | : Not classified |
| Specific target organ toxicity – repeated exposure | : Not classified |

Ultrasol SOP

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| Ultrasol SOP (7778-80-5) | |
|---------------------------------------------|---------------------------------------------|
| NOAEL (subacute,oral,animal/male,28 days) | >= 1500 mg/kg body weight (OECD 422 method) |
| NOAEL (subchronic,oral,animal/male,90 days) | 256 mg/kg body weight (OECD 453 method) |

| | |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------|
| Aspiration hazard | : Not classified |
| Viscosity, kinematic | : No data available |
| Symptoms/effects after inhalation | : May cause respiratory irritation. |
| Symptoms/effects after skin contact | : May cause slight irritation to the skin. |
| Symptoms/effects after eye contact | : May cause eye irritation. |
| Symptoms/effects after ingestion | : On ingestion in large quantities: May cause gastrointestinal irritation, nausea, vomiting and diarrhea. |

SECTION 12: Ecological information

12.1. Toxicity

| | |
|-------------------|------------------------------------------------------------------------------------------------------------------------|
| Ecology - general | : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment. |
|-------------------|------------------------------------------------------------------------------------------------------------------------|

| Ultrasol SOP (7778-80-5) | |
|--------------------------|------------------------------------------------|
| LC50 fish 1 | 680 mg/l Pimephales promelas, EPA 600/4-90/027 |
| EC50 Daphnia 1 | 720 mg/l EPA 600/4-90/027 |
| ErC50 (algae) | 2700 mg/l Chlorella Vulgaris |
| NOEC chronic algae | >= 100 mg/l Chlorella Vulgaris |

12.2. Persistence and degradability

| Ultrasol SOP (7778-80-5) | |
|-------------------------------|------------------------------------------------------------------|
| Persistence and degradability | Contains no substances known to be hazardous to the environment. |

12.3. Bioaccumulative potential

| Ultrasol SOP (7778-80-5) | |
|---------------------------|------------------------------------------------------------------|
| Log Pow | Not applicable |
| Log Kow | Not applicable |
| Bioaccumulative potential | Low bioaccumulation potential. Material highly soluble in water. |

12.4. Mobility in soil

| Ultrasol SOP (7778-80-5) | |
|--------------------------|---------------------------------------------------------|
| Ecology - soil | Soluble in water. Expected to be highly mobile in soil. |

12.5. Other adverse effects

| | |
|-----------------------|---------------|
| Other adverse effects | : None known. |
|-----------------------|---------------|

SECTION 13: Disposal considerations

13.1. Disposal methods

| | |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Regional legislation (waste) | : Disposal must be done according to official regulations. Dispose in a safe manner in accordance with local/national regulations. This product is not listed as a dangerous waste in the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. |
| Waste treatment methods | : Dispose of at a licensed waste collection center. Dispose of contents/container in accordance with licensed collector's sorting instructions. |
| Sewage disposal recommendations | : Do not flush into surface water or sewer system. |

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated

Transportation of Dangerous Goods

Not regulated

Ultrasol SOP

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Transport by sea

Not regulated

Air transport

Not regulated

SECTION 15: Regulatory information

15.1. US Federal regulations

Ultrasol SOP (7778-80-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

Ultrasol SOP (7778-80-5)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

Ultrasol SOP (7778-80-5)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

Ultrasol SOP (7778-80-5)

Listed on INSQ (Mexican National Inventory of Chemical Substances)
 Listed on the AICS (Australian Inventory of Chemical Substances)
 Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
 Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
 Listed on the Korean ECL (Existing Chemicals List)
 Listed on NZIoC (New Zealand Inventory of Chemicals)
 Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
 Listed on CICR (Turkish Inventory and Control of Chemicals)

15.3. US State regulations

Ultrasol SOP (7778-80-5)

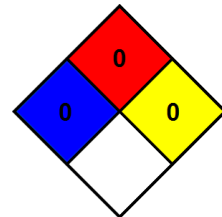
U.S. - California - Proposition 65 - Other information

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 10/29/2018
 Data sources : REACH registrations.
 NFPA health hazard : 0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.
 NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.
 NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



Indication of changes:

| Section | Changed item | Change | Comments |
|---------|--------------|----------------------------------------|----------|
| | | This sheet has been revised completely | |

Ultrasol SOP

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| | | (changes were not marked) | |
|------|---------------------------------------------|---------------------------|---------------------------|
| 1 | Emergency number | Modified | |
| 1 | Other means of identification | Modified | Product name - Trade name |
| 8.1 | DNEL/DMEL (Workers) | Removed | |
| 11 | Acute toxicity | Added | Inhalation |
| 11 | Repeated dose toxicity | Added | Additional information |
| 12.1 | Ecological information | Modified | algae |
| 15 | Hazardous Product Inventory | Added | |
| 16 | NFPA (National Fire Protection Association) | Modified | NFPA health hazard |

SDS US (GHS HazCom 2012)

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