# SAFETY DATA SHEET

#### 00083US

## **Section 1. Identification**

GHS product identifier : #350 (INT.SOL.POWDER FOR REF.ELECTRODE)

**Product code** : 3200043623, 9003003400

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

Identified uses

Not applicable.

Uses advised against

Not applicable.

**Supplier's details**: HORIBA Advanced Techno Co., Ltd.

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HORIBA Instruments Inc.

9755 Research Drive, Irvine, CA 92618. USA

Tel 800-446-7422 (949-250-4811)

**Emergency telephone** number (with hours of

number (with hours of operation)

: During normal Business Hours: HORIBA Instruments Inc 800-446-7422

(949-250-4811)

During Holidays and after Business Hours: Chemtrec (800) 424-9300

## Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard

(29 CFR 1910.1200).

Classification of the substance or mixture

: EYE IRRITATION - Category 2B

**GHS** label elements

Signal word : Warning

**Hazard statements**: Causes eye irritation.

**Precautionary statements** 

**Prevention**: Wear eye or face protection. Wash hands thoroughly after handling.

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 or

attention.

**Storage**: Keep cool and protect from sunlight. Store locked up.

Disposal : Dispose of contents and container in accordance with all local, regional, national and

international regulations.

**Hazards not otherwise** 

classified

: None known.

Hazards identified when

used

: No known significant effects or critical hazards.

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## Section 3. Composition/information on ingredients

Substance/mixture Other means of identification : Substance: Not available.

Ingredient name	Synonyms	%	Identifiers
potassium chloride	Potassium chloride (KCI); E 508; sylvine; sylvite; CHLORURE DE POTASSIUM; Chlorvescent; Klotrix; Potassium muriate; Potassium monochloride	100	CAS: 7447-40-7

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

## **Description of necessary first aid measures**

**Eye contact** 

: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. If irritation persists, get medical attention.

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Skin contact** 

: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

: Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

## Most important symptoms/effects, acute and delayed

### Potential acute health effects

**Eye contact** : Causes eye irritation.

Inhalation: No known significant effects or critical hazards.Skin contact: No known significant effects or critical hazards.Ingestion: No known significant effects or critical hazards.

### Over-exposure signs/symptoms

**Eye contact**: Adverse symptoms may include the following:

irritation watering redness

Inhalation: No specific data.Skin contact: No specific data.Ingestion: No specific data.

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## Section 4. First aid measures

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

Notes to physician

: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Specific treatments** 

: No specific treatment.

**Protection of first-aiders** 

: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

### See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### **Extinguishing media**

Suitable extinguishing media

: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media

: None known.

Specific hazards arising from the chemical

: No specific fire or explosion hazard.

Hazardous thermal decomposition products

 Decomposition products may include the following materials: halogenated compounds metal oxide/oxides

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

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

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders

: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** 

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

**Small spill** 

: Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill

: Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor.

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## Section 7. Handling and storage

## Precautions for safe handling

#### **Protective measures**

: Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

## Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

# including any incompatibilities

Conditions for safe storage, : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

# Section 8. Exposure controls/personal protection

#### **Control parameters**

### **Occupational exposure limits**

Ingredient name	Exposure limits
potassium chloride	None.

#### **Biological exposure indices**

No exposure indices known.

### **Appropriate engineering** controls

**Environmental exposure** controls

- : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

#### Individual protection measures

**Hygiene measures** 

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

#### **Eye/face protection**

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

#### **Skin protection**

**Hand protection** 

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

### **Body protection**

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

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## Section 8. Exposure controls/personal protection

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** 

: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

#### **Appearance**

**Physical state** : Solid. Color : White.

Odor : Not available. **Odor threshold** Not available. pН : Not available.

**Melting point/freezing point** 

**Boiling point or initial** boiling point and boiling range

: Not applicable. Flash point : Not available. **Evaporation rate Flammability** Lower and upper explosion

limit/flammability limit

Vapor pressure Relative vapor density Relative density Solubility in water Partition coefficient: n-: Not applicable.

octanol/water

**Auto-ignition temperature Decomposition temperature** 

**Viscosity** 

**:** 776℃ : Not available.

 Not available. : Not applicable.

: Not available. : Not applicable. : Not available. : Not available.

: Not applicable. : Not available.

Dynamic (room temperature): Not available. Kinematic (room temperature): Not available.

Kinematic (40°C (104°F)): Not available.

## **Particle characteristics**

Median particle size : Not available.

## Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability** : The product is stable.

Possibility of hazardous reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid** : No specific data.

Incompatible materials : No specific data.

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## Section 10. Stability and reactivity

Hazardous decomposition products

: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

# Section 11. Toxicological information

### Information on toxicological effects

**Acute toxicity** 

Product/ingredient name Result

potassium chloride Rat - Oral - LD50 2600 mg/kg

**Conclusion/Summary [Product]** : Not available.

**Skin corrosion/irritation** 

Not available.

**Conclusion/Summary [Product]** : Not available.

Serious eye damage/eye irritation

Product/ingredient name Result

potassium chloride Rabbit - Eyes - Mild irritant

<u>Duration of treatment/exposure</u>: 24 hours <u>Amount/concentration applied</u>: 500 mg

**Conclusion/Summary [Product]**: Not available.

Respiratory corrosion/irritation

Not available.

