

Safety Data Sheet

1. Products and Company information

Product name	AV Adhesive 62 (high viscosity slow drying up)
Supplier name	Asahi Yukizai Corporation
Address	2-5955, Nakanose-cho Nobeoka-city Miyazaki-pref. Japan 882-8688
Section	CS & Quality Assurance Group Environmental Safety & CS/QA Department Valve & Piping Systems Administration
Phone	+81-982-35-9380
Facsimile	+81-982-35-9358
Manufacturer	Konishi Co., Ltd.
Recommended use of the chemical and restrictions on use	Adhesive for rigid polyvinyl chloride pipes. Don't use the product for any purpose other than given application.

2. Hazard identification

GHS classification	
Physical and Chemical hazards	Flammable liquids : Category 2 Pyrophoric liquids : Outside the scope of classification Self-heating substances and mixtures : Outside the scope of classification Substances and mixtures which, in contact with water, emit flammable gases : Outside the scope of classification oxidizing liquids : Outside the scope of classification
Health hazards	Acute toxicity (Oral) : Category 4 Acute toxicity (Dermal) : Category 4 Acute toxicity (Inhalation: vapor) : Category 4 Skin corrosion/irritation : Category 2 Serious eye damage/eye irritation : Category 2A Skin sensitization : Category 1 Germ cell mutagenicity : Category 2 Reproductive toxicity : Category 2 Aspiration hazard : Outside the scope of classification Specific target organ toxicity (single exposure) : Category 1 (Respiratory system, Central nervous system) Specific target organ toxicity (single exposure) : Category 2 (Kidney) Specific target organ toxicity (single exposure) : Category 3 (Anesthetic action, Respiratory tract irritation) Specific target organ toxicity (repeated exposure) : Category 1 (Bones, Central nervous system, Peripheral nervous system) Hazards not specified above are not applicable to classification or unclassifiable.

GHS label elements

Symbol



Signal word

Danger

Hazard statements

H225 : Highly flammable liquid and vapor
H302+H312+H332: Harmful if swallowed, in contact with skin, or inhaled.
H315 : Causes skin irritation
H317 : May cause an allergic skin reaction
H319 : Causes serious eye irritation
H335 : May cause respiratory irritation
H336 : May cause drowsiness or dizziness
H341 : Suspected of causing genetic defects

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Precautionary statements

Safety measures

H361 : Suspected of damaging fertility or the unborn child
 H370 : Causes damage respiratory system or central nervous system
 H371 : May cause damage to kidney
 H372 : Causes damage to born, central nervous system, or peripheral nervous system through prolonged or repeated exposure

P201 : Obtain special instructions before use.
 P202 : Do not handle until all safety precautions have been read and understood.
 P210 : Keep away from heat/sparks/open flames/hot surfaces.- No smoking.
 P233 : Keep container tightly closed.
 P240 : Ground/bond container and receiving equipment.
 P241 : Use explosion-proof electrical/ventilating/lighting/equipment.
 P242 : Use only non-sparking tools.
 P243 : Take precautionary measures against static discharge.
 P260 : Do not breathe dust/gas/mist/vapors/spray.
 P261 : Avoid breathing dust/gas/mist/vapors/spray.
 P264 : Wash hand thoroughly after handling.
 P264 : Wash eyes thoroughly after handling.
 P270 : Do not eat, drink or smoke when using this product.
 P271 : Use only outdoors or in a well-ventilated area.
 P272 : Contaminated work clothing should not be allowed out of the workplace.
 P280 : Wear protective gloves/eye protection/face protection.

