

Material safety data sheet

SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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Catalog Numbers: 59185

Catalog Name: Bismuth, standard solution 1000mg/L

Company Identification:

Junsei Chemical Co., Ltd.

4-16, 4-Chome, Nihonbashi-Honcho, Chuo-ku

Tokyo, 103-0023 JAPAN

EMERGENCY TELEPHONE NUMBER: +81-48-988-3621

Sales Headquarters

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FAX: +81-48-988-8719 E-mail: shiyaku-t@junsei.co.jp

Web: http://www.junsei.co.jp/

CREATION DATE: June 27, 2008

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SECTION 2 COMPOSITION, INFORMATION ON INGREDIENTS

Ingredient 1

Chemical name: Bismuth nitrate

CAS NUMBER: 10361-44-1

EC NUMBER (EINECS): 233-791-8 JAPAN NUMBER (ENCS):1-97

Content: 0.19%

Ingredient 2

Chemical name: Nitric acid CAS NUMBER: 7697-37-2

EC NUMBER (EINECS): 231-714-2 JAPAN NUMBER (ENCS):1-394

Content: ca.6.0%

Ingredient 3

Chemical name: Water CAS NUMBER: 7732-18-5

EC NUMBER (EINECS): 231-791-2

ENCS Designation: Japanese Pharmacopoeia(8th Ed.) substance

Content: ca.93.8%

SECTION 3 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Irritating to eyes, respiratory system and skin.

Potential Health Effects

Eye:

Contact with eyes may cause severe irritation, and possible eye burns.

Skin:

May cause severe irritation and possible burns.

Ingestion:

Not available.

Inhalation:

May cause severe irritation of the respiratory tract with sore throat, coughing, shortness of breath and delayed lung edema. Causes chemical burns to the respiratory tract.

Chronic:

Not available.

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SECTION 4 FIRST AID MEASURES

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Eyes:

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids.

Skin:

Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion:

Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Inhalation:

Remove from exposure to fresh air immediately.

Notes to Physician:

SECTION 5 FIRE FIGHTING MEASURES

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

Extinguishing Media:

Not available.

SECTION 6 ACCIDENTAL RELEASE MEASURES

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container.

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SECTION 7 HANDLING AND STORAGE

Handling:

Not available.

Storage:

Not available.

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SECTION 8 EXPOSURE CONTROLS, PERSONAL PROTECTION

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Engineering Controls:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Personal Protective Equipment

Eyes:

Wear safety glasses and chemical goggles if splashing

is possible.

Skin:

Wear appropriate protective gloves and clothing to

prevent skin exposure.

Clothing:

Not available.

Respirators:

Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape

provisions.

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SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Clear liquid
Appearance: Not available.
Odor: Not available.
PH: Not available.
Vapor Pressure: Not available.
Viscosity: Not available.
Boiling Point: Not available.
Freezing/Melting Point: Not available.

Autoignition Temperature: Not available. Flash Point: Not available. Explosion Limits, lower: Not available. Explosion Limits, upper: Not available. Decomposition Temperature: Solubility in water: miscible Specific Gravity/Density: SECTION 10 STABILITY AND REACTIVITY Chemical Stability: Stable under normal temperatures and pressures. Conditions to Avoid: Not available. Incompatibilities with Other Materials: Not available. Hazardous Decomposition Products: Nitrogen. Hazardous Polymerization: Has not been reported. ______ SECTION 11 TOXICOLOGICAL INFORMATION RTECS#: CAS# unlisted. LD50/LC50: Not available. Carcinogenicity: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA. See actual entry in RTECS for complete information. SECTION 12 ECOLOGICAL INFORMATION ______ Not available. DISPOSAL CONSIDERATIONS ______ Dispose of in a manner consistent with federal, state, and local regulations. SECTION 14 TRANSPORT INFORMATION

IATA

Shipping Name: NITRIC ACID

Hazard Class: 8 UN Number: 2031 Packing Group: II

IMO

Shipping Name: NITRIC ACID

Hazard Class: 8 UN Number: 2031 Packing Group: II

RID/ADR

Shipping Name: NITRIC ACID

Hazard Class: 8 UN Number: 2031 Packing group: II

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SECTION 15 REGULATORY INFORMATION

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XI Risk Phrases:

R 36/37/38 Irritating to eyes, respiratory system

and skin.

Safety Phrases:

S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)

CAS# : No information available.
United Kingdom Occupational Exposure Limits

Canada

None of the chemicals in this product are listed on the DSL/NDSL list.

CAS# is not listed on Canada's Ingredient Disclosure List.

Exposure Limits

US FEDERAL

TSCA

CAS# is not listed on the TSCA inventory. It is for research and development use only.

SECTION 16 OTHER INFORMATION

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no

way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.