

## Safety Data Sheet

### 1. Products and Company information

|  |  |
|--|--|
| Product name                             | High Impact poly vinyl chloride pipes for water supply (HI-PVC)<br>: Shavings (JIS K 6742, AS20) |
| Supplier name                            | Asahi Yukizai Corporation  |
| Address                                  | 2-5955, Nakanose-cho Nobeoka-city Miyazaki-pref. Japan 882-8688                                  |
| Section                                  | Valve & Piping Systems Administration CS & Quality Assurance Group                               |
| Phone                                    | +81-982-35-9380  |
| Facsimile                                | +81-982-35-9358  |
| Recommended use and restrictions for use | Pipes for transfer of waterworks.  |

### 2. Hazard identification

|                                     |   |
|-------------------------------------|---|
| GHS classification                  |   |
| Physical and Chemical hazards       | Not classifiable  |
| Health hazards                      | Not classifiable  |
| GHS label elements                  |   |
| Symbol                              | Not classifiable  |
| Signal word                         | Not classifiable  |
| Hazard statements                   | No information  |
| Precautionary statements (Shavings) |   |
| Safety measures                     | P260 : Do not breathe dust.<br>P264 : Wash hand thoroughly after handling.<br>P270 : Do not eat, drink or smoke when using this product.<br>P273 : Avoid release to the environment.<br>P281 : Use personal protective equipment as required. |
| Emergency measures                  | P304+P340 : If inhaled, remove victim to fresh air and keep at rest in a position comfortable for breathing.<br>P308+P313 : If exposed or concerned, get medical advice/attention.  |
| Storage                             | P401 : Store not to leak of the Shavings.   |
| Disposal                            | P501 : Dispose of contents/container should be outsourced to a dedicated waste disposal company licensed by the municipal governor.   |

### 3. Composition / information on ingredients

|                   |  |
|-------------------|--|
| Single or Mixture | Solid mixture  |
| Product name      | Unplasticized poly vinyl chloride pipes for water supply |

| Component                         | Concentration or concentration range | Chemical formula   | Reference Number in Gazetted List in Japan |                             | CAS No.        |
|-----------------------------------|--------------------------------------|--|--|-----------------------------|----------------|
|                                   |                                      |  | CSCL                                       | Labor Safety and Health Act |                |
| Polyvinyl chloride (PVC)          | 90-95%                               | (CH <sub>2</sub> CHCl) <sub>n</sub>  | (6)-66                                     | Che(6)-66                   | 9002-86-2      |
| MBS polymers                      | 5-10%                                | (C <sub>8</sub> H <sub>8</sub> .C <sub>5</sub> H <sub>8</sub> O <sub>2</sub> .C <sub>4</sub> H <sub>6</sub> .C <sub>3</sub> H <sub>3</sub> N) <sub>x</sub> | -  | -                           | 9010-94-0      |
| Other organic/inorganic compounds | < 5%                                 | Non-disclosure   | Non-disclosure                             | Non-disclosure              | Non-disclosure |

|                                  |             |
|----------------------------------|-------------|
| Industrial Safety and Health Act | Not applied |
|----------------------------------|-------------|

### 4. First-aid measures

|                       |  |
|-----------------------|--|
| If inhaled (shavings) | Move to a place of fresh air and get rest in an easily breathing posture.<br>Call a doctor if you feel unwell. |
| If on skin (shavings) | Promptly remove the shavings.<br>If you feel unusual, contact a doctor.  |

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**If in eyes (shavings)**

Carefully wash with water for a few minutes.  
Remove contact lenses, if present and easy to do. Continue rinsing.  
If you feel unusual, contact a doctor.

**If swallowed (shavings)**

Rinse mouth. Do not induce vomiting.  
If you feel unusual, contact a doctor.

