



SAFETY DATA SHEET

According to JIS Z 7253:2019 Revision date 15-Feb-2023 Revision Number 2.02

Section 1: PRODUCT AND COMPANY IDENTIFICATION

| Product Name | Polyv | inylpyrrolidone | K 90 | | |
|---|------------------------------|--|---------------------|--------------|-----------|
| Product Code | 162-1 | 7045,168-1704 | 2 | | |
| Manufacturer | 1-2 Dos Chuo-k Phone: | M Wako Pure Chem shomachi 3-Chome u, Osaka 540-8605, v +81-6-6203-3741 1-6-6203-5964 | | | |
| Supplier | 1-2 Dos Phone: Fax: +8 | +81-6-6203-3741 1-6-6203-2029 | Chuo-ku, Osaka 540- | -8605, Japan | |
| Emergency telephone n Recommended uses and restrictions on use | | 203-3741 / +81-3-32 earch use only | 70-8571 | | |
| | Sectio | n 2: HAZARDS | IDENTIFICATI | ON | |
| | | | | | |
| GHS classification <u>Classification of the substance or mixture</u> Not a hazardous substance or mixture according to the Globally Harmonized System (GHS) | | | | | |
| Pictograms Signal word | None | | | | |
| Hazard statements Not a hazardous substance or mixture according to the Globally Harmonized System (GHS) | | | | | |
| Precautionary statemen • Not applicable Precautionary statemen | | | | | |
| Not applicable Precautionary statements-(Storage) Not applicable | | | | | |
| Precautionary statements-(Disposal) Not applicable | | | | | |
| Others Other hazards | Not ava | ilable | | | |
| Section 3: COMPOSITION/INFORMATION ON INGREDIENTS | | | | | |
| Single Substance or Mixture Substance | | | | | |
| Formula | (C6H9N | | | | |
| Chemical Name | Weight-% | Molecular weight | ENCS | ISHL No. | CAS RN |
| Poly(Vinyl Pyrrolidone) | =<100 | N/A | 6-1007,6-1048 | * | 9003-39-8 |
| Note on ISHL No.: | * in the | table means announ | ced chemical substa | nces. | |

Impurities and/or Additives: Not a

Not applicable

Section 4: FIRST AID MEASURES

Inhalation

Remove to fresh air. If symptoms persist, call a physician.

Skin contact

Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.

Eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediate medical attention is required.

Ingestion

Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Do not induce vomiting without medical advice.

Protection of first-aiders

Use personal protective equipment as required.

Section 5: FIRE FIGHTING MEASURES

Suitable extinguishing media

Water spray (fog), Carbon dioxide (CO2), Foam, Extinguishing powder, Sand

Unsuitable extinguishing media

No information available

Specific hazards arising from the chemical product

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Special extinguishing method

No information available

Special protective actions for

fire-fighters

Use personal protective equipment as required. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For indoor, provide adequate ventilation process until the end of working. Deny unnecessary entry other than the people involved by, for example, using a rope. While working, wear appropriate protective equipments to avoid adhering it on skin, or inhaling the gas. Work from windward, and retract the people downwind.

Environmental precautions

To be careful not discharged to the environment without being properly handled waste water contaminated.

Methods and materials for contaminent and methods and materials for cleaning up

Sweep up and gather scattered particles, and collect it in an empty airtight container.

Recoverly, neutralization

No information available

Secondary disaster prevention measures

Clean contaminated objects and areas thoroughly observing environmental regulations.

Section 7: HANDLING AND STORAGE

Handling

Technical measures

Avoid contact with strong oxidizing agents. Use with local exhaust ventilation.

Precautions

Do not rough handling containers, such as upsetting, falling, giving a shock, and dragging Prevent leakage, overflow, and scattering. Not to generate steam and dust in vain. Seal the container after use. After handling, wash hands and face, and then gargle In places other than those specified, should not be smoking or eating and drinking Should not be brought

contaminated protective equipment and gloves to rest stops Deny unnecessary entry of non-emergency personnel to the handling area

Safety handling precautions

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

| Storage | |
|-------------------------|--|
| Safe storage conditions | |
| Storage conditions | Keep container protect from light, store |
| | in well-ventilated place at room temperature (preferably cool). Keep container tightly |
| | closed. |
| Safe packaging material | Polypropylene |
| Incompatible substances | Strong oxidizing agents |

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls

Eye protection

In case of indoor workplace, seal the source or use a local exhaust system. Provide the safety shower facility, and handand eye-wash facility. And display their position clearly.

