

Nicotinamide, JUNSEI CHEMICAL CO., LTD., 53097jis_E-1,20/06/2018

Date of issue for the 1.st edition: 20/06/2018

Safety Data Sheet

 Identification of the substance/mixture and of the company/undertaking Product identifier: Product name: Nicotinamide Product code(SDS NO): 53097jis_E-1 Details of the supplier of the safety data sheet Manufacturer/Supplier: JUNSEI CHEMICAL CO., LTD. Address: 1-6, Ohmano-Cho, Koshigaya, Saitama 343-0844, Japan Division: Quality Assurance Department Telephone number: +81-48-986-6161 FAX: +81-48-989-2787 e-mail address: shiyaku-t@junsei.co.jp

2. Hazards identification

GHS classification and label elements of the product Classification of the substance or mixture HEALTH HAZARDS Serious eye damage/eye irritation: Category 2A (Note) GHS classification without description: Not applicable/Out of classification/Not classifiable

Label elements



Signal word: Warning HAZARD STATEMENT Causes serious eye irritation PRECAUTIONARY STATEMENT Prevention Wash contaminated parts thoroughly after handling. Wear eye protection/face protection. 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/attention.

3. Composition/information on ingredients Mixture/Substance selection: Substance
Common name, synonyms: 3-Pyridinecarboxamide Ingredient name:Nicotinamide Content(%):98.0 < Chemical formula:C6H6N2O Chemicals No, Japan:5-736 CAS No.:98-92-0 MW:122.12 ECNO:202-713-4

4. First-aid measures

Descriptions of first-aid measures

IF INHALED

Remove person to fresh air and keep comfortable for breathing.

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

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

Extinguishing media

Suitable extinguishing media

In case of fire, use water mist, foam, dry powder, CO2.

Specific hazards arising from the substance or mixture

Containers may explode when heated.

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

Advice for firefighters

Specific fire-fighting measures

Evacuate non-essential personnel to safe area.

Special protective equipment and precautions for fire-fighters

Wear fire/flame resistant/retardant clothing.

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

Methods and materials for containment and cleaning up

Sweep up, place in a bag and hold for waste disposal.

Preventive measures for secondary accident

Collect spillage.

7. Handling and storage

Precautions for safe handling

Preventive measures

(Protective measures against fire and explosion)

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

Exhaust/ventilator

Exhaust/ventilator should be available.



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Safety treatments Avoid contact with skin. Avoid contact with eyes. Avoid breathing dust, fume, gas, mist or vapor. Safety Measures/Incompatibility Wear protective gloves, protective clothing or face protection. Wear eye protection/face protection. Use personal protective equipment as required. When using do not eat, drink or smoke. Conditions for safe storage, including any incompatibilities Recommendation for storage

Store in a well-ventilated place. Keep container tightly closed. Keep cool. Protect from sunlight.

8. Exposure controls/personal protection

Control parameters
No control value data available in MHLW
Adopted value
No Adopted value data available in JSOH
Exposure controls
Appropriate engineering controls
Do not use in areas without adequate ventilation.
Eye wash station should be available.
Washing facilities should be available.
Individual protection measures
Respiratory protection
Wear respiratory protection.
Hand protection
Wear protective gloves.
Eye protection
Wear eye/face protection.
Safety and Health measures
Wash thoroughly after handling.

9. Physical and Chemical Properties

Information on basic physical and chemical properties Physical properties Appearance: Crystalline powder Color: White Odor: None pH data N.A. Phase change temperature Initial Boiling Point/Boiling point: 150~160 °C(0.067Pa) Melting point/Freezing point: 128~131°C Decomposition temperature: >=200°C Flash point: 182°C Auto-ignition temperature: 480°C Explosive properties data N.A. Vapor pressure: 3.1 kPa (35°C) Relative Vapor Density (Air=1): 4.2 Specific gravity/Density: 1.4g/cm3



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Solubility Solubility in water: 100 g/100ml (20°C) n-Octanol /water partition coefficient: log Pow-0.38

10. Stability and Reactivity

Chemical stability
Stable under normal storage/handling conditions.

Possibility of hazardous reactions

May form explosive dust-air mixtures.
On combustion, forms toxic gases including nitrogen oxides.
Reacts with oxidants oxidants.

Conditions to avoid

Contact with incompatible materials.
Open flames. Heat.

Incompatible materials

Oxidizing agents
Hazardous decomposition products
Carbon oxides, Nitrogen oxides

11. Toxicological Information

Information on toxicological effects
Acute toxicity
Acute toxicity (Oral)
rat LD50=3.5~7.1g/kg (SIDS, 2002)
Acute toxicity (Dermal)
rabbit LD50 >2000mg/kg (SIDS, 2002)
Irritant properties
Skin corrosion/irritation
rabbit (OECD TG404, 84/449/EEC):Not irritating (SIDS, 2002)
Serious eye damage /irritation
rabbit (OECD TG405, 84/449/EEC) : moderate to severe irritant (SIDS, 2002)
Sensitization
Skin sensitization
Evidence from human exposure indicates that nicotinamide is not a skin sensitiser.(SIDS, 2002)
No Mutagenic effects data available
No Carcinogenic effects data available
No reproductive toxicity data available
No STOT-single/repeated exposure data available

No Aspiration hazard data available

12. Ecological Information
Ecotoxicity
Aquatic toxicity
Aquatic acute toxicity component(s) data
Fish(Poecilia reticulata) LC50 >1000 mg/L/96hr (SIDS, 2002)
Algae(Scenedesmus subspicatus) ErC50 >1000 mg/L/72hr (SIDS, 2002)
No Aquatic toxicity data available
Water solubility
100 g/100ml (20°C) (ICSC, 2008)
No Persistence and degradability data available



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Bioaccumulative potential log Pow=-0.38 (ICSC, 2008)

13. Disposal considerations

Waste treatment 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

Other regulatory information

We are not able to check up the regulatory information in regard to the substances in your country or region, therefore, we request this matter would be filled by your responsibility. Regulatory information with regard to this substance in your country or in your region should be examined by your own responsibility.

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

16. Other information

GHS classification and labelling

Eye Irrit. 2A: H319 Causes serious eye irritation

Reference Book

Globally Harmonized System of classification and labelling of chemicals, (5th ed., 2013), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 19th edit., 2015 UN Classification, labelling and packaging of substances and mixtures (table3-1 ECNO6182012) 2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT)

2017 TLVs and BEIs. (ACGIH)

http://monographs.iarc.fr/ENG/Classification/index.php

Supplier's data/information

NITE Chemical Risk Information Platform(NITE-CHRIP) http://www.safe.nite.go.jp/japan/db.html GHS Classification Guidance for Enterprises 2013 Revised Edition (August, 2013,METI)

General Disclaimer

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 tests to determinate the safety and suitability of each such product or combination for their own purposes.

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 current Japan official data (NITE published in 2016).