### 5. Fire-fighting measures

**Extinguishing media**

Water, spray water, fire-extinguishing powder, general fire-extinguishing foam, carbon dioxide, sand

**Special hazards**

It is self-extinguishing and puts out once it is taken out of flame but produces stimulant gas if it burns. (Key ingredients of gas are HCl, CO, and CO<sub>2</sub>)  
[Sourced from] Japan PVC Pipe and Fittings Association,  
Vinyl Environmental Council

**Special fire-extinguishing method**

Separate the product from the source of fire, if possible and extinguish fire from the windward.

**Advice for fire-fighters**

Wear appropriate protective clothing (heat resistance) while extinguishing fire.

### 6. Accidental release measures

**Personal precautions**

The worker should wear appropriate protective equipment to avoid contact with the eye and skin or inhalation if dust evolves by cutting the pipe.

**Environmental precautions**

Cautions should be exerted not to affect the environment resulting from release to rivers etc. Never discharge to the environment.

**Collection**

If pipe cutting produces dust, rake and collect dust in an empty container and dispose of it later.

**Prevention of secondary hazards**

If pipe cutting produces dust and if dust remains on the floor, there is a danger of slipping: frequent sweeping is required.

### 7. Handling and storage

**Handling (Shavings)**

**Engineering measures**

Implement equipment measures as described in "8. Exposure controls/personal protection" and wear protective equipment.

**Local / general ventilation**

Implement local / general ventilation as described in "8. Exposure controls/personal protection."

**Precautions for safe handling**

Do not inhale or swallow the product (shavings).  
Wash hands well after handling.  
Provide ventilation for emission to keep the airborne concentration below the exposure limit. (If pipe cutting produces dust)  
Use the product only outdoor or in an area with good ventilation.  
Avoid release to the environment (if pipe cutting produces dust).

**Contact avoidance**

See "10. Stability and reactivity."

**Storage (Shavings)**

**Engineering measures**

Avoid fire.

**Storage condition**

No specific technical countermeasures are required.

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### 8. Exposure controls/personal protection

#### Control parameters

| Component | Control concentration | Allowable concentration<br>(Japan Society for Occupational Health) | Allowable concentration<br>(ACGIH) |
|-----------|-----------------------|--|------------------------------------|
| -         | -                     | -  | -                                  |

#### Equipment measures

Handling shall be conducted where a general ventilator is installed.  
(If cutting produces dust)

#### Protective equipment

##### Respiratory protection

Use personal respiratory protective equipment where necessary.

##### Hand protection

Use personal hand protective equipment where necessary.

##### Eye protection

Use personal eye protective equipment where necessary.

##### Skin protection

Use personal protective clothing and protective face mask where necessary.

#### Sanitary measures

Wash hands thoroughly after handling.

### 9. Physical and chemical properties

#### Physical state

##### Appearance

Solid (Pipe)

##### Color

Gray

##### Odor

Almost odorless

##### pH

No data available

#### Flash point

454°C [Sourced from] "Plastic Data Handbook" edited by Kimimasa Ito, Kogyo Chosakai Publishing Co., Ltd. (1980)

#### Specific gravity

Approx. 1.4g/cm<sup>3</sup> (20 °C)

#### Combustion quality

Self-extinguishing

#### Solubility

Not soluble in water but soluble in ketone and THF.

### 10. Stability and reactivity

#### Chemical stability

Stable under normal condition.

#### Possibility of hazardous reactions

No information

#### Conditions to avoid

No information

#### Incompatible materials

No information

#### Hazardous decomposition products

If it burns, it evolves hazardous gas (key ingredients of gas are HCl, CO and CO<sub>2</sub>).