**Conclusion/Summary [Product]**: Not available.

Respiratory or skin sensitization

Not available.

Skin

**Conclusion/Summary [Product]**: Not available.

Respiratory

**Conclusion/Summary [Product]**: Not available.

Germ cell mutagenicity

Not available.

**Conclusion/Summary [Product]** : Not available.

Carcinogenicity

Not available.

**Conclusion/Summary [Product]** : Not available.

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# **Section 11. Toxicological information**

#### Reproductive toxicity

Not available.

**Conclusion/Summary [Product]** : Not available.

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Not available.

### **Aspiration hazard**

Not available.

## Information on the likely routes of exposure

Not available.

### Potential acute health effects

**Eye contact** : Causes eye irritation.

Inhalation : No known significant effects or critical hazards.
 Skin contact : No known significant effects or critical hazards.
 Ingestion : No known significant effects or critical hazards.

## Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact**: Adverse symptoms may include the following:

irritation watering redness

Inhalation: No specific data.Skin contact: No specific data.Ingestion: No specific data.

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

**Short term exposure** 

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Long term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

## Potential chronic health effects

Not available.

Conclusion/Summary [Product] : Not available.

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## **#350 (INT.SOL.POWDER FOR REF.ELECTRODE)**

# **Section 11. Toxicological information**

General : No known significant effects or critical hazards.
 Carcinogenicity : No known significant effects or critical hazards.
 Mutagenicity : No known significant effects or critical hazards.
 Reproductive toxicity : No known significant effects or critical hazards.

### **Numerical measures of toxicity**

## **Acute toxicity estimates**

Product/ingredient name	0.1011 (111.3)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
#350 (INT.SOL.POWDER FOR REF.ELECTRODE) potassium chloride	2600.0	N/A	N/A	N/A	N/A
	2600	N/A	N/A	N/A	N/A

# **Section 12. Ecological information**

## **Toxicity**

Product/ingredient name Result

potassium chloride Acute - LC50 - Fresh water

Crustaceans - Water flea - Pseudosida ramosa - Neonate

<u>Age</u>: ≤24 hours 12.92 mg/l [48 hours] Effect: Mortality

Acute - LC50 - Fresh water Fish - Zebra danio - Danio rerio

509.65 mg/l [96 hours] Effect: Mortality

**Conclusion/Summary [Product]** : Not available.

### Persistence and degradability

Not available.

**Conclusion/Summary [Product]** : Not available.

## **Bioaccumulative potential**

Not available.

## **Mobility in soil**

Soil/Water partition : Not available. coefficient

#### Other adverse effects

No known significant effects or critical hazards.

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## Section 13. Disposal considerations

### **Disposal methods**

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

# **Section 14. Transport information**

	DOT Classification	TDG Classification	Mexico Classification	IMDG	IATA
UN number	No.	No.	No.	Not regulated	Not regulated
UN proper shipping name	No.	No.	No.	-	-
Transport hazard class(es)	No.	No.	No.	-	-
Packing group	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according : Not available.

to IMO instruments

# Section 15. Regulatory information

#### U.S. Federal regulations

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

TSCA 12(b) - Chemical export notification

Not applicable.

Clean Air Act Section 112

: Not listed

(b) Hazardous Air **Pollutants (HAPs)** 

: Not listed

Clean Air Act Section 602

**Class I Substances** Clean Air Act Section 602

: Not listed

**Class II Substances** 

**DEA List I Chemicals** 

: Not listed

(Precursor Chemicals)

: Not listed

**DEA List II Chemicals** (Essential Chemicals)

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## Section 15. Regulatory information

### **SARA 302/304**

### **Composition/information on ingredients**

No products were found.

SARA 304 RQ : Not applicable.

**SARA 311/312** 

Classification : EYE IRRITATION - Category 2B

Composition/information on ingredients

Name	%	Classification
potassium chloride	100	EYE IRRITATION - Category 2B

#### State regulations

Massachusetts: None of the components are listed.New York: None of the components are listed.New Jersey: None of the components are listed.Pennsylvania: None of the components are listed.

California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

#### International regulations

### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### **Montreal Protocol**

Not listed.

#### **Stockholm Convention on Persistent Organic Pollutants**

Not listed.

## Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

#### **UNECE Aarhus Protocol on POPs and Heavy Metals**

Not listed.

## Section 16. Other information

## **Hazardous Material Information System (U.S.A.)**



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

**National Fire Protection Association (U.S.A.)** 

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## Section 16. Other information



### Procedure used to derive the classification

Classification	Justification	
EYE IRRITATION - Category 2B	Calculation method	

#### **History**

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revision

9/16/2025

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**Key to abbreviations** 

: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor DOT = Department of Transportation

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods IMO = International Maritime Organization

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973

as modified by the Protocol of 1978. ("Marpol" = marine pollution)

N/A = Not available SGG = Segregation Group

TDG = Transportation of Dangerous Goods

UN = United Nations

#### References

✓ Indicates information that has changed from previously issued version.

#### **Notice to reader**

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot quarantee that these are the only hazards that exist.

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