Emergency measures

P302+P352 : If on skin, gently wash with plenty of soap and water.
 P303+P361+P353 : If on skin or hair, remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
 P304+P340 : If inhaled, remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P305+P351+P338 : If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P308+P313 : If exposed or concerned, get medical advice/attention.
 P312 : Call a doctor if you feel unwell.
 P314 : Get medical advice/attention if you feel unwell.
 P321 : Specific treatment.
 P330 : Rinse mouth.
 P332+P313 : If skin irritation occurs, get medical advice/attention.
 P333+P313 : If skin irritation or rash occurs, get medical advice/attention.
 P337+P313 : If eye irritation persists, get medical advice/attention.
 P362+P364 : Take off contaminated clothing, wash contaminated clothing before reuse.
 P370+P378 : In case of fire, appropriate extinguishing media.

Storage

P403+P233 : Store in a well-ventilated place. Keep container tightly closed.
 P403+P235 : Store in a well-ventilated place. Keep cool.
 P405 : Store locked up.

Disposal

P501 : Dispose of contents/container should be outsourced to a dedicated waste disposal company licensed by the municipal governor.

Other hazard not related to classification Specific hazards

The product may cause organic solvent poisoning.

3. Composition / information on ingredients

Single or Mixture

Mixture

Product name

Vinyl chloride resin adhesive

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Component	Concentration or concentration range	Chemical formula	Reference Number in Gazetted List in Japan		CAS No.
			CSCL	Labor Safety and Health Act	
Cyclohexanone	50-60%	C ₆ H ₁₀ O	(3)-2376	-	108-94-1
Methyl ethyl ketone (MEK)	20-30%	CH ₃ CH ₂ COCH ₃	(2)-542	-	78-93-3

Impurities and stabilizing additives contributing to classification

No information

Industrial Safety and Health Act

Hazardous and harmful materials requiring notification of name etc (Article 57-2 of the Law, Enforcement Ordinance, Article 18-2, Item 1, Item 2, Schedule 9)

Cyclohexanone (Legally specified number: 231) (50% - 60%)

Methyl ethyl ketone (Legally specified number: 570) (20-30%)

4. First-aid measures

If inhaled

Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Call a doctor if you feel unwell.

If on skin

Remove/take off immediately all contaminated clothing and rinse skin with water/shower.

Wash with plenty of soap and water.

Immediately call a doctor.

If in eyes

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a doctor.

If swallowed

Rinse mouth. Do not induce vomiting.

Immediately call a doctor.

Protection of first-aiders

Be sure to wear appropriate protective equipment as required.

5. Fire-fighting measures

Extinguishing media

Dry chemicals, carbon dioxide, water spray, sand, and general fire foams

Unsuitable extinguishing media

Water, straight stream

Specific hazards

Highly flammable, easily ignited by heat / sparks / flame.

Specific firefighting method

Extinguish the fire from the windward where gas does not stagnate and take leakage control measures.

Protection of fire fighters

Wear (heat-resistant) protective equipment including air respirator in fire extinguishing.

6. Accidental release measures

Special precautions, protective equipment, and emergency measures

Isolate dangerous sites and keep out persons who are not authorized or not wearing protective equipment.

Ventilate the area of leakage.

Do not touch or walk in the leaked material.

Wear appropriate protective equipment and avoid contact with eyes and skin. (See "8. Exposure Controls/Personal Protection")

Environmental precautions

Do not release into the environment.

Prevent the chemical from being discharged into the rivers etc. and affecting the environment.

Dilution water may cause contamination.

Containment and cleaning method / equipment and materials

Ground all the equipment when handling spillage.

Stop spillage if not dangerous.

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In case of a minor spillage, absorb the product with dry soil, sand, sawdust, or incombustible material and collect it into an empty container that can be covered and sealed.

In case of a major spillage, stop the spill by raising the surrounding ground and collect the product into vacant containers in a safe place.

Prevention of secondary hazards

Remove all ignition sources (No-smoking, avoid spark or open flame near them)

Prevent spillage into drains, sewers, basement or closed place.

Frequently treat the product remaining on floors, if any, which is slippery and dangerous.

7. Handling and storage

Handling

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

Handle in a well-ventilated place.

Wash hands well and gargle after handling.

No fire and pay attention to static electricity

No high temperature objects, spark, or fire in surroundings.

