

1. Product and Company Information

Product Name: Touch-up paint (base)
Company Name: Panasonic Electric Works Chemical Co., Ltd.
Address: 4-1-20, Nishinomiya-hama, Nishinomiya, Hyogo, 662-0934
Section in Charge: Quality & Environment Section, Business Management Group
Telephone: 0798-33-1371
Facsimile: 0798-33-1538
Emergency Telephone: 0798-33-1371
Management No.: M0301001E09

2. Abstract Of Hazardous/Toxic Properties**[GHS Classification]****Physical/Chemical Hazard**

Inflammable liquid: Category 2

Health Hazard

Acute toxicity (Oral): Category 5

Acute toxicity (Percutaneous): Out of category

Acute toxicity (Inhalation: Gas): Not subject to classification

Acute toxicity (Inhalation: Vapor): Category 4

Acute toxicity (Inhalation: Powder dust, mist): Cannot be classified

Skin irritation/corrosion: Category 2

Serious eye damage/eye irritation: Category 2A

Respiratory organ sensitization: Cannot be classified

Skin sensitization: Out of category

Generative cell mutagenicity: Out of category

Carcinogenicity: Out of category

Reproductive toxicity: Category 1A

Specific target organ systemic toxicity (Single exposure): Category 1 Internal organs (Central nervous system, respiratory organ system, liver, kidney, organ of vision, general toxicity)

Category 3: Risk of respiratory organ irritation
Risk of drowsiness or dizziness

Specific target organ systemic toxicity (Repeated exposure): Category 1 Disorders of internal organs (Nervous system, central nervous system, liver, kidney, organ of vision) from long-term or repeated exposure

Aspiration hazard to respiratory organ: Category 1

Environmental Hazard

Aquatic environment hazard (Acute) Category 2

Aquatic environment hazard (Chronic) Out of category

[GHS Labeling]**[Information On Hazard/Toxicity]**

Highly inflammable liquid and vapor

Swallow harm

Inhalation harm

Skin irritation

Serious eye irritation

Adverse influence on generative function or unborn baby

Disorders of internal organs (Respiratory organ, central nervous system, kidney, liver, organ of vision, general toxicity)

Risk of respiratory organ irritation

Risk of drowsiness or dizziness

Disorders of internal organs (Central nervous system, kidney, liver, organ of vision, nervous system) from long-term or repeated exposure

Risk of death from swallow or entry into the respiratory tract

Toxicity to aquatic creatures

[Precautions]**Safety Measures**

Do not handle the material before you read all safety instructions and understand them thoroughly.

Obtain instruction manuals before use.

During use of the material, do not eat, drink or smoke.

Keep the material away from a heat source, such as heat, spark, flame or high-temperature object.

Use explosion-proof electrical equipment, ventilator and illumination equipment.

Use personal protective gear to cope with electrostatic discharge and spark, and a ventilator, and avoid exposure.

Wear protective gloves, protective glasses and protective mask.

Use the material outdoors, or in a well-ventilated place.

Do not inhale mist, vapor or spray.

After handling the material, thoroughly wash the hands.

Avoid release to the environment.

[Emergency Actions]

In case of a fire, take appropriate fire extinguishing measures.

If the material is inhaled, move to a place with fresh air, and take a rest in a posture that facilitates respiration.

If the material is swallowed, do not forcibly vomit it.

If the material touches the eyes, wash the eyes carefully with water for several minutes.

If contact lenses can be easily removed, remove and wash the lenses.

If the material touches the skin, wash the skin with a large quantity of water and soap.

If the material touches the skin (or hair), immediately remove all stained clothes.

Once removed, wash all stained protective clothes before reuse.

In case of exposure, or if there is possibility of exposure, undergo doctor's diagnosis and medical treatment.

[Storage]

Tightly seal the package, and keep it in a cool, well-ventilated place with a lock.

[Disposal]

Disposal of the materials and packages should be trusted to a specialized waste disposal agent authorized by the prefectural governor.

