

SAFETY DATA SHEET

Effective Date 2018/11/7

1. Identification

| | |
|---------------------|---|
| * Product name | Water-Based Urethane Varnish For Floor Semi-Gloss JPMA F☆☆☆☆ Reg. No. W02040 |
| * Reference number | 26602 |
| * Company | Washin Paint Co.,Ltd. |
| * Company address | 2100-18 Kamiyoshiba Satte-shi Saitama-ken 340-0121 Japan |
| * Section concerned | Production engineering department |
| * Person in charge | Takeyuki Kawashima |
| * Phone No. | 0480-48-2021 |
| * FAX No. | 0480-48-2024 |
| * Emergency contact | 0480-48-2021 |
| * Product kind | Urethane resin paint |
| * Principal use | Floor coating |

2. Hazards identification

[Classification]

| Hazards | Category | Signal word |
|--|---|-------------|
| | Hazard statement | |
| Flammable liquids | Not classified | |
| Acute toxicity Oral | Not classified | |
| Acute toxicity Dermal | Not classified | |
| Acute toxicity Gasas | Not applicable | |
| Acute toxicity Vapours | Not classified | |
| Acute toxicity Mists | Not classified | |
| Skin corrosion/irritation | Not classified | |
| Serious eye damage/eye irritation | Not classified | |
| Respiratory sensitization | Not classified | |
| Skin sensitization | Not classified | |
| Germ cell mutagenicity | Not classified | |
| Carcinogenicity | Not classified | |
| Reproductive toxicity | Category 2 Suspected of damaging fertility or the unborn child. | Warning |
| Specific target organ systemic toxicity Single exposure | Not classified | |
| Specific target organ systemic toxicity Repeated exposure | Category 2 May causes damage to organs state all organs affected, if known through prolonged or repeated exposure. | Warning |
| Aspiration hazard | Not classified | |
| Hazardous to aquatic environment Acute | Not classified | |
| Hazardous to aquatic environment Chronic | Not classified | |
| Hazardous to the ozone layer | Classification not possible | |

* If the signal word "Danger" applies, the signal word "Warning" should not appear.

* For the details with "Specific target organ systemic toxicity", refer to "11.Toxicological information".

[Symbol]

Health hazard



[Precautionary statement]

(Prevention)

- * Obtain and understand special instructions before use.
- * Don't eat, drink or smoke when using this product.
- * Wear protective gloves and eye/face protection when it needs.
- * Wash hands thoroughly and gargle after handling.
- * Paint adhered cloth, paint sluge and sprayed dust have the fear of the spontaneous combustion, so be flooded them until it disposes or burns them up every time at work.

(Response)

- * In case of fire, use carbon dioxide/powder/foams for extinction.
- * If in eyes: Rinse cautiously with water, get medical advice/attention.
- * If on skin or cloth: Wash with plenty of soap and water. Take off contaminated clothing and exchange it.
- * If skin irritation occurs, seek medical advice/attention.
- * If exposed or concerned: Get medical attention/advice.

(Strage)

- * Store container in the place which well-ventilated and cool.

(Disposal)

- * Don't dispose contents/container to the river and the sewage.
- * Dispose contents/container in accordance with local/regional/national regulation.

3. Composition/information on ingredients

Property Mixture
Product kind Urethane resin paint

| Chemical name | Weight (%) | CAS No. | Chemical structure | Notice duty |
|---------------------------|------------|----------|----------------------------------|-------------|
| silica, amourphous, fused | 0~1 | — | SiO ₂ | ○ |
| 1-methyl-2-pyrrolidone | 1~5 | 872-50-4 | C ₅ H ₉ NO | ○ |
| — | — | — | — | — |
| — | — | — | — | — |
| — | — | — | — | — |

4. First-aid measures

(When swallowing)

- * Without making vomit by force, be rested and have a medical attention.
- * The vomit doesn't make swallow. Get medical attention.

(When inhaling)

- * Remove to fresh air and keep at rest in a position comfortable for breathing.
- Seek medical advice/attention if you feel unwell.

(When adhering to the skin)

- * Wipes up quickly with cloth and washes it off sufficiently using plenty of water and soap.
- Don't use organic solvent, thinner and so on.
- * If you get damage or feel pain, seek medical advice/attention.

(When entering eyes)

- * Wash for more than 15 minutes with a plenty of water at once.
- * Get a medical attention as fast as possible.

5. Fire-fighting measures

(Suitable extinguishing media)

- * Water (○), Carbon dioxide (○), Foams (○), Powder (○), Dry sand (○), Other (),

(Specific hazards arising from the chemical)

- * This substance is not inflammable but the dry material is inflammable.
- * When burning, there is possibility to make carbon monoxide occur.

