

Safety Data Sheets

1. Identification

Product name :Scandium, standard solution 1000mg/L
Name of supplier :JUNSEI CHEMICAL CO., LTD.
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Product code(SDS NO) :39272jis_E1-1

2. Hazards identification

GHS classification and label elements of the product

GHS classification

HEALTH HAZARDS

Skin corrosion/irritation : Category 1B

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



Signal word : Danger

HAZARD STATEMENT

Causes severe skin burns and eye damage.

PRECAUTIONARY STATEMENT

Prevention

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash contaminated parts thoroughly after handling.

Wear protective gloves/protective clothing/face protection.

Response

Immediately call a POISON CENTRE or doctor/physician.

Wash contaminated clothing before reuse.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage

Store locked up.

Disposal

Dispose of contents/container in accordance with local/national regulation.

3. Composition/information on ingredients

Substance/Preparation :Preparation

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Ingredient name:Scandium(III) nitrate tetrahydrate
content(%):ca. 0.67
Chemical formula: $N_3O_9Sc \cdot 4H_2O$
Chemicals No, Japan:1-785
CAS No.:16999-44-3 [13465-60-6(anh)]
MW:303.03
ECNO:236-701-5(anh)

Ingredient name:Nitric acid
content(%):ca. 6.3
Chemical formula: HNO_3
Chemicals No, Japan:1-394
CAS No.:7697-37-2
MW:63.01
ECNO:231-714-2

Ingredient name:Water
content(%):Residual quantity of the ingredient mentioned above
Chemical formula: H_2O
CAS No.:7732-18-5
MW:18.02
ECNO:231-791-2

4. First-aid measures

General procedures

Immediately call a POISON CENTRE or doctor/physician.

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. Do NOT induce vomiting.

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

5. Fire-fighting measures

Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.

The product is non-flammable.

Specific hazards arising from the chemical

Containers may explode when heated.

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

Runoff from fire control or dilution water may cause pollution.

Specific fire-fighting measures

Cool container with water spray.

Special protective equipment and precautions for fire-fighters

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Wear fire/flare resistant/retardant clothing.
Wear cold insulating gloves/face shield/eye protection.
Firefighters should wear self-contained breathing apparatus with full face piece 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)

Do not breathe dust/fume/gas/mist/vapours/spray.

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

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

(Nitric acid)

ACGIH(1992) TWA: 2ppm

STEL: 4ppm (URT & eye irr; dental erosion)

OSHA-PEL

(Nitric acid)

TWA 2ppm, 5mg/m³

NIOSH-REL

(Nitric acid)

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TWA 2ppm, 5mg/m³; STEL 4ppm, 10mg/m³

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.

Safety and Health measures

Wash ... thoroughly after handling.

Wash contaminated clothing before reuse.

9. Physical and Chemical Properties

Physical properties

Appearance :liquid

Color :colorless

odour data N.A.

pH :Strong acid

Phase change temperature

Initial Boiling Point/Boiling point :ca. 100°C

Melting point/Freezing point :-3.6°C

Decomposition temperature data N.A.

Flash point data N.A

Auto-ignition temperature data N.A

Explosions data N.A

Vapor pressure data N.A

Vapor density data N.A

Specific gravity/Density :1.03g/ml (20°C)

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

Contact with incompatible materials.

Light, Heat.

Incompatible materials

Bases

Hazardous decomposition products

Nitrogen oxides

11. Toxicological Information

Symptoms related to the physical, chemical and toxicological characteristics

Acute toxicity

Inhalation toxicity component(s) data

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(Nitric acid)

mist : LC50=0.05 – 0.5 mg/L (ACGIH, 2001)

Irritant properties

Skin corrosion/irritation

Skin corrosion/Irritation component(s) data

(Nitric acid)

rabbit : corrosive (IUCLID,2000)

No Allergenic and sensitizing effects data available

No Mutagenic effects data available

No Teratogenic effects data available

No Carcinogenic effects data available

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

No Persistence and degradability data available

Bioaccumulative potential

(Nitric acid)

log Pow=-0.21 (ICSC, 2006)

Additional data

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

UN No :2031

UN CLASS :8

PG :II

Proper shipping name :NITRIC ACID, other than red fuming, with less than 65% nitric acid

ERG GUIDE NO :157

15. Regulatory Information

Sea pollutants control law

Noxious Liquid ; Cat. Y :Nitric acid

Non Noxious Liquid ; Cat. OSWater

GHS classification and labelling

Skin Corr. 1B : H314 Causes severe skin burns and eye damage.

US major regulations

TSCA

Nitric acid; Water; Scandium(III) nitrate tetrahydrate

Other regulatory information

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

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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/ENG/Classification/index.php>
Supplier's data/information
Chemical Risk Information Platform (CHRIP)(NITE) <http://www.safe.nite.go.jp/japan/db.html>
GHS Classification Guidance for Enterprises 2013 Revised Edition (August, 2013,METI)

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