REAGENTS DUKSAN

# SAFETY DATA SHEET

**According to OSHA Hazcom Standard 29 CFR 1910.1200**

## Potassium Thiocyanate

**Date of issue: 2020-07-21** **Revision date: 2023-07-07** **Version: R0004.0001**

## 1. IDENTIFICATION

### A. Product name

- Potassium Thiocyanate

### B. Recommended use and restriction on use

- General use : for experimental, research and industrial use
- Restriction on use : Never drink, Not used except for experimental, research and industrial applications.

### C. Manufacturer / Supplier / Distributor information

○ **Manufacturer information**

- Company name : DUKSAN PURE CHEMICALS
- Address : 53,SINWONRO 133BEONGIL, DANWONGU, ANSANSHI, GYUNGGIDO, KOREA
- Emergency telephone number : 82-31-495-4055

○ **Supplier/Distributer information**

- Company name : DUKSAN PURE CHEMICALS
- Address : 53,SINWONRO 133BEONGIL, DANWONGU, ANSANSHI, GYUNGGIDO, KOREA
- Telephone number : 82-31-495-4055
- Emergency telephone number : 82-31-495-4055
- Fax number : 82-31-495-4058

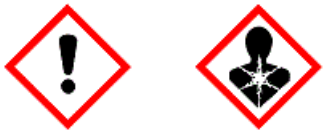
## 2. HAZARD IDENTIFICATION

### A. GHS Classification

- Acute toxicity (oral) : Category4
- Skin corrosion/irritation : Category2
- Serious eye damage/irritation : Category2A
- Reproductive toxicity : Category2
- Specific target organ toxicity(Single exposure) : Category3(Narcotic effects)
- Specific target organ toxicity(Repeated exposure) : Category2

### B. GHS label elements

○ **Hazard symbols**



○ **Signal words**

- Warning

○ **Hazard statements**

- H302 Harmful if swallowed
- H315 Causes skin irritation
- H319 Causes serious eye irritation
- H336 May cause drowsiness and dizziness.
- H361 Suspected of damaging fertility or the unborn child
- H373 May cause damage to organs through prolonged or repeated exposure (Refer Section SDS 11)

○ **Precautionary statements**

**1) Prevention**

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P260 Do not breathe dust/fume.
- P261 Avoid breathing dust/fume.
- P264 Wash hands thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P271 Use only outdoors or in a well-ventilated area.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.

**2) Response**

- P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- P302+P352 IF ON SKIN: Wash with plenty of soap and water.
- P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P308+P313 If exposed or concerned: Get medical advice/attention.
- P312 Call a POISON CENTER or doctor/physician if you feel unwell.
- P314 Get medical advice/attention if you feel unwell.
- P321 Specific treatment
- P330 Rinse mouth.
- P332+P313 If skin irritation occurs: Get medical advice/attention.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P362 Take off contaminated clothing and wash before reuse.

**3) Storage**

- P403+P233 Store in a well-ventilated place. Keep container tightly closed.
- P405 Store locked up.

**4) Disposal**

- P501 Dispose of contents/container in accordance with local/regional/national/international regulation

### C. Other hazards which do not result in classification

- Not available

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | Trade names and Synonyms | CAS No. | Content(%) |
|---|---|---|---|
| Potassium thiocyanate | - | 333-20-0 | 100 |

## 4. FIRST AID MEASURES

### A. Eye contact

- Do not rub your eyes.
- Immediately flush eyes with plenty of water for at least 15 minutes and call a doctor/physician.
- Get medical attention immediately.
- Go to the hospital immediately if symptoms(flare, irritate) occur.
- Remove contact lenses if worn.

### B. Skin contact

- Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
- Wash contaminated clothing thoroughly before re-using.
- Get medical attention immediately.
- Go to the hospital immediately if symptoms(flare, irritate) occur.
- Wash thoroughly after handling.

### C. Inhalation contact

- When exposed to large amounts of steam and mist, move to fresh air.
- Take specific treatment if needed.

- Get medical attention immediately.
- If breathing is stopped or irregular, give artificial respiration and supply oxygen.

### D. Ingestion contact

- Please be advised by doctor whether induction of vomit is demanded or not.
- Rinse your mouth with water immediately.
- Get medical attention immediately.

### E. Delayed and immediate effects and also chronic effects from short and long term exposure

- Not available

### F. Notes to physician

- Notify medical personnel of contaminated situations and have them take appropriate protective measures.
- If exposed or concerned, get medical attention/advice.

## 5. FIREFIGHTING MEASURES

### A. Suitable (Unsuitable) extinguishing media

- Dry chemical, carbon dioxide, regular foam extinguishing agent, spray
- Avoid use of water jet for extinguishing

### B. Specific hazards arising from the chemical

- Not available

### C. Special protective actions for firefighters

- Keep unauthorized personnel out.
- Notify your local firestation and inform the location of the fire and characteristics hazard.
- In case of conflagration, use automatic fire sprinkler. Major fire may require withdrawal, allowing the object itself to burn.
- Avoid inhalation of materials or combustion by-products.
- Do not approach the tank surrounded by fire until it is extinguished.
- Keep containers cool with water spray.

