

## SAFETY DATA SHEET

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## 1. Identification of the product and of the company

\* Product name Water-Soluble Flat Varnish Spray

\* Reference number 20801

\* Manufacturer Washin Paint Co., Ltd.

\* Address 2100-18, Kamiyoshiba, Satte-shi, Saitama 340-0121, Japan

\* Phone No. 0480-48-2021

\* FAX No. 0480-48-2024

\* Emergency contact 0480-48-2021

\* Product type Water-soluble resin paint

\* Principal use Wood paint

## 2. Hazards identification

[ Classification ]

Hazards	Category	Signal word
	Hazard statement	
Aerosols	Category 1	Danger
	Extremely flammable aerosol pressurized container; may burst if heated	
Flammable liquids	Category 2	Danger
	Highly flammable liquid and Vapor	
Acute toxicity (Oral)	Not classified	
Acute toxicity (Dermal)	Not classified	
Acute toxicity (Gases)	Not classified	
Acute toxicity (Vapors)	Not classified	
Acute toxicity (Mists)	Not classified	
Skin corrosion/irritation	Classification not possible	
Serious eye damage/eye irritation	Category 1	Danger
	Causes serious eye damage	
Respiratory sensitization	Classification not possible	
Skin sensitization	Classification not possible	
Germ cell mutagenicity	Classification not possible	
Carcinogenicity	Classification not possible	
Reproductive toxicity	Category 2	Warning
	Suspected of damaging fertility or the unborn child	
Specific target organ toxicity Single exposure	Category 1	Danger
	Causes damage to organs	
Specific target organ toxicity Repeated exposure	Category 1	Danger
	Causes damage to organs through prolonged or repeated exposure	
Aspiration hazard	Not classified	
Hazardous to aquatic environment Acute	Not classified	
Hazardous to aquatic environment Chronic	Classification not possible	
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 toxicity", refer to "11. Toxicological information".

## [ Symbol ]

Flame



Corrosion



Health hazard



## [ Precautionary statement ]

## ( Prevention )

- \* Obtain and understand special instructions before use.
- \* Pressurized container: Do not pierce or burn, even after use.
- \* Do not spray on an open flame or any white-hot material.
- \* Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.
- \* Keep container tightly closed and avoid release to the environment.
- \* Take action to prevent static discharge. Ground a container/carrier receptacle etc.
- \* Use non-sparking tools.
- \* Avoid breathing powder dust.
- \* Do not 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.

## ( Response )

- \* In case of fire, use CO2/powder/foams for extinction.
- \* If inhaled: Remove to fresh air and keep at rest in a position comfortable for breathing.  
Get medical advice/attention if you feel unwell.
- \* If in eyes: Rinse cautiously with water, get medical advice/attention.
- \* If on skin or clothing: Wash with plenty of soap and water. Take off contaminated clothing and exchange it.
- \* If skin irritation occurs, get medical advice/attention.
- \* If exposed or concerned of exposure: Get medical advice/attention.

## ( Storage )

- \* Protect from sunlight and do not expose to temperatures exceeding 40 °C.
- \* Store container tightly closed in the place which well-ventilated, cool and child doesn't reach.

## ( Disposal )

- \* Do not dispose of contents to the river and the sewage. Dispose of container after the contents are used up.
- \* Dispose of container in accordance with local/regional/national regulation. Do not use another purpose.

## 3. Composition/information on ingredients

Property Mixture

Product type Water-soluble resin paint

Ingredient name	Weight (%)	CAS No.	Chemical formula	Duty of notify
dimethyl ether	50~60	115-10-6	C <sub>2</sub> H <sub>6</sub> O	○
2-propanol	10~20	67-63-0	C <sub>3</sub> H <sub>8</sub> O	○
resin	10~20	—	—	—
water	5~10	7732-18-5	H <sub>2</sub> O	—
1-butanol	5~10	71-36-3	C <sub>4</sub> H <sub>10</sub> O	○
silica, amorphous	1~5	—	SiO <sub>2</sub>	○
additive	0~1	—	—	—

## 4. First-aid measures

( If swallowed )

- \* Do not induce vomiting. Keep at rest and get medical attention immediately.
- \* Do not swallow vomit.

( If inhaled )

- \* Give artificial respiration if breathing is irregular or has stopped.
- \* Do not swallow vomit and get medical attention immediately.
- \* Remove to fresh air and keep at rest in a position comfortable for breathing.
- Get medical advice/attention if you feel unwell.

