date of issue : 30/09/2013

JUNSEI

Safety Data Sheets

1. Identification

Product name :0.05mol/L Bromine solution

Name of supplier :JUNSEI CHEMICAL CO., LTD.

Address :1-6, Ohmano-Cho, Koshigaya, Saitama 343-0844, Japan

Division :GUARANTEE OF QUALITY DEPARTMENT

Phone :+81-48-986-6161

FAX :+81-48-989-2787

E-mail :shiyaku-t@junsei.co.jp

Product code(SDS NO) :95432jis_E-1

2. Hazards identification

GHS classification and label elements of the product

GHS classification

HEALTH HAZARDS

Carcinogenicity : Category 1B

(Note) GHS classification without description : Not applicable/Out of classification/Not classifiable

Signal word : Danger

HAZARD STATEMENT

May cause cancer

PRECAUTIONARY STATEMENT

Prevention

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Use personal protective equipment as required.

Response

IF exposed or concerned: Get medical advice/attention.

Storage

Store locked up.

Disposal

Dispose of contents/container

3. Composition/information on ingredients

Substance/Preparation :Preparation

Ingredient name:Potassium bromate

content(%):About 0.3

Chemical formula:BrKO3

Chemicals No, Japan:1-109

CAS No.:7758-01-2

MW:167.00

HAZCODE_EU:3_H301; 1B_H350

ECNO:231-829-8

Ingredient name:Potassium bromide
content(%):About 1.5
Chemical formula:BrK
Chemicals No, Japan:1-108
CAS No.:7758-02-3
MW:119.00
ECNO:231-830-3

Ingredient name:Water
content(%):About 98.2
Chemical formula:H2O
CAS No.:7732-18-5
MW:18.02
ECNO:231-791-2

4. First-aid measures

General procedures

IF exposed or concerned: Get medical attention/advice.

IF INHALED

Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Call a POISON CENTER or doctor/physician if you feel unwell.

IF ON SKIN(or hair)

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
If skin irritation or rash occurs: Get medical advice/attention.

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/attention.

IF SWALLOWED

Rinse mouth.
Call a POISON CENTER or doctor/physician if you feel unwell.

5. Fire-fighting measures

Suitable extinguishing media

The product is non-flammable.

Specific hazards arising from the chemical

Fire may produce irritating, corrosive and/or toxic gases.

Special protective equipment and precautions for fire-fighters

Wear fire/flame resistant/retardant clothing.
Wear cold insulating gloves/face shield/eye protection.
Firefighters should wear self-contained breathing apparatus with full face peace operated positive pressure mode.

6. Accidental release measures

Personnel precautions, protective equipment and emergency procedures

Ventilate area after material pick up is complete.
Wear proper protective equipment.

Environmental precautions

Avoid release to the rivers, lakes, ocean, groundwater.

Methods and materials for neutralization, containment and cleaning up

Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste container.

Preventive measures for secondary accident

Collect spillage.

7. Handling and storage

Precautions for safe handling

Preventive measures

(Exposure Control for handling personnel)

Use personal protective equipment as required.

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Exhaust/ventilator

Exhaust/ventilator should be available.

Safety treatments

Avoid contact with skin.

Avoid contact with eyes.

Avoid breathing dust, vapor, mist, or gas.

Safety Measures/Incompatibility

Obtain special instructions before use.

Wear protective gloves/protective clothing/eye protection/face protection.

When using do not eat, drink or smoke.

Conditions for safe storage, including any incompatibilities

Recommendation for storage

Keep container tightly closed.

Keep cool . Protect from sunlight.

Store in well-ventilated place.

Store locked up.

8. Exposure controls/personal protection

Control parameters e.g. occupational exposure limit values or biological limit values

Adopted value

California proposition 65

cancer NSRL

(Potassium bromate)

NSRL=1μg/day

Appropriate engineering controls

Do not use in areas without adequate ventilation.

Eye wash station should be available.

Washing facilities should be available.

Protective equipment

Respiratory protection

Wear positive pressure self-contained breathing apparatus (SCBA).

Hand protection

Wear protective gloves.

Eye protection

Wear eye/face protection.

9. Physical and Chemical Properties

Physical properties

Appearance :water soluble liquid

Color :colorless
odour data N.A.
pH data N.A.
Initial Boiling Point/Boiling point data N.A.
Melting point/Freezing point data N.A
Decomposition temperature data N.A.
Flash point data N.A
Auto-ignition temperature data N.A
Explosiont data N.A
Vapor pressure data N.A
Vapor density data N.A
Specific gravity/Density data N.A
Solubility
Solubility in water :miscible
n-Octanol /water partition coefficient data N.A

10. Stability and Reactivity

Stability
Stable under normal storage/handling conditions.
Conditions to avoid
Heat.
Hazardous decomposition products
Bromine.Bromide.

11. Toxicological Information

Symptoms related to the physical, chemical and toxicological characteristics
Oral toxicity component(s) data
(Potassium bromate)
rat LD50=348 - 549 mg/kg (Environ. Health Perspect. 87, 1990)
No Irritant properties data available
No Allergenic and sensitizing effects data available
No Mutagenic effects data available
No Teratogenic effects data available
Carcinogenic effects
(Potassium bromate)
IARC-Gr.2B ; Possibly carcinogenic to humans.
(Potassium bromate)
EU-Category 2; Should be regarded as if carcinogenic to Human
No Toxicity for reproduction data available
No Delayed/chronic effects from short/long-term exposure data available
No Aspiration hazard data available
Additional data
There are no data available on the preparation itself.

12. Ecological Information

Ecotoxicity
No Aquatic toxicity data available
Water solubility
(Potassium bromate)
7.5 g/100 ml (25℃) (ICSC, 2003)
No Persistence and degradability data available

No Bioaccumulative potential data available
No Mobility in soil data available
Ozone depleting chemical data not available
There are no data available on the preparation itself.

13. Disposal Considerations

Disposal methods
Dispose of contents/container in accordance with local/national regulation

14. Transport Information

UN No, UN CLASS
Not applicable to UN NO.

15. Regulatory Information

GHS classification and labelling
Carc. 1B : H350 May cause cancer
US major regulations
TSCA
Water; Potassium bromate; Potassium Bromide
California proposition 65
cancer
Potassium bromate
Other regulatory information
Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

16. Other information

Reference Book
Globally Harmonized System of classification and labelling of chemicals, (4th ed., 2011), UN
Recommendations on the TRANSPORT OF DANGEROUS GOODS 17th edit. UN
Classification, labelling and packaging of substances and mixtures (reg.(EC) No 1272/2008)
2012 EMERGENCY RESPONSE GUIDEBOOK(US DOT)
2013 TLVs and BEIs. (ACGIH)
http://monographs.iarc.fr/monoeval/grlist.html
Supplier's data/information
Other information
This information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. It are advised to make their own test
The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.
The GHS classification data given here is based on currentEU official data