

## Safety Data Sheets

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

Product identifier :

Product name : Disodium hydrogen arsenate heptahydrate

Product code(SDS NO) :59112jis\_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

Serious eye damage /eye irritation : Category 2

Carcinogenicity : Category 1A

Reproductive toxicity : Category 2

Specific target organ toxicity-single exposure : Category 1

Specific target organ toxicity-repeated exposure : Category 1

#### ENVIRONMENT HAZARDS

Hazardous to the aquatic environment-acute toxicity : Category 2

Hazardous to the aquatic environment-chronic toxicity : Category 2

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

Label elements



Signal word :Danger

#### HAZARD STATEMENT

Causes serious eye irritation

May cause cancer

Suspected of damaging fertility or the unborn child

Causes damage to organs after single exposure

Causes damage to organs following repeated exposure

Toxic to aquatic life

Toxic to aquatic life with long lasting effects

#### PRECAUTIONARY STATEMENT

Prevention

Obtain special instructions before use.

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

Avoid release to the environment.

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

Wash contaminated parts thoroughly after handling.

Disodium hydrogen arsenate heptahydrate,  
JUNSEI CHEMICAL CO., LTD., 59112jis\_E-1, 19/08/2014

Wear eye protection/face protection.  
Use personal protective equipment as required.  
Do not eat, drink or smoke when using this product.

Response

Collect spillage.  
Get medical advice/attention if you feel unwell.  
IF exposed or concerned: Get medical advice/attention.  
IF exposed or concerned: Call a POISON CENTER or doctor/physician.

### 3. Composition/information on ingredients

Substance/Preparation :

Substances

Common name, synonyms :Sodium arsenate dibasic heptahydrate

Ingredient name:Disodium hydrogen arsenate heptahydrate

content(%):99.0 <

Chemical formula:AsHNa<sub>2</sub>O<sub>4</sub>•7H<sub>2</sub>O

Chemicals No, Japan:1-806

CAS No.:10048-95-0

MW:312.01

ECNO:231-902-4(anh)

### 4. First-aid measures

Descriptions of first-aid measures

General measures

Get medical attention/advice if you feel unwell.  
IF exposed or concerned: Get medical attention/advice.  
IF exposed or concerned: Call a POISON CENTER 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.  
Call a POISON CENTER or doctor/physician if you feel unwell.  
Give a slurry of activated charcoal in water to drink.

### 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.  
The product is non-flammable.

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.

Disodium hydrogen arsenate heptahydrate,  
JUNSEI CHEMICAL CO., LTD., 59112jis\_E-1, 19/08/2014

Advice for firefighters

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 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 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

Obtain special instructions before use.

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

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

Control parameters

Adopted value

ACGIH(1990) TWA: 0.01mg-As/m<sup>3</sup> (Lung cancer)

Exposure controls

Appropriate engineering controls

Do not use in areas without adequate ventilation.

Disodium hydrogen arsenate heptahydrate,  
JUNSEI CHEMICAL CO., LTD.,59112jis\_E-1,19/08/2014

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.

## 9. Physical and Chemical Properties

### Information on basic physical and chemical properties

#### Physical properties

Appearance :CRYSTAL

Color :COLOURLESS-WHITE

Odor :NONE

pH data N.A.

#### Phase change temperature

Initial Boiling Point/Boiling point :180°C

Melting point/Freezing point :130°C

Decomposition temperature :180°C

Flash point data N.A.

Auto-ignition temperature data N.A.

Explosive properties data N.A.

Vapor pressure data N.A.

Vapor density data N.A.

Specific gravity/Density :1.9g/cm<sup>3</sup>

#### Solubility

Solubility in water :39 g/100 ml (21°C)

n-Octanol /water partition coefficient data N.A.

## 10. Stability and Reactivity

### Chemical stability

Stable under normal storage/handling conditions.

### Possibility of hazardous reactions

Reacts with acids. This produces toxic arsine gas.

Attacks many metals such as iron, aluminium and zinc in the presence of water. This produces toxic fumes.

### Conditions to avoid

Contact with incompatible materials.

Heat.

### Incompatible materials

Acids

### Hazardous decomposition products

Arsenic compounds

## 11. Toxicological Information

Information on toxicological effects

No Acute toxicity data available

Irritant properties

Serious eye damage /irritation

Eye damage/irritation component(s) data

[GHS Cat. Japan, base data]

(Disodium hydrogen arsenate)

Inorganic arsenic compounds are reported to irritate human eyes. (HSG 70, 1992; PIM 042, 1996).

No Allergenic and sensitizing effects data available

No Mutagenic effects data available

No Teratogenic effects data available

Carcinogenicity

IARC-Gr.1 : Carcinogenic to humans.

ACGIH-A1(1990) : Confirmed Human Carcinogen

Reproductive toxicity

[GHS Cat. Japan, base data]

(Disodium hydrogen arsenate) cat.2; EHC 224, 2001

Delayed and immediate effects and also chronic effects from short- and long-term exposure

STOT

STOT-single exposure

[cat.1]

[Japan published data]

(Disodium hydrogen arsenate)

digestive apparatus/alimentary system; CVS; nerve/nervous system; kidney; liver;

respiratory apparatus/system ( EHC 224, 2001 )

STOT-repeated exposure

[cat.1]

[Japan published data]

(Disodium hydrogen arsenate)

digestive apparatus/alimentary system; CVS; nerve/nervous system; kidney; liver;

blood/blood system; skin; respiratory apparatus/system ( EHC 224, 2001 )

No Aspiration hazard data available

## 12. Ecological Information

Toxicity

Aquatic toxicity

Toxic to aquatic life

Toxic to aquatic life with long lasting effects

Aquatic acute toxicity component(s) data

[GHS Cat. Japan, base data]

(Disodium hydrogen arsenate)

Crustacea (Mysidopsis bahia) LC50=1.74mg/L/96hr (ECETOC, 2003)

Water solubility

(Disodium hydrogen arsenate heptahydrate)

39 g/100 ml (21°C) (ICSC, 2005)

No Persistence and degradability data available

No Bioaccumulative potential data available

### 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 :1685

UN proper shipping name :

SODIUM ARSENATE

Transport hazard class(es) :6.1

Packing group :II

ERG GUIDE NO :151

### 15. Regulatory Information

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

US major regulations

TSCA

Disodium hydrogen arsenate heptahydrate

#### 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. 2 : H319 Causes serious eye irritation

Carc. 1A : H350 May cause cancer

Repr. 2 : H361 Suspected of damaging fertility or the unborn child

STOT SE 1 : H370 Causes damage to organs after single exposure

STOT RE 1 : H372 Causes damage to organs through prolonged or repeated exposure

Aquatic Acute 2 : H401 Toxic to aquatic life

Aquatic Chronic 2 : H411 Toxic to aquatic life with long lasting effects

#### 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 (CHRIPI)(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 is advised to make their own tests to

Disodium hydrogen arsenate heptahydrate,

JUNSEI CHEMICAL CO., LTD., 59112jis\_E-1, 19/08/2014

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