### 11. Toxicological information

#### Acute toxicity

##### Oral

Not classifiable due to the lack of data

##### Dermal

Not classifiable due to the lack of data

##### Inhalation

Not classifiable due to the lack of data

#### Skin corrosion / irritation

Not classifiable due to the lack of data

#### Serious eye damage / eye irritation

Not classifiable due to the lack of data

#### Respiratory sensitization or skin sensitization

Not classifiable due to the lack of data

#### Germ cell mutagenicity

Not classifiable due to the lack of data

#### Carcinogenicity

Not classifiable due to the lack of data

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|--|--|
| Reproductive toxicity                              | Not classifiable due to the lack of data |
| Specific target organ toxicity (single exposure)   | Not classifiable due to the lack of data |
| Specific target organ toxicity (repeated exposure) | Not classifiable due to the lack of data |
| Aspiration hazard                                  | Not classifiable due to the lack of data |

## 12. Ecological information

### Environmental hazards

**Hazardous to the aquatic environment (Acute)** Not classifiable due to the lack of data

**Hazardous to the aquatic environment (Long-term hazard)** Not classifiable due to the lack of data

**Ecotoxicity** No information

**Residual/decomposition property** Not easily decomposed under a general environment.

**Biological concentration** No information

**Mobility in soil** No information

**Other** Follow "13. Disposal considerations" when disposing of the product.

## 13. Disposal considerations

|  |  |
|--|--|
| <b>Waste from residues</b>                           | Follow the related laws and regulations as well as the local government's standards for disposal.<br><br>Outsource disposal to an industrial waste vendor licensed by the prefectural governor or the local government if it disposes of waste.<br><br>When outsourcing waste disposal, the waste vendor must be fully informed of its hazards and harmful effects before outsourcing.<br><br>This product is classified as waste plastics (stable industrial waste).<br><br>Reference: It is incinerated at a furnace with exhaust gas treatment device or buried as non-hazardous waste. [Sourced from] Vinyl Environmental Council "Safety Information on PVC Resin") |
| <b>Contaminated container and package (shavings)</b> | Not applicable   |

## 14. Transport information

### International regulations

**Marine regulation information** No restrictions

**Aviation regulation information** No restrictions

### Domestic regulations

**Land regulation information** No restrictions

**Marine regulation information** No restrictions

**Aviation regulation information** No restrictions

**Special safety measures** Follow "7. Handling and storage."

## 15. Regulatory information (in Japan)

|   |   |
|---|---|
| <b>Industrial Safety and Health Act</b>                 | Not applied   |
| <b>Waste Management and Public Cleansing Act</b>        | Industrial waste (classification when it is disposed of as waste) |
| <b>Poisonous and Deleterious Substances Control Act</b> | Not applied   |
| <b>Fire Service Act</b>                                 | Not applicable or non-hazardous material                          |
| <b>Foreign Exchange and Foreign Trade Act</b>           | Not applied   |

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|                         |             |
|-------------------------|-------------|
| Ship Safety Act         | Not applied |
| Civil Aeronautics Act   | Not applied |
| Act on Port Regulations | Not applied |

### 16.Other information

|                     |   |
|---------------------|---|
| Contact information | Specified in "1.Products and Company information."  |
| References          | JIS Z 7250-2010 Material Safety Data Sheet (MSDS)<br>Japan PVC Pipe and Fittings Association website "Product Summary"<br>Vinyl Environmental Council website "PVC safety information"<br>"Plastic Data Handbook" edited by Kimimasa Ito, Kogyo Chosakai Publishing Co., Ltd. (1980)  |
| Others              | <p>Unplasticized poly vinyl chloride pipes for water supply is a molded product and is therefore not applicable to GHS classification but GHS classification was conducted assuming micro-powder dust that may be produced when it is being handled or cut.</p> <p>The content described on the Safety Data Sheet for this product is based on the materials and information available at this point in time but we are unable to provide any sort of warranty with respect to hazards, physical and chemical properties.</p> <p>Precautions and considerations are based on normal handling. If you handle the product in a special manner, full safety measures shall be taken to meet its intended use and usage method.</p> <p>Please discard the previous material safety data sheet of the product, if any.</p> <p>Please confirm whether your SDS is the latest version if the date of preparation / revision is more than two years ago since SDS will be revised according to revision of the laws or improvement of the product.</p> <p>SDS delivery route: Safety Data Sheet (SDS) is delivered to end users on the following route.</p> <p>If you have no SDS or any inquiry about the latest version, please contact us through the distribution route.</p> <p>[Manufacturer      Distributor      User]</p> |