## 6. ACCIDENTAL RELEASE MEASURES

### A. Personal precautions, protective equipment and emergency procedures

- Ventilate closed spaces before entering.
- Must work against the wind, let the upwind people to evacuate.
- Remove all sources of ignition.
- Handle the damaged containers or spilled material after wearing appropriate protective equipment
- Avoid skin contact and inhalation.
- Keep unauthorized people away,isolate hazard area and deny entry.

### B. Environmental precautions

- Prevent runoff and contact with waterways, drains or sewers.
- If large amounts have been spilled, inform the relevant authorities.

### C. Methods and materials for containment and cleaning up

- Large spill : Stay upwind and keep out of low areas. Dike for later disposal.
- Notify the central and local government if the emission reach the standard threshold.
- Disposal of waste shall be in compliance with the Wastes Control?Act
- Appropriate container for disposal of spilled material collected.
- Small liquid state spills: Appropriate container for disposal of spilled material collected.
- Put the spilled material in an appropriate containers and clean the contaminated area

## 7. HANDLING AND STORAGE

### A. Precautions for safe handling

- Wash thoroughly after handling.
- Avoid contact with incompatible materials.
- Operators should wear antistatic footwear and clothing.
- Contaminated work clothing should not be allowed out of the workplace.

### B. Conditions for safe storage, including any incompatibilities

- Check regularly for leaks.
- Do not use damaged containers.
- Do not apply direct heat.
- Store according to current laws and regulations
- Keep in the original container.
- Collected them in sealed containers.
- Do not eat, drink or smoke when using this product.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### A. Exposure limits

○ **ACGIH TLV**

- Not available

○ **OSHA PEL**

- Not available

### B. Engineering controls

- Business owner is recommended to maintain below recommended exposure limits for the working place with general exhaust of gas/vapour/mist/fume.

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

○ **Respiratory protection**

- Respiratory protection is ranked in order from minimum to maximum.
- Consider warning properties before use.
- Under conditions of frequent use or heavy exposure, Respiratory protection may be needed.
- Dust, mist, fume-purifying respiratory protection
- Air-purifying respirator with high-efficiency particulate filtering
- Any respiratory protection with a electromotion fan(for dust, mist, fume-purifying)
- Self-contained breathing apparatus with a corpuscle filter of high efficiency
- For Unknown Concentration or Immediately Dangerous to Life or Health : Any supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply. Any self-contained breathing apparatus with a full facepiece.

○ **Eye protection**

- Wear primary eye protection such as splash resistant safety goggles with a secondary protection face shield.
- Provide an emergency eye wash station and quick drench shower in the immediate work area.

○ **Hand protection**

- Wear appropriate glove.

○ **Skin protection**

- Wear appropriate clothing.

○ **Others**

- Not available

## 9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---|
| A. Appearance | |
| - Appearance | Solid(Other) |
| - Color | colorless |
| B. Odor | odorless |
| C. Odor threshold | Not available |
| D. pH | Not available |
| E. Melting point/Freezing point | 173 ℃ |

| | |
|---|---|
| F. Initial Boiling Point/Boiling Ranges | 500 ℃ |
| G. Flash point | 500 ℃ |
| H. Evaporation rate | Not available |
| I. Flammability(solid, gas) | Not available |
| J. Upper/Lower Flammability or explosive limits | Not available |
| K. Vapour pressure | Not available |
| L. Solubility | very soluble in water |
| M. Vapour density | Not available |
| N. Specific gravity(Relative density) | 1.9 |
| O. Partition coefficient of n-octanol/water | Not available |
| P. Autoignition temperature | Not available |
| Q. Decomposition temperature | 500 ℃ |
| R. Viscosity | Not available |
| S. Molecular weight | 97.181 |

## 10. STABILITY AND REACTIVITY

### A. Chemical Stability

- This material is stable under recommended storage and handling conditions.

### B. Possibility of hazardous reactions

- Hazardous Polymerization will not occur.

### C. Conditions to avoid

- Avoid contact with incompatible materials and condition.
- Avoid : Accumulation of electrostatic charges, Heating, Flames and hot surfaces

### D. Incompatible materials

- Not available

### E. Hazardous decomposition products

- May emit flammable vapour if involved in fire.