( If on skin )

- \* Wipe off quickly with cloth and wash with plenty of water and soap.
- Do not use solvents or thinners.
- \* If skin irritation or pain occurs, get medical advice/attention.

( If in eyes )

- \* Wash with plenty of clean water for at least 15 minutes immediately, including behind the eyelids.
- \* Get medical attention as soon as possible.

## 5. Fire-fighting measures

( Suitable extinguishing media )

- \* Water ( ), CO2 ( O ), Foam ( O ), Powder ( O ), Dry sand ( ), Other ( )

( Specific hazards arising from the product )

- \* Liquid and vapour are extremely flammable.
- If they expose to heat, flame or oxidizers, there is danger of intense fire.
- \* May burst of container intensely by expansion and decomposition of content.
- \* Will form toxic carbon monoxides upon combustion.

( Specific extinguishing method )

- \* Inform fire station of the location and the hazardous/toxicological information of fire.
- \* Prevent spills from entering sewers, watercourses.
- \* Wear respiratory protection and protective gloves.
- \* Remove quickly all flammable materials from the area.
- \* Use the suitable extinguishing medias.
- \* Do fire fighting from the windward.
- \* Keep a sufficient distance from the fire when extinguishing. The container may burst due to high temperatures.

( Special protective equipment and precautions for fire-fighters )

- \* Wear respiratory protective equipment/chemical protective clothing/gloves/boots/glasses/masks as necessary.

## 6. Accidental release measures

( Personal precautions, protective equipment and emergency procedures )

- \* Evacuate personnel for windward from the leak area.
- \* Avoid inhalation of vapours and contact with skin and eyes. Ventilate well.
- \* Wear protective equipment (gloves, protective mask, apron, goggles, etc.).

( Environmental precautions )

- \* Prevent spills from entering sewers, watercourses.
- \* If contamination of sewer pipes or waterways occurs, notify appropriate authorities.

( Methods and materials for containment and cleaning up )

- \* Eliminate all ignition sources. Prohibit smoking, open flames. Use only non-sparking tools.
- \* Collect spills in sealable containers and move to a safe place.
- \* Absorb spills with inert material (dry sand, earth, et al).
- \* Water spray mist may be used to absorb the diffusion of vapours.
- \* Dispose of waste in accordance with applicable laws and regulations.

## 7. Handling and storage

( Handling: Technical measure )

- \* Handle in accordance with relevant laws and regulations (the Industrial Safety and Health Act and the Fire Service Act, etc.).
- \* Follow the correct work procedures, ventilate well and keep the working environment below TLV.
- \* Wear antistatic work clothing and shoes while handling.
- \* Eliminate all ignition sources. Prohibit smoking and fire. Use non-sparking tools.
- \* Equipment for transporting, pumping, stirring, etc. must be grounded. Use explosion-proof electrical devices.
- \* After handling, always wash with soap and water. Launder work clothing separately from other clothing.

## ( Handling: Notice )

- \* To prevent static discharge, ground all equipment and use explosion-proof electrical devices.
- \* Avoid contact with strong oxidizing agent.
- \* Take caution as heat, acidic and alkaline substances may induce a reaction.
- \* Use containers that are not damaged, corroded or cracked.
- \* Used containers should be collected in the designated area.

## ( Storage )

- \* Follow the Fire Service Act and other regulations because of a flammable liquid.
- \* Protect from sunlight and do not expose to temperatures above 40 °C.
- \* Do not store near water or in humid places as container may corrode and burst.
- \* Store in a cool, well-ventilated place in a tightly closed container.

## 8. Exposure controls/personal protection

Standard control concentration, threshold limit value etc.

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

Ingredient name	Standard control concentration	Threshold limit value	ACGIH ( TLV )	PRTR	Skin harmful substances	
					Irritation	Absorption
dimethyl ether	—	—	—	—	—	—
2-propanol	200ppm	400ppm	200ppm	—	—	—
resin	—	—	—	—	—	—
water	—	—	—	—	—	—
1-butanol	25ppm	50ppm	20ppm	—	○	○
silica, amorphous	—	—	—	—	—	—
additive	—	—	—	—	—	—

## [Equipment measure]

- \* Set up sealed systems or local exhaust ventilation.
- \* Install safety showers, hand- and face-washing facilities near handling areas and clearly indicate their locations.
- \* Post signs such as "NO OPEN FLAMES" and "NO UNAUTHORIZED ENTRY" in easily visible locations.
- \* Explosion-proof local exhaust ventilation is required in workplaces where flammable liquids are handled.