Do not breathe mist/vapors/spray.

Contact avoidance

See "10. Stability and reactivity."

Sanitary measures

Wash hands thoroughly after handling.

Storage

Engineering measures

The place of storage should have fireproof construction for walls, pillars, and floor, and beams made of incombustible material.

Storage conditions

Storage temperature: 2-40

Protect from sunlight.

Keep container tightly closed.

Store locked up.

Container packaging materials

Use containers that meet the Explosives Control Law and the U.N. transportation regulations.

8. Exposure controls/personal protection

Control parameters

Component	Control concentration (MHLW)	Allowable concentration (Japan Society for Occupational Health)	ACGIH
Cyclohexanone	20ppm	25ppm (100mg/m ³)	TWA 20ppm, STEL 50ppm (Skin)
Methyl Ethyl Ketone (MEK)	200ppm	200ppm (590mg/m ³)	TWA 200ppm, STEL 300ppm

Engineering controls

Use in a well-ventilated environment.

Eye irrigation equipment and safety shower should be provided in the facilities where the product is stored or used.

A local ventilation system should be provided.

Protective equipment

Respiratory protection

Use the organic vapor respirator cartridge for a gas mask.

Hand protection

Wear appropriate protective gloves.

Eye / face protection

Wear appropriate eye protective equipment.

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Skin protection

Wear long-sleeved working clothes, as well as protective clothes or boots, if necessary.

9. Physical and chemical properties

Physical state**Appearance**

Liquid

Color

Colorless and semitransparent

Odor

Petroleum odor

pH

No data (Neutrality)

Boiling point

80 (Methyl Ethyl Ketone)

Flash point

-9 (Minimum flash point)

Combustion / explosion range**Lower limit**

No data

Upper limit

No data

Spontaneous ignition temperature

420 (Cyclohexanone)

Vapor density

1 or more (air =1)

Specific gravity

0.90g/cm³

Solubility

Insoluble in water, soluble in organic solvent

Viscosity

800 to 3200mPa•s

10. Stability and reactivity

Reactivity

No reactivity

Chemical stability

Stable under normal condition.

Possibility of hazardous reactions

No reactivity

Conditions to avoid

The vapor of the solvent is heavier than air and may travel along the ground; distant ignition is possible.

Incompatible materials

Avoid contact with oxidizer and other general incompatible materials.

Hazardous decomposition products

Combustion etc. may generate hazardous and irritating gases, such as CO.

11. Toxicological information

Acute toxicity**Oral**

Acute toxicity (oral) - Category 4 since Acute Toxicity Estimate (ATE) of mixture is 1476.975 mg/kg.

Dermal

Acute toxicity (dermal) - Category 4 since ATE of mixture is 1195.37 mg/kg.

Inhalation

Acute toxicity (inhalation: vapor) - Category 4 since ATE of mixture is 12.003 mg/L.

Acute toxicity (inhalation: dust, mist) - Unclassifiable since health hazard dust / mist cannot be determined.

Skin corrosion / irritation

Skin corrosion / irritation- Category 2 since total concentration of Skin corrosion / irritation - Category 2 for the ingredients of mixture is not lower than the cut-off value.

Serious eye damage / eye irritation

Serious eye damage / eye irritation- Category 2A since total concentration of Serious eye damage / eye irritation - Category 2A for the ingredients of mixture is not lower than the cut-off value.

