Safety Data Sheets

1. Identification of the substance/mixture and of the company/undertaking

Product identifier :

Product name : Cyanoacetic acid

Product code(SDS NO) :33120jis_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

Competent section :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

Acute toxicity Oral : Category 4

Skin corrosion/irritation : Category 1

Serious eye damage /eye irritation : Category 1

ENVIRONMENT HAZARDS

Hazardous to the aquatic environment-acute toxicity : Category 3

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

Label elements

Signal word :Danger

HAZARD STATEMENT

Harmful if swallowed

Causes severe skin burns and eye damage

Causes serious eye damage

Harmful to aquatic life

PRECAUTIONARY STATEMENT

Prevention

Avoid release to the environment.

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

Wash contaminated parts thoroughly after handling.

Wear protective gloves, protective clothing or face protection.

Wear eye protection/face protection.

Do not eat, drink or smoke when using this product.

Response

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.

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

Wash contaminated clothing before reuse.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Rinse mouth.
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Storage
Store locked up.

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

3. Composition/information on ingredients

Substance/Preparation :

Substances

Ingredient name:Cyanoacetic acid
content(%):98.0 <
Chemical formula:C3H3NO2
Chemicals No, Japan:2-1548
CAS No.:372-09-8
MW:85.06
ECNO:206-743-9

4. First-aid measures

Descriptions of first-aid measures

General measures
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)
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

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.
Runoff from fire control or dilution water may cause pollution.

Advice for firefighters

Specific fire-fighting measures
Cool container with water spray.

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 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

(Exposure Control for handling personnel)

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

(Protective measures against fire & explosion)

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 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

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

8. Exposure controls/personal protection

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 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.
Do not eat, drink or smoke when using this product.
Wash contaminated clothing before reuse.

9. Physical and Chemical Properties

Information on basic physical and chemical properties
Physical properties
Appearance :crystals
Color :white
odour data N.A.
pH :1.6 (50 g/L)
Phase change temperature
Initial Boiling Point/Boiling point :108℃(15 mmHg)
Melting point/Freezing point :66℃
Decomposition temperature data N.A.
Flash point :107℃
Auto-ignition temperature :575℃ (1015 hPa)
Explosive properties data N.A.
Vapor pressure :35.9mmHg (25℃)
Vapor density data N.A.
Specific gravity/Density :1.411g/cm3
Solubility
Solubility in water :890 - 1000 g/liter (25℃)
n-Octanol /water partition coefficient : log Pow-0.76

10. Stability and Reactivity

Chemical stability
Stable under normal storage/handling conditions.
Hygroscopic
Conditions to avoid
Contact with incompatible materials.
Open flames. Heat.
Incompatible materials
Bases, Oxidizing agents
Hazardous decomposition products
Carbon oxides, Nitrogen oxides, Cyanides.

11. Toxicological Information

Information on toxicological effects
Acute toxicity
Acute toxicity (Oral)
[GHS Cat. Japan, base data]
rat LD50=1500 mg/kg (HSDB, 2006)
No Irritant properties data available
No Allergenic and sensitizing effects data available
No Mutagenic effects data available
No Teratogenic 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

Toxicity

Aquatic toxicity

Harmful to aquatic life

Aquatic acute toxicity component(s) data

[GHS Cat. Japan, base data]

Crustacea (Daphnia magna) EC50 = 59 mg/L/48hr (SIDS, SIAP agreed in 2006)

Water solubility

890 - 1000g/L (25℃) (SIDS, 2006)

Persistence and degradability

BOD_Degradation : 90% (Registered chemicals data check & review, Japan 2002)

Bioaccumulative potential

log Pow=-0.76 (PHYSPROP Database, 2011)

13. Disposal considerations

Waste treatment methods

Avoid release to the environment (- if this is not the intended use).

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

14. Transport Information

UN No, UN CLASS

UN number :3261

UN proper shipping name :

CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.

Transport hazard class(es) :8

Packing group :III

ERG GUIDE NO :154

15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

US major regulations

TSCA

Cyanoacetic acid

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

Acute Tox. 4 : H302 Harmful if swallowed

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

Eye Dam. 1 : H318 Causes serious eye damage
Aquatic Acute 3 : H402 Harmful to aquatic life

Reference Book

Globally Harmonized System of classification and labelling of chemicals, (4th ed., 2011), UN
Recommendations on the TRANSPORT OF DANGEROUS GOODS 18th edit., 2013 UN
Classification, labelling and packaging of substances and mixtures (table3-1 ECNO6182012)
2012 EMERGENCY RESPONSE GUIDEBOOK(US DOT)
2014 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 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