

## Safety Data Sheets

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

#### Product identifier :

Product name : Vinyl acetate(polymer) solution

Product code(SDS NO) :31261jis\_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

##### PHYSICAL HAZARDS

Flammable liquids : Category 2

##### HEALTH HAZARDS

Serious eye damage /eye irritation : Category 2B

Specific target organ toxicity – single exposure; Respiratory tract irritation Category 3

Specific target organ toxicity – single exposure; Narcosis Category 3

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

#### Label elements



Signal word :Danger

#### HAZARD STATEMENT

Highly flammable liquid and Vapor

Causes eye irritation.

May cause respiratory irritation

May cause drowsiness and dizziness

#### PRECAUTIONARY STATEMENT

##### Prevention

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

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Avoid breathing dust/fume/gas/mist/vapors/spray.

Use only outdoors or in a well-ventilated area.

Wash contaminated parts thoroughly after handling.

Wear protective gloves and face protection.

##### Response

In case of fire: Use appropriate media other than water for extinction.

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

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.

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.

#### Storage

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

Store locked up.

#### Disposal

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

#### Physical and Chemical hazards

Highly flammable liquid. Vapor/air mixture may explode.

### 3. Composition/information on ingredients

#### Substance/Preparation :

##### Mixtures

Ingredient name:Vinyl acetate (polymer)

content(%):ca. 50

Chemical formula:(CH<sub>3</sub>COOCHCH<sub>2</sub>)<sub>n</sub>

Chemicals No, Japan:6-295

CAS No.:9003-20-7

Ingredient name:Ethyl acetate

content(%):Residual quantity of the ingredient mentioned above

Chemical formula:C<sub>4</sub>H<sub>8</sub>O<sub>2</sub>

Chemicals No, Japan:2-726

CAS No.:141-78-6

MW:88.11

ECNO:205-500-4

### 4. First-aid measures

#### Descriptions of first-aid measures

##### General measures

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

##### 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.

## 5. Fire-fighting measures

### Extinguishing media

#### Suitable extinguishing media

In case of fire, use foam, dry powder, CO<sub>2</sub>, dry sand .

#### Unsuitable extinguishing media

Water may be effective for cooling, but may not effect extinguishment.

### 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

Evacuate non-essential personnel to safe area.

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 piece operated positive pressure mode.

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## 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

Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste container.

### Preventive measures for secondary accident

Collect spillage.

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## 7. Handling and storage

### Precautions for safe handling

#### Preventive measures

##### (Exposure Control for handling personnel)

Avoid breathing dust/fume/gas/mist/vapors/spray.

##### (Protective measures against fire & explosion)

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

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

#### 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

Use only outdoors or in a well-ventilated area.

Wear protective gloves, protective clothing or face protection.

- Wear protective gloves and 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 well-ventilated place. Keep container tightly closed.
- Keep cool. Protect from sunlight.
- Store locked up.

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## 8. Exposure controls/personal protection

Control parameters

Adopted value

- (Ethyl acetate)
- ACGIH(1979) TWA: 400ppm (URT & eye irr)

OSHA-PEL

- (Ethyl acetate)
- TWA 400ppm, 1400mg/m<sup>3</sup>

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.

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## 9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical properties

- Appearance :viscous liquid
- Color :colorless
- Odor :Aromatic odor
- pH data N.A.

Phase change temperature

- Initial Boiling Point/Boiling point data N.A.
- Melting point/Freezing point data N.A.
- Decomposition temperature data N.A.
- Flash point : (Ethyl acetate )-4°C
- Auto-ignition temperature :427°C (Ethyl acetate)°C
- Explosive properties : Flammability or explosive limit
  - lower limit :2.2 vol % (Ethyl acetate)
  - upper limit :11.5 vol % (Ethyl acetate)

Vapor pressure :10 kPa (20°C) (Ethyl acetate)

Relative Vapor Density (Air=1) :3.0 (Ethyl acetate)

Specific gravity/Density data N.A.

Viscosity :6~12Pas

## Solubility

Solubility in water :slightly soluble

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

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**10. Stability and Reactivity**

## Chemical stability

Stable under normal storage/handling conditions.

Highly flammable.

## Conditions to avoid

Contact with incompatible materials.

Open flames. Heat.

## Incompatible materials

Oxidizing agents

## Hazardous decomposition products

Carbon oxides

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**11. Toxicological Information**

## Information on toxicological effects

## Acute toxicity

## Acute toxicity (Oral)

[GHS Cat. Japan, base data]

(Ethyl acetate)

rat LD50=4940 mg/kg (PATTY 5th, 2001)

## Acute toxicity (Dermal)

[GHS Cat. Japan, base data]

(Ethyl acetate)

Based on no mortality at 18000 mg/kg after 24-hour occlusive application for rabbits (DFGOT vol. 12, 1999).

## Acute toxicity (Inhalation)

[GHS Cat. Japan, base data]

(Ethyl acetate)

vapor : rat LC50=13856 ppm/4hr (ACGIH, 2001)

## Irritant properties

Serious eye damage /irritation

[GHS Cat. Japan, base data]

(Ethyl acetate)

rabbit: Draize test MMAS=15.0 (ECETOC TR48, 1998)

No Allergenic and sensitizing effects data available

No Mutagenic effects data available

No Teratogenic effects data available

## Carcinogenicity

(Vinyl acetate (polymer))

IARC-Gr.3 : Not Classifiable as a Human Carcinogen

No reproductive toxicity data available

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

## STOT

## STOT-single exposure

[cat.3(resp. irrit.)]

[Japan published data]

(Ethyl acetate) Respiratory tract irritation ( ACGIH, 2001 )

[cat.3(drow./dizz.)]

[Japan published data]

(Ethyl acetate) Narcosis ( ACGIH, 2001 )

No Aspiration hazard data available

Additional data

There are no data available on the preparation itself.

## 12. Ecological Information

Toxicity

Aquatic toxicity

Aquatic acute toxicity component(s) data

[GHS Cat. Japan, base data]

(Ethyl acetate)

Crustacea (Daphnia) LC50 = 2,500mg/L/24hr (SIDS, 2008)

Water solubility

(Ethyl acetate)

8 g/100 ml (PHYSPROP Database, 2005)

No Persistence and degradability data available

Bioaccumulative potential

(Ethyl acetate)

log Pow=0.73 (ICSC, 1997)

Additional information

There are no data available on the preparation itself.

## 13. Disposal considerations

Waste treatment methods

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

## 14. Transport Information

UN No, UN CLASS

UN number :1993

UN proper shipping name :FLAMMABLE LIQUID, N.O.S.

Transport hazard class(es) :3

Packing group :II

ERG GUIDE NO :128

Transport in bulk according to Annex II of MARPOL73/78 and IBC Code

Noxious Liquid ; Cat. Z···Ethyl acetate

Flammable Liquid···Ethyl acetate

## 15. Regulatory Information

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

US major regulations

TSCA

Ethyl acetate; Vinyl Acetate (polymer)

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

Flam. Liq. 2 : H225 Highly flammable liquid and Vapor

Eye Irrit. 2B : H320 Causes eye irritation

STOT SE 3 : H335 May cause respiratory irritation

STOT SE 3 : H336 May cause drowsiness and dizziness

### 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 is advised to make their own tests to determine 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