(Specific extinguishing method)

- * Tell Fire Service the place and the dangerous/hazardous property.
- * Prevent outflow being in water pipe or watercourse.
- * Wear respiratory-protective-equipment and protective-glove.
- * Remove combustibles quickly from the surrounding area.
- * Uses the suitable extinguishing media.
- * Do fire fighting from the windward.

(Special protective equipment and precautions for fire-fighters)

- * Wear respiratory-protective-equipment, chemical-defense clothes/glove/boots,/glasses/mask as occasion demands.

6. Accidental release measures

(Personal precautions, protective equipment and emergency procedures)

- * Wear protective equipments (gloves, protective mask, apron and goggles).

(Environmental precautions)

- * Prevent outflow being in water pipe or watercourse.
- * When water pipe or watercourse are polluted, contact organs concerned.

(Methods and materials for containment and cleaning up)

- * Collects outflow to the container which can be shut, and move it to the safe place.
- * Prevent outflow using dry sand, earth or other imcombustible material, and make absorb residue to collect it.
- * It may use water sprayer to absorb the diffusion of vapour.
- * Dispose wastes based on the regulations concerned.

7. Handling and storage

(Handling: Technical measure)

- * Handle this based on the related laws (Industrial Safety and Health Law, Fire Defense Law, etc.).
- * Follow the operation-standard, keep working atmosphere below TLV, promote ventilation.
- * After handling, wash hands with soap water. It should wash work clothing separately.

(Handling: Notice)

- * Avoid contact with strong oxidizing reagent.
- * It has a fear of causing a reaction by heating, acidic material and alkaline material.
- * Use the container which has no damage, no corrosion and no breakage.
- * Gather used containers to the decided safekeeping place.

(Storage)

- * Store container tightly closed in the place which well-ventilated and cool.

8. Exposure controls/personal protection

Standard control concentration, threshold limit value etc.

(Control parameters e.g. occupational exposure limit values or biological limit values)

| Chemical name | Standard control concentration | Threshold limit value | ACGIH (TWA) | PRTR |
|--------------------------|--------------------------------|-----------------------|--------------------|------|
| silica, amorphous, fused | — | — | 2mg/m ³ | — |
| 1-methyl-2-pyrrolidone | — | 1ppm | — | — |
| — | — | — | — | — |
| — | — | — | — | — |
| — | — | — | — | — |

[Equipment measure]

- * Set up safe shower, bathroom and face washing near the work area, and display the position.
- * Show the signs such like 'NO UNAUTHORIZED ENTRY'.

(Protection measure)

- * As occasion demands, wear following guards appropriately.
 - air-supplied respirator, air SCBA, oxygen SCBA, chemical-cartridge respirator,
 - protective glasses, protective gloves, protective boots, protective clothing,
- * Check protective equipments regularly by the check list.
- * Don't eat, drink or smoke when using this product.
- * Wash hands with soap before eat, drink or smoke.
- * The person who showed the symptom of the asthma once should not contact this chemical because he may cause the same symptom.
- * Contact lens bring about special harm.
 - Don't use soft contact lens because it absorbs irritant and has possibility to concentrate them.
- * Wear chemical-proof type protective gloves and antistatic protective shoes.

9. Physical and chemical properties

(Physical state: Liquid)

| | | | | | |
|-----------------|--------------------|--------------------------------------|---------|----------------------------------|---------|
| Colour | Milky | Density | 1.04 | Flash point | Not |
| Odour | Slight resin odour | PH | 7 - 9 | Ignition point | No data |
| Boiling point | 100 °C (ref.) | Solbility | No data | Flammability or explosive limits | |
| Vapour pressure | No data | Partiton coefficient n-octanol/water | | Lower | No data |
| | | | No data | Upper | No data |

10. Stability and reactivity

(Chemical stability)

- * The product seems to be stable.
- * It has a possibility of the dangerous/harmful reaction.
- * It reacts to the oxidizing materials.
- * Paint adhered cloth, paint sluge and sprayed dust have the fear of spontaneous combustion when it oxidize.

(Conditions to avoid)

- * Heating, Contact with the avoidance, Ignition source.
- * Degradation product which has dangerous/hazardous property.
- * Vapour of organic solvent.
- * Heat, light, metal powder and peroxide.