3. Information on Composition and Ingredients

Differentiation between single material and mixture: Mixture

Chemical name (or general name): Silicone resin solution

Ingredient:

Ingredient	Content	CAS No.	Kashin-ho No. (Act on the evaluation of chemical substances and regulation of their manufacture, etc.)	Anei-ho No (Industrial Safety and Health Act)	PRTR
Silicone resin	10-20%				
Methanol	20-30%	67-56-1	2-201	560	
Toluene	21%	108-88-3	3-2	407	Class 1-300
Silane coupling agent	0-5%	3069-29-2		191	
Pigment White Titanium dioxide	30-40%	13463-67-7	1-558	191	
Pigment Black Pigment black 28*		68186-91-4	1-284, 475	142, 379	Class 1-87
Pigment Brown Pigment brown 33*		68186-88-9	1-284	142	Class 1-87
Pigment Yellow Pigment brown 24*		68186-90-3	1-284, 543	38, 142	Class 1-31, 87
Pigment Yellow Pigment yellow 119*		68187-51-9	1-357, 561	192, 188	
Pigment Blue Pigment blue 28*		1345-16-0	1-267	172	Class 1-132
Pigment Pink Pigment red 233*		68187-12-2	1-284, 551	142, 322	Class 1-87

The contents of chrome, antimony and cobalt for each paint color are given in the attached document ("MB-R440")

(G1) PRTR substance content percentage list by principle agent product number").

Hazardous/toxic ingredient: Toluene, methanol

4. First Aid Actions

Inhalation:	Move to a place with fresh air. In case of dyspnea, undergo artificial respiration or oxygen inhalation, and immediately take doctor's diagnosis.
Skin:	Immediately wipe off the adhering substance with a soft cloth, etc. Thoroughly wash it off with a large quantity of water and soap. If there is a change in appearance or a pain, take doctor's diagnosis.
Eyes:	Immediately wash the substance with a large quantity of clean running water for at least 15 minutes. Completely wash the eyes including inside of the eyelids. Get medical attention as soon as possible.
Ingestion:	In case of accidental swallow, remove a residual substance from the mouth, and rest quietly in bed. Immediately take doctor's diagnosis. Since the substance may include volatile liquid, it is more hazardous to vomit it forcedly. Do not allow vomited substance to be re-swallowed.

5. Fire Fighting Procedures

Extinguishing Media:	Carbon dioxide gas fire extinguishing agent, foam fire extinguishing agent, powder fire extinguishing agent
Extinguishing Media to be Avoided:	Water
Protection for Fire Fighters:	Use respiratory protection equipment.

6. Accidental Release Measures

Personal Precautions:	During work, wear appropriate protective gear (gloves, protective mask, apron, goggles, etc.). The action should be conducted from the windward side. Environmental Quickly remove possible ignition sources in and around the target area.
Environmental Precautions:	Remove an ignition source from the surrounding area.
Collecting Method:	In case of a large amount of leak, after taking outflow preventive measures with sand, sandbags, etc., collect the leak substance into an empty container that can be tightly sealed. In case of a small amount of leak, absorb the leak substance with a soft cloth, etc, and collect it into an empty container that can be tightly sealed.

7. Handling And Storage Precautions

Handling Precautions:

- Wear protective glasses, protective gloves and respiratory protective gear.
- Keep fire off.
- For the purpose of electrostatic elimination, ground equipment and appliances.
- For electrical equipment used in a chemical handling place, provide explosion-proof structure, and take static electricity elimination measures.
- Seal the package every time it is closed.

Storage Precautions:

- Avoid storing the package in a place exposed to direct sunlight. Store it in a well-ventilated, cool and dark place.
- The storing place must be free from fire.
- The package must be tightly sealed.

8. Exposure Prevention And Protective Measures

Control Density: 50 ppm (toluene)

Allowable Density:

- 50 ppm (Toluene) Japan Society for Occupational Health (1996)
- 200 ppm (Methanol) Japan Society for Occupational Health (1996)
- TWA 50 ppm (Toluene) ACGIH (1997)
- TWA 200 ppm (Methanol) ACGIH (1997)

Measures for Facility: Overall and local exhaust systems, eye washing equipment, safety shower

Protective Gear:

- Respiratory protective gear: Gas mask for organic gas.
- Hand protective gear: Oil-proof protective gloves
- Eye protective gear: Protective glasses (goggles)
- Skin and body: Oil-proof protective boots, protective clothes and protective apron

9. Physical And Chemical Properties

State: Liquid

Color: Specified color

Odor: Solvent odor

Boiling Point: 64 to 110°C

Density: 1.30

Flash Point: Flash point: 4.4°C, Ignition point: 470°C or higher

Explosive Characteristics: Explosion limit: Upper limit: 1.3%, Lower limit: 7.0% (Toluene)

Solubility: Hardly soluble in water

10. Stability And Reactivity

Stability:

Intrinsically stable. However, polymerization or decomposition may occur in contact with strong acid or strong alkali.