## 11. TOXICOLOGICAL INFORMATION

### A. Information on the likely routes of exposure

○ **(Respiratory tracts)**

- Not available

○ **(Oral)**

- Harmful if swallowed

○ **(Eye·Skin)**

- Causes serious eye irritation
- Causes skin irritation

### B. Delayed and immediate effects and also chronic effects from short and long term exposure

○ **Acute toxicity**

*** Oral**

- [Potassium thiocyanate] : LD50 854 ㎎/㎏ Rat (NLM)

*** Dermal**

- Not available

*** Inhalation**

- Not available

○ **Skin corrosion/irritation**

- Causes skin irritation

○ **Serious eye damage/irritation**

- Causes serious eye irritation

○ **Respiratory sensitization**

- Not available

○ **Skin sensitization**

- Not available

○ **Carcinogenicity**

*** IARC**

- Not available

*** OSHA**

- Not available

*** ACGIH**

- Not available

*** NTP**

- Not available

*** EU CLP**

- Not available

○ **Germ cell mutagenicity**

- Not available

○ **Reproductive toxicity**

- Suspected of damaging fertility or the unborn child

○ **STOT-single exposure**

- May cause drowsiness and dizziness.

○ **STOT-repeated exposure**

- May cause damage to organs through prolonged or repeated exposure

○ **Aspiration hazard**

- Not available

## 12. ECOLOGICAL INFORMATION

### A. Ecotoxicity

○ **Fish**

- [Potassium thiocyanate] : LC50 11 ㎎/ℓ 96 hr Oncorhynchus mykiss (ECOTOX)

○ **Crustaceans**

- [Potassium thiocyanate] : LC50 11 ㎎/ℓ 48 hr Daphnia pulex (ECOTOX)

○ **Algae**

- Not available

### B. Persistence and degradability

○ **Persistence**

- Not available

○ **Degradability**

- Not available

### C. Bioaccumulative potential

○ **Bioaccumulative potential**

- [Potassium thiocyanate] : BCF 13.8 (Pimephales promelas , Duration of exposure 124 days, Exposure concentrations 32600ug/L) (ECOTOX)

○ **Biodegradation**

- Not available

### D. Mobility in soil

- Not available

### E. Other adverse effects

- Not available

## 13. DISPOSAL CONSIDERATIONS

### A. Disposal methods

- Stabilization and minimization treatment by incineration or similar method can be applied, if more than two kinds of designated wastes are in mixture state and it is impractical to separate them
- Oil water separation technology shall be applied as pre-waste treatment if it is applicable
- It shall be treated by incineration

### B. Special precautions for disposal

- Anyone with business license number who generates industrial wastes shall treat the waste by him/herself or by entrusting to the legal entities who treat the wastes, recycle the wastes of others or install and operate the waste treatment facilities according to the Wastes Control Act
- Dispose of waste in accordance with all applicable laws and regulations.

## 14. TRANSPORT INFORMATION

### A. UN No. (IMDG CODE/IATA DGR)

- Not applicable

### B. Proper shipping name

- Not applicable

### C. Hazard Class

- Not applicable

### D. IMDG CODE/IATA DGR Packing group

- Not applicable

### E. Marine pollutant

- Not applicable

### F. Special precautions for user related to transport or transportation measures

- Local transport follows in accordance with Dangerous goods Safety Management Law.
- Package and transport follow in accordance with Department of Transportation (DOT) and other regulatory agency requirements.
- EmS FIRE SCHEDULE : Not available
- EmS SPILLAGE SCHEDULE : Not available
- Air transport(IATA): Not subject to IATA regulations.

## 15. REGULATORY INFORMATION

### A. National and/or international regulatory information

○ **POPs Management Law**

- [Potassium thiocyanate] : Not applicable

○ **Information of EU Classification**

*** Classification**

- Not applicable

○ **U.S. Federal regulations**

*** OSHA PROCESS SAFETY (29CFR1910.119)**

- Not applicable

*** CERCLA Section 103 (40CFR302.4)**

- Not applicable

*** EPCRA Section 302 (40CFR355.30)**

- Not applicable

*** EPCRA Section 304 (40CFR355.40)**

- Not applicable

*** EPCRA Section 313 (40CFR372.65)**

- Not applicable

○ **Rotterdam Convention listed ingredients**

- Not applicable

○ **Stockholm Convention listed ingredients**

- Not applicable

○ **Montreal Protocol listed ingredients**

- Not applicable

## 16. OTHER INFORMATION

### A. Reference

- The information contained herein is believed to be accurate. It is provided independently of any sale of the product for purpose of hazard communication. It is not intended to constitute performance information concerning the product. No express warranty, or implied warranty of merchantability or fitness for a particular purpose is made with respect to the product or the information contained herein.
- This Safety Data Sheet was compiled with data and information from the following sources: KOSHA, NITE, ESIS, NLM, SIDS, IPCS

### B. Issue date

- 2020-07-21

### C. Revision number and Last date revised

- 3 times, 2023-07-07

### D. Other

- This SDS is prepared according to the Globally Harmonized System (GHS).