IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER PRODUCT IDENTIFIER : 3.3M KCl Internal Solution . KCl MANUFACTURER : FUJI SEIMITSU DENKI Co., LTD. SUPPLIER : FUJI SEIMITSU DENKI Co., LTD.. ADDRESS : 15-14, Meguroi 2-chome, Meguro-ku, Tokyo, 153-0063, Japan TELEPHONE NUMBER:03-3716-3441
 EMERGENCY TELEPHONE NUMBER: 03-3716-3441

2. HAZARDS IDENTIFICATION

GHS classification

Physical and chemical hazard
Flammable liquids : Out of category
Pyrophoric liquids : Out of category
Self-heating substances and mixtures : Out of category
Substances and mixtures which, in contact with water, emit flammable gases
: Out of category
Human health hazard
Acute toxicity(oral) : Out of category
Serious eye damageEye irritation : Out of category
Specific target organ systemic toxicity (repeated exposure) : Out of category
Environmental hazard
Hazardous to the aquatic environment-acute hazard : Out of category
Hazardous to the aquatic environment-chronic hazard : Out of category

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture:	Substance
Ingredients and composition :	Potassium chloride 24.6%
	Water 75.4%
FORMULA :	KC1
MOLECULAR WEIGHT :	74.551
CAS NUMBER :	7447-40-7
TSCA INVENTORY :	Potassium chloride Registered
EINECS No. :	Potassium chloride 231-211-8

4. FIRST AID MEASURES

GENERAL ADVICE : Wash off immediately with soap and plenty of water. In the case of respirable dust and/or fumes, use self-contained breathing apparatus and dust impervious protective suit. Use personal protective equipment.

INHALATION : Move victim to fresh air. If breathing is difficult, give oxygen. If irritation persists, consult a physician.

SKIN CONTACT : Remove contaminated clothes and shoes, rinse skin with plenty of water or shower. Use soap to help assure removal. If irritation persists, consult a physician.

EYE CONTACT : Remove any contact lenses at once. Flush eyes well with flooding amounts of running water for at least 15 minutes. Assure adequate flushing by separating the eyelids with sterile fingers. If irritation persists, consult a physician.

INGESTION : Rinse mouth, give plenty of water to dilute the substance. Never give anything by mouth to an unconscious person. Consult a physician.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA : This product is noncombustible.

PROHIBITED EXTINGUISHING MEDIA : None

PARTICULAR FIRE FIGHTING : Move containers from fire area if it can be done without risk, if not possible, apply water from a safe distance to cool and protect surrounding area.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS : Remove ignition sources and ventilate the area. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid contact with skin and eyes.

ENVIRONMENTAL PRECAUTIONS : Prevent spills from entering sewers, watercourses or low areas.

METHODS FOR CLEANING UP : Do not touch spilled material without suitable protection(See section 8). Take up spilled material with ashes or other absorbents. After material is completely picked up, wash the spill site with soap and water and ventilate the area. Put all wastes in a plastic bag for disposal and seal it tightly. Remove, clean, or dispose of contaminated clothing.

7. HANDLING AND STORAGE

PRECAUTION FOR SAFE HANDLING : Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Handle material with suitable protection.

CONDITIONS FOR SAFE STORAGE : Store away from sunlight in well-ventilated dry place at room temperature (preferably cool place). Keep container tightly closed.

INCOMPATIBILITIES : Not available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING MEASURES : Install a local ventilation system under dense vapor or dusty condition.

CONTROL PARAMETER :

ACGIH(2009) : Not established

PROTECTIVE EQUIPMENT

Respiration protective equipment : Not necessary

Hands protective equipment : If necessary, wear gloves.

Eyes protective equipment : If necessary, wear goggles

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE : Liquid COLORr: None ODOUR : None pH : Neutra BOILING POINT : Approx. 104°C MELTING POINT : Approx. -15°C FLASH POINT : Noncombustible SPECIFIC GRAVITY : 1.17g/ml SOLUBILITY SOLUBILITY IN SOLVENTS : Water ; Freely soluble

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY : Stable under normal usage . INCOMPATIBLE CONDITIONS : Light, heat

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY : Oral : Out of category

DERMAL : Not possible to classify because of insufficient data.

INHALATION (vapor): Not possible to classify because of insufficient data.

INHALATION (dust, mist): Not possible to classify because of insufficient data.

rat oral LD50=12080mg/kg (as calculated value)

SKIN CORROSIVENESS : Not possible to classify because of insufficient data.

IRRITATION TO SKIN, EYES : Out of category

Potassium chloride has irritation of rabbits eyes equivalent to GHS classification 2B, but this product is about 25% solution, the irritation of eyes is classified our of category.

RESPIRATORY SENSITIZATION OR SKIN SENSITIZATION

: Respiratory sensitization : Not possible to classify because of insufficient data.

Skin sensitization : Not possible to classify because of insufficient data.

MUTAGENICITY : Not possible to classify because of insufficient data.

CARCINOGENIC EFFECTS : Not possible to classify because of insufficient data EFFECTS ON THE REPRODUCTIVE SYSTEM : Not possible to classify because of insufficient data.

SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY SINGLE EXPOSURE

: Not possible to classify because of insufficient data.

SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY REPEATED EXPOSURE : Out of category

In oral administration test of male rats for 2 years, the only treatment related effect was gastritis as irritant effect, NOAEL was 1820mg/kg/day. In oral administration test of male rats for 105 days with 5250mg/kg/day, effects were all recovery properties and no significant toxicity was seen.

ASPIRATION HAZARD : Not possible to classify because of insufficient data.

12. ECOLOGICAL INFORMATION

ACUTE TOXICITY : Oral : Out of category Ecotoxicity Fish toxicity : Acute aquatic toxicity : Out of category Chronic aquatic toxicity : Out of category Daphnia magna LC50=2640mg/l/48H (as calculated value) REDIUALBILITY AND DEGRADABILITY : Not available MOBILITY : Not available

13. DISPOSAL CONSIDERATION (INCLUDING CONTAINER)

RESIDUAL DISPOSAL : Dilute the chemical with a large amount of water and flush in a drain after confirming pH of the solution. Or entrust approved waste disposal companies with the disposa.l

CONTAINERS : In case of disposal of empty bottles, dispose bottles after removing the content thoroughly.

14. TRANSPORT INFORMATION UN class : Not applicable

15. REGULATORY INFORMATION

Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

16. OTHER INFORMATION

References Safety Data Sheets of No.32895 Potassium chloride saturated solution, KANTO CHEMICAL CO., INC.

Safety Data Sheets of No.32326 Potassium chloride, KANTO CHEMICAL CO., INC.

The information contained herein is based on several references and the present state of our knowledge. However the MSDS does not always cover all information about the product, handle the product carefully. The information is intended to ordinary usage, in case of particular handlings, conduct appropriate safety measurements. The information herein is only provision of information, and it does not represent a guarantee the properties of the product.