## ( Protection measure )

- \* Wear the following protective equipment as necessary:  
Air supply masks, air SCBA, oxygen SCBA, gas masks, protective goggles,  
impermeable protective gloves, protective boots, protective clothing
- \* Check protective equipment regularly using a checklist.
- \* Do not eat, drink, or smoke while handling.
- \* After handling, wash hands with soap before eating, drinking, or smoking.
- \* If you experience asthma symptoms while using this product,  
do not come into contact with it again as it may cause the same symptoms.
- \* Contact lenses pose a special hazard.  
Soft lenses should not be used because they can absorb irritants and concentrate them.
- \* Wear impermeable chemical protective gloves and antistatic safety shoes.

## 9. Physical and chemical properties

( Content fluid Physical state : Liquid )

Liquid color	Milky	Density	0.92 g/mL (25°C)	Flash point	17 °C
Odor	Solvent odor	pH	Not correspond	Ignition point	343 °C
Boiling point Lower	82 °C	Solubility	Soluble in water	Flammability or explosive limits	
Boiling point Upper	118 °C	Partition coefficient n-octanol/water		Lower	1.5 %
Vapor pressure	4266 Pa (ref.)		No data	Upper	12 %

( Propellant ( dimethyl ether ) )

Liquid color	Transparent colorless	Density	0.66 g/mL (25°C)	Flash point	-41 °C
Odor	Chloroform like Odor	pH	Not correspond	Ignition point	350 °C
Boiling point	-24.8 °C	Solubility	No data	Flammability or explosive limits	
		Partition coefficient n-octanol/water		Lower	3.4 %
Vapor pressure	590616 Pa (ref.)		No data	Upper	26.7 %

## 10. Stability and reactivity

( Chemical stability )

\* Stable under normal storage/handling conditions.

( Possibility of hazardous reactions )

\* Reacts with oxidizing agents.

\* No other reactions were informed.

( Conditions to avoid )

\* Avoid heat and sources of ignition (flames, sparks, etc.).

\* Organic solvent vapors

\* Heat, light, metal powders and peroxides

## 11. Toxicological information

Ingredient name	Acute toxicity			
	Oral	Dermal	Gases	Vapors
dimethyl ether	Classification not possible	Classification not possible	Not classified	Not applicable
2-propanol	Not classified	Not classified	Not classified	Not classified
resin	Not classified	Not classified	Not classified	Not classified
water	Not classified	Not classified	Not classified	Not classified
1-butanol	Not classified	Not classified	Not classified	Classification not possible
silica, amorphous	Classification not possible	Classification not possible	Not classified	Classification not possible
additive	Classification not possible	Classification not possible	Not classified	Classification not possible

Ingredient name	Acute toxicity	Skin corrosion/ irritation	Serious eye damage/ eye irritation	Respiratory sensitization
	Mists			
dimethyl ether	Not applicable	Classification not possible	Classification not possible	Classification not possible
2-propanol	Classification not possible	Not classified	Category 2	Classification not possible
resin	Not classified	Not classified	Not classified	Not classified
water	Not classified	Not classified	Not classified	Not classified
1-butanol	Classification not possible	Category 2	Category 1	Classification not possible
silica, amorphous	Classification not possible	Classification not possible	Classification not possible	Classification not possible
additive	Classification not possible	Classification not possible	Classification not possible	Classification not possible

Ingredient name	Skin sensitization	Germ cell mutagenicity	Carcinogenicity	Reproductive toxicity
dimethyl ether	Classification not possible	Classification not possible	Classification not possible	Classification not possible
2-propanol	Classification not possible	Classification not possible	Classification not possible	Category 2
resin	Not classified	Not classified	Not classified	Not classified
water	Not classified	Not classified	Not classified	Not classified
1-butanol	Classification not possible	Classification not possible	Classification not possible	Classification not possible
silica, amorphous	Classification not possible	Classification not possible	Classification not possible	Classification not possible
additive	Classification not possible	Classification not possible	Classification not possible	Classification not possible

Ingredient name	Specific target organ toxicity		Aspiration hazard
	Single exposure	Repeated exposure	
dimethyl ether	Category 3	Classification not possible	Classification not possible
2-propanol	Category 1, 3	Category 1, 2	Classification not possible
resin	Not classified	Not classified	Not classified
water	Not classified	Not classified	Not classified
1-butanol	Category 3	Category 1	Classification not possible
silica, amorphous	Classification not possible	Classification not possible	Classification not possible
additive	Classification not possible	Classification not possible	Classification not possible

\* This information is specific to the chemical substance and is not dependent on the concentration.