11. Toxicological information

| Chemical name | Acute toxicity | | | |
|---------------------------|-----------------------------|-----------------------------|----------------|-----------------------------|
| | Oral | Dermal | Gasas | Vapours |
| silica, amourphous, fused | Classification not possible | Classification not possible | Not applicable | Classification not possible |
| 1-methyl-2-pyrrolidone | Not classified | Not classified | Not applicable | Classification not possible |
| — | — | — | — | — |
| — | — | — | — | — |
| — | — | — | — | — |

| Chemical name | Acute toxicity | Skin corrosion/ irritation | Serious eye damage/ eye irritation | Respiratory sensitization |
|---------------------------|-----------------------------|-------------------------------|---------------------------------------|------------------------------|
| | Mists | | | |
| silica, amourphous, fused | Classification not possible | Classification not possible | Classification not possible | Classification not possible |
| 1-methyl-2-pyrrolidone | Not classified | Category 2 | Category 2A | Classification not possible |
| — | — | — | — | — |
| — | — | — | — | — |
| — | — | — | — | — |

| Chemical name | Skin sensitization | Germ cell mutagenicity | Carcinogenicity | Reproductive toxicity |
|------------------------|--------------------|-----------------------------|-----------------------------|--------------------------|
| | | | | |
| 1-methyl-2-pyrrolidone | Not classified | Classification not possible | Classification not possible | Category 2 |
| — | — | — | — | — |
| — | — | — | — | — |
| — | — | — | — | — |

| Chemical name | Specific target organ systemic toxicity | | Aspiration hazard |
|---------------------------|---|-----------------------------|-----------------------------|
| | Single exposure | Repeated exposure | |
| silica, amourphous, fused | Classification not possible | Classification not possible | Classification not possible |
| 1-methyl-2-pyrrolidone | Category 3 | Category 1 | Classification not possible |
| — | — | — | — |
| — | — | — | — |
| — | — | — | — |

* Hazards information is peculiar to the chemicals. It doesn't change according to the content.

12. Ecological information

| Chemical name | Hazardous to aquatic environment | | |
|--------------------------|----------------------------------|-----------------------------|-----------------------------|
| | Acute | Chronic | Ozone layer |
| silica, amorphous, fused | Classification not possible | Classification not possible | Classification not possible |
| 1-methyl-2-pyrrolidone | Not classified | Not classified | Classification not possible |
| — | — | — | — |
| — | — | — | — |
| — | — | — | — |

* Hazards information is peculiar to the chemicals. It doesn't change according to the content.

- * Residual property/resolvability There are not data as a mixture.
- * Creature accumulation characteristics There are not data as a mixture.
- * Movement degree in the soil There are not data as a mixture.

13. Disposal consideration

- * Requests disposal to the agency who has solid-waste-treatment license.
- * When disposing container, dispose after removing a content fully.
- * Dispose of contents/container in accordance with local/regional/national regulation.

14. Transport information

(National regulation)

- * There is not special regulation.

(International regulation)

- * UN number Not
- * UN classification It doesn't correspond to the danger according to the UN recommendation.

(Special precautions)

- * In case of transportation, carry "transportation notice" or "Yellow Card".
- * Confirm container tightly closed and no leaking before transportation.
- * In case of transportation, fix a container tightly and use buffering one as occasion demands.

15. Regulatory information

- * Industrial Safety and Health Law
 - Dangerous goods Not applicable
 - Ordinance on the Prevention of Organic Solvent Poisoning Not applicable
 - Ordinance on Prevention of Lead Poisoning Not applicable
 - Ordinance on Prevention of Hazards due to Specified Chemical Substances Not applicable
- * Pollutant Release and Transfer Register Law Not listed
- * Poisonous and Deleterious Substances Control Law Not applicable
- * Fire Defense Law Not applicable
- * Ship Safety Law Not applicable
- * Offensive Odor Control Law Not listed

16. Other information

(Main reference)

- * National Institute of Technology and Evaluation Opend data
- * Japan Paint Manufacturers Association
 - Raw material data base
 - The guide book for the creating SDS and label [mixture (paint)] Second edition
 - Model MSDS and label samples [mixture (paint)]
- * Japan Industrial Safety and Health Association
 - The OJT text for the MSDS of mixture (chemicals) by GHS compatible
 - * "YOZAI Pocket Book" * "KIKEN BOSAI KYUKYU BINRAN"
 - * International Chemical Safety Cards (ICSC) * SDS of raw materials

(Notice)

- * This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only.
- * It should not therefore be construed as guaranteeing any specific property of the product.
- * In case of use, set a safe conditions for handling.
- * All chemicals have possibility of unknown hazards, so it needs a due attention for handling.
- * Applicable scope of this document is only in Japan.