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Respiratory sensitization or skin sensitization	Respiratory sensitization - Unclassifiable since there is no data. Skin sensitization - Category 1 since concentration of Skin sensitization - Category 1 for the ingredients of mixture is not lower than 10%.
Germ cell mutagenicity	Germ cell mutagenicity - Category 2 since concentration of Germ cell mutagenicity - Category 2 for the ingredients of mixture is not lower than 10%.
Carcinogenicity	Carcinogenicity - Unclassifiable although the result of classification is Carcinogenicity - Outside the scope of classification since unclassifiable ingredients are contained approx. 20%.
Reproductive toxicity	Reproductive toxicity - Category 2 since concentration of Reproductive toxicity - Category 2 for the ingredients of mixture is not lower than the cut-off value.
Specific target organ toxicity (single exposure)	Specific target organ toxicity (single exposure) - Category 1 (Respiratory system) since concentration of Specific target organ toxicity (single exposure) - Category 1 (Respiratory system) for the ingredients of mixture is not lower than 10%. Specific target organ toxicity (single exposure) - Category 1 (Central nervous system) since concentration of Specific target organ toxicity (single exposure) - Category 1 (Central nervous system) for the ingredients of mixture is not lower than 10%. Specific target organ toxicity (single exposure) - Category 2 (Kidney) since concentration of Specific target organ toxicity (single exposure) - Category 2 (Kidney) for the ingredients of mixture is not lower than 10%. Specific target organ toxicity (single exposure) - Category 3 (Anesthetic action) since concentration of Specific target organ toxicity (single exposure) - Category 3 (Anesthetic action) for the ingredients of mixture is not lower than 20%. Specific target organ toxicity (single exposure) - Category 3 (Respiratory tract irritation) since concentration of Specific target organ toxicity (single exposure) - Category 3 (Respiratory tract irritation) for the ingredients of mixture is not lower than 20%.
Specific target organ toxicity (repeated exposure)	Specific target organ toxicity (repeated exposure) - Category 1 (Bones) since concentration of Specific target organ toxicity (repeated exposure) - Category 1 (Bones) for the ingredients of mixture is not lower than 10%. Specific target organ toxicity (repeated exposure) - Category 1 (Central nervous system) since concentration of Specific target organ toxicity (repeated exposure) - Category 1 (Central nervous system) for the ingredients of mixture is not lower than 10%. Specific target organ toxicity (repeated exposure) - Category 1 (Peripheral nervous system) since concentration of Specific target organ toxicity (repeated exposure) - Category 1 (Peripheral nervous system) for the ingredients of mixture is not lower than 10%.
Aspiration hazard	Aspiration hazard - Outside the scope of classification since kinematic viscosity at 40 is larger than 20.5mm ² /s.

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12. Ecological information

Environmental hazards

Hazardous to the aquatic environment (Acute)

Hazardous to the aquatic environment (Acute) - Unclassifiable although the result of classification is Hazardous to the aquatic environment (Acute) – Outside the scope of classification since unclassifiable ingredients are contained approx. 20%.

Hazardous to the aquatic environment (Long-term hazard)

Hazardous to the aquatic environment (Long-term hazard)
-Unclassifiable although the result of classification is Hazardous to the aquatic environment (Long-term hazard) - Outside the scope of classification since unclassifiable ingredients are contained approx. 20%.

Ecotoxicity

No information

Hazard to the ozone layer

No data.

Other

Handle the product carefully since it may affect the environment in case of leakage, disposal, etc.

13. Disposal considerations

Waste from residues

Dispose in accordance with applicable laws and regulations and municipal standards.

Disposal should be outsourced to the industrial waste disposer licensed by the prefectural governor or the local government, if applicable.

Since the product corresponds to special control industrial waste, the disposal standard of specially controlled industrial waste under the Waste Disposal and Public Cleaning Law should be observed particularly for disposal.

Dried product is classified into waste plastics. (Industrial waste of stabilized type)

Contaminated container and package

Remove the content of vacant containers thoroughly before disposing of them as industrial waste or collecting them.

Paper-made containers including cases and paper tubes, and package: Collect or dispose as waste paper. (Controlled industrial waste regardless of whether the waste has additional ingredients)

Metal can, metal drum, and metal tubes: Dispose as waste metal. (When the waste has no additional ingredients treat as stabilized industrial waste. When the waste has additional ingredients, follow the stabilized / controlled type classification of the ingredients.