## 12. Ecological information

Ingredient name	Hazardous to aquatic environment		
	Acute	Chronic	Ozone layer
dimethyl ether	Not classified	Not classified	Classification not possible
2-propanol	Not classified	Not classified	Classification not possible
resin	Not classified	Not classified	Classification not possible
water	Not classified	Not classified	Classification not possible
1-butanol	Not classified	Not classified	Classification not possible
silica, amorphous	Classification not possible	Classification not possible	Classification not possible
additive	Classification not possible	Classification not possible	Classification not possible

\* This information is specific to the chemical substance and is not dependent on the concentration.

- |                                 |   |
|---------------------------------|---|
| * Persistence and degradability | There is no data available for the mixture. |
| * Bioaccumulative potential     | There is no data available for the mixture. |
| * Mobility in soil              | There is no data available for the mixture. |

## 13. Disposal considerations

- \* When disposing of this product, ask an industrial waste disposal company to handle the disposal.
- \* May burst if placed in a fire, even if the container is empty.
- \* Dispose of container after using the contents completely.
- \* Be careful of fire and inhaling mist when degassing.
- \* Dispose of the contents/container in accordance with local/national regulations.

## 14. Transport information

### ( National regulation )

- |                      |   |
|----------------------|---|
| * UN number          | 1950  |
| * Guideline number   | 126   |
| * Land transport     | Follow the transport methods stipulated in the Fire Service Act, Industrial Safety and Health Act, etc. |
| * Air transport      | Aerosol products cannot be transported under the Aviation Act.  |
| * Maritime transport | Follow the transport methods stipulated in the Ship Safety Act.   |
| * Fire Service Act   | Annex class 4-1    Water-soluble    Danger class    II  |

### ( International regulation )

- |                     |                     |
|---------------------|---------------------|
| * UN number         | 1950                |
| * UN classification | Class 2    AEROSOLS |

### ( Special precautions )

- \* When transporting by vehicle, etc., carry the transportation precautions and Yellow Card.
- \* Check the container is tightly sealed and there are no leaks before transport.
- \* Secure the container tightly and keep the temperature below 40 °C.

## 15. Regulatory information

## \* Industrial Safety and Health Act

Dangerous goods	Flammable liquid
Ordinance on Prevention of Organic Solvent Poisoning	Class-2
Ordinance on Prevention of Lead Poisoning	Not applicable
Ordinance on Prevention of Hazards Due to Specified Chemical Substances	Not applicable
Skin irritant harmful substances	Not applicable
Skin absorbable harmful substances	Not applicable

* Pollutant Release and Transfer Register Law	Not listed
* Poisonous and Deleterious Substances Control Act	Not applicable
* Fire Service Act	Annex class 4-1    Water-soluble
* Ship Safety Act	Dangerous goods (high pressure gas)
* Offensive Odor Control Law	Not listed

## 16. Other information

## ( Main references )

- \* Data published by the National Institute of Technology and Evaluation
- \* Japan Paint Manufacturers Association,
  - "Raw Materials Database"
  - "GHS-compliant SDS/Label Creation Guidebook [Mixtures (for paints)]"
  - "Model MSDS/Model Label Examples [Mixtures (for paints)]"
- \* Japan Industrial Safety and Health Association,
  - "GHS-compliant Training Text for Creating MSDS of Mixtures (chemicals)"
- \* The Society of Synthetic Organic Chemistry, Japan, "New Edition Solvent Pocket Book"
- \* "Disaster Prevention and First Aid Handbook"
- \* International Chemical Safety Cards (ICSC)
- \* SDS of raw materials

## ( Notice )

- \* This data sheet is based on our current knowledge and is intended as a description of health, safety and environmental information.
- \* We do not guarantee any content, physical or chemical properties, hazards, etc.
- \* When using, ensure safe handling conditions.
- \* All chemical products may have unknown hazards and harmful effects, so they must be handled with the utmost care.
- \* The scope of application of this data sheet is limited to Japan.