Exposure limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Personal protective equipment Respiratory protection Hand protection

Dust mask Protection gloves protective eyeglasses or chemical safety goggles Long-sleeved work clothes

Skin and body protection General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Form

| Color | White - s |
|--|------------|
| Appearance | crystallir |
| Odor | no data |
| Melting point/freezing point | 225 °C |
| Boiling point, initial boiling point and boiling range | no data |
| Flammability | no data |
| Evaporation rate: | no data |
| Flammability (solid, gas): | no data |
| Upper/lower flammability or | |
| explosive limits | |
| Upper: | no data |
| Lower: | no data |
| Flash point | no data |
| Auto-ignition temperature: | no data |
| Decomposition temperature: | no data |
| рН | 4.0 - 7. |
| Viscosity (coefficient of viscosity) | no data |
| Dynamic viscosity | no data |
| Solubilities | water ar |
| n-Octanol/water partition coefficient:(log Pow) | no data |
| Vapour pressure | no data |
| Specific Gravity / Relative density | no data |
| Vapour density | no data |
| Particle characteristics | no data |
| | |

White - slightly yellow rrystalline powder - powder no data available 225 °C no data available no data available no data available no data available

no data available no data available no data available no data available no data available 4.0 - 7.0 (50g/L, 25°C) no data available water and Ethanol : freely soluble . acetone : slightly soluble . no data available no data available

Section 10: STABILITY AND REACTIVITY

Stability

Reactivity no data available Chemical stability May be altered by light. Hygroscopic. Hazardous reactions None under normal processing Conditions to avoid Extremes of temperature and direct sunlight, Moisture Incompatible materials Strong oxidizing agents Hazardous decomposition products Oarbeen meneovide (OO)

Carbon monooxide (CO), Carbon dioxide (CO2), Nitrogen oxides (NOx)

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|-------------------------|----------------|-------------|-----------------|
| Poly(Vinyl Pyrrolidone) | 100 g/kg (Rat) | N/A | N/A |

Skin irritation/corrosion Serious eye damage/ irritation Respiratory or skin sensitization Reproductive cell mutagenicity Carcinogenicity no data available no data available no data available no data available

| Chemical Name | NTP | IARC | ACGIH | JSOH (Japan) |
|--|-----|--|-------|--------------|
| Poly(Vinyl Pyrrolidone) 9003-39-8 | | Group 3 | | |
| STOT-single exposureno dataSTOT-repeated exposureno data | | a available a available a available a available | | |

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

No information available

| Other data | no data available |
|------------|-------------------|
| | |

| Persistence and degradability Bioaccumulative potential | No information available No information available |
|--|--|
| Mobility in soil | No information available |
| Hazard to the ozone layer | No information available |

Section 13: DISPOSAL CONSIDERATIONS

Waste from residues

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated container and contaminated packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Section 14: TRANSPORT INFORMATION

ADR/RID UN number Proper shipping name: Not regulated

-

W01W0116-1704 JGHEEN

| UN classfication Subsidiary hazard class Packing group Marine pollutant | Not applicable |
|--|------------------------------|
| IMDG | Not regulated |
| UN number | - |
| Proper shipping name: | |
| UN classfication | |
| Subsidiary hazard class | |
| Packing group | |
| Marine pollutant (Sea) | Not applicable |
| Transport in bulk according to | No information available |
| Annex II of MARPOL 73/78 and | |
| the IBC Code | Net as avalate d |
| ΙΑΤΑ | Not regulated |
| UN number | - |
| Proper shipping name: | |
| UN classfication | |
| Subsidiary hazard class | |
| Packing group | N I I I I I I I I I I |
| Environmentally Hazardous | Not applicable |
| Substance | |

Section 15: REGULATORY INFORMATION

| International Inventories EINECS/ELINCS TSCA | - Listed |
|--|-----------------|
| Japanese regulations | |
| Fire Service Act | Not applicable |
| Poisonous and Deleterious | Not applicable |
| Substances Control Law | |
| Industrial Safety and Health Act | tNot applicable |
| Regulations for the carriage | Not applicable |
| and storage of dangerous | |
| goods in ship | |
| Civil Aeronautics Law | Not applicable |
| Pollutant Release and Transfer | Not applicable |
| Register Law | |
| (~2023.3.31) | |
| Pollutant Release and Transfer | Not applicable |
| <u>Register Law</u> (2023/4/1~) | |
| Export Trade Control Order | Not applicable |
| | |

Section 16: OTHER INFORMATION

| Key literature references and sources for data etc. | NITE: National Institute of Technology and Evaluation (JAPAN) http://www.safe.nite.go.jp/japan/db.html IATA dangerous Goods Regulations RTECS:Registry of Toxic Effects of Chemical Substances Japan Industrial Safety and Health Association GHS Model SDS Dictionary of Synthetic Oraganic Chemistry , SSOCJ, Koudansha Scientific Co.Ltd. |
|---|---|
| | Chemical Dictionary, Kyouritsu Publishing Co., Ltd. etc |

Disclaimer

This SDS is according to JIS Z 7253: 2019. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, and is not to be considered a warranty or quality specification. The information relates only to the specific material

designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. GHS Classification is according to JIS Z7252(2019). *JIS: Japanese Industrial Standards

End of Safety Data Sheet