Glass containers: Treat as waste glass. (When the waste has no additional ingredients treat as stabilized industrial waste. When the waste has additional ingredients, follow the stabilized / controlled type classification of the ingredients.

Plastic bottles, tubes, bags, etc.: Dispose as waste plastics. (When the waste has no additional ingredients treat as stabilized industrial waste. When the waste has additional ingredients, follow the stabilized / controlled type classification of the ingredients.

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14. Transport information

International regulations

Marine regulation information

UN No.

Proper Shipping Name

Class

Packing Group

Marine Pollutant

Transport in bulk according to MARPOL 73/78, Annex II, and the IBC code

Follow the regulations of IMO.

1133

Adhesives

3

Not applicable

Not applicable

Aviation regulation information

UN No.

Proper Shipping Name

Class

Packing Group

Follow the regulations of ICAO/IATA.

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Adhesives

3

Domestic regulations

Land regulation information

Follow the transportation methods required by the Fire Service Law, Industrial Safety and Health Law, and/or Poisonous and Deleterious Substances Control Law, if applicable.

Marine regulation information

U.N. No.

Product name

Class

Packing group

Marine pollutant

MARPOL 73/78 Annex II and Liquid substances transported in bulk under IBC Code

Follow the regulations of Vessel Safety Law.

1133

Adhesive

3

II

N/A

N/A

Aviation regulation information

U.N. No.

Product name

Class

Packing group

Follow the regulations of Aviation Law

1133

Adhesive

3

II

Special safety measures

Follow "7. Handling and storage."

Check that the containers are free from leakage and load them so as to prevent them from toppling over, falling, and suffering damage and ensure the prevention of collapse.

Emergency Response Guidebook No.

128

15. Regulatory information (in Japan)

Industrial Safety and Health Act

Second class organic solvent, etc. (Enforcement Ordinance, Schedule 6-2; Ordinance on the Prevention of Organic Solvent Poisoning, Article 1, Paragraph 1, Item 4)

Working Environment Assessment Standard (Article 65-2, Paragraph 1 of the Law)

Hazardous and Harmful Materials Requiring Indication (Article 57-1 of the Law; Enforcement Ordinance, Article 18, Item 1, Item 2, Schedule 9)

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Hazardous / flammable material (Enforcement Ordinance, Schedule 1, Item 4)

Hazardous and Harmful Materials Requiring Notification (Article 57-2 of the Law; Enforcement Ordinance, Article 18-2, Item 1, Item 2, Schedule 9)

Fire Service Act

Category 4, Class 1 petroleum (water-insoluble)

Foreign Exchange and Foreign Trade Act

Export Trade Control Order, Schedule 1, Paragraph 16

Ship Safety Act

Flammable liquids (Regulations for the Carriage and Storage of Dangerous Goods in Ships, Articles 3; Hazardous Materials Notification, Schedule 1)

Civil Aeronautics Act

Flammable liquids (Enforcement Regulations, Article 194; Hazardous Materials Notification - Schedule 1)

Act on Port Regulations

Hazardous materials / flammable liquids (Article 21-2 of the Law; Article 12 of the Regulations)

16.Other information

Contact information

Specified in "1.Products and Company information."

References

JIS Z 7252-2014 Methods of Classifying Chemicals under GHS Requirements

Ministry of Economy, Trade and Industry GHS Classification Guidance for Business Operators (July 2013)

Japan Chemical Industry Association Guidance on the GHS Classification (June 2012)

JIS Z 7253-2012 Methods of Communicating the Hazardous Information of Chemicals under GHS Requirements -- Indication of Work on the Site and Safety Data Sheet (SDS)

Prepared with "Logist" -- SDS preparation system by Japan Chemical Database Ltd.

Others

Handle the product with enough care since assessment of danger / hazards is not necessarily complete.

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.

SDS delivery route: Safety Data Sheet (SDS) is delivered to end users on the following route.

If you have no SDS or any inquiry about the latest version, please contact us through the distribution route.

[Manufacturer Distributor User]