Reactivity:

Because of hydrolytic degradation property, use caution against mixture of moisture.

Materials to be Avoided:

Acute reaction with strong oxidizing agent, strong nitric acid, halogen, etc.

11. Information on Toxicity (Toluene)

Acute Toxicity:

Oral LD50: 5,000 mg/kg (rat) (Toluene)

Local Effects (Skin, Eyes, etc.):

LD50: 12,000 mg/kg (rat) (Toluene)

Chronic/Long-term Toxicity:

60 to 100 ppm exposure for 4 years results in neural poisoning, etc. (Toluene)

Allowable Density:

ACGIH TLV Antimony (Sb) 0.5 mg/m³

Chrome (Cr) 0.5 mg/m³

Cobalt (Co) 0.02 mg/m³

12. Information on Environmental Impact

Mobility:

Because of physical properties, movable to the atmosphere, water and soil environments.

Persistency/Decomposition Property:

Regarding contained solvent, excellent decomposition property has been provided as a result of existing chemical substance inspection based on the Kashin-ho.

Ichthyotoxicity:

Trout Tlm 488, Trout Tlm 488,000 mg/l, Tribolodon hakonensis LD100 17,000 mg/124h (Methanol)

13. Precautions for Disposal

(1) Spray the material into a fire room of an incinerator to burn it. Since the material contains chrome, which corresponds to an environmental control substance under the Water Pollution Control Law, use caution not to allow residual incineration waste to directly flow to the outside. Note: No chrome is contained depending on the paint color.

(2) The contents and packages must be disposed of by following the specified procedure according to the Industrial Waste Disposal Law, or trusted to an authorized industrial waste disposal agent under a contract.

14. Precautions for Transportation

INTERNATIONAL CONTROL

Marine Transportation Control Information:	Conform to the IMO regulation.
UN No.:	1263
Proper shipping name:	Paint
Class:	3
Packing group:	II
Marine pollutant:	Not applicable
Aerial Transportation Control Information:	Conform to the ICAO/IATA regulation.
UN No.:	1263
Proper shipping name	Paint
Class:	3
Packing group:	II

DOMESTIC CONTROL (Japan)

Land Transportation Control Information:	Conform to the Fire Service Act.
	Conform to the <i>Dokugeki-ho</i> (Poisonous and Deleterious Substances Control Act).
Marine Transportation Control Information:	Conform to the Ship Safety Act.
UN No.:	1263
Product name:	Paint
Class:	3
Packing group:	II
Marine pollutant:	Not applicable
Aerial Transportation Control Information:	Conform to the Civil Aeronautics Act.
UN No.:	1263
Product name:	Paint
Class:	3
Packing group:	II

Special Safety Measures:

Hazardous substances must be loaded so that the hazardous substances or carrying packages that contains the relevant hazardous substances will not fall, overturn or suffer damage.

Hazardous substances or carrying packages that contains the relevant hazardous substances must be transported so that the packages will not suffer remarkable friction or oscillation.

If there is a risk of remarkable leak of hazardous substances during transportation, take emergency measures to prevent the hazard, and contact the nearest fire station or other related organization.

During transportation, avoid exposure to direct sunlight. Load packages so that they will not suffer damage, corrosion or leak, and secure load collapse preventive measures.

Do not stack heavy objects.

15. Applicable Laws And Ordinances

Fire Service Act:	Hazardous substance Class 4, Petroleum Class 1, (non-water-soluble)
Industrial Safety and Health Act:	Ordinance on Prevention of Organic Solvent Poisoning, Class 2 Organic Solvent
PRTR Law:	Class 1 specific chemical substance No.300 (Toluene) No.31 (Antimony) No.87 (Chrome) No.132 (Cobalt)
Poisonous and Deleterious Substances Control Act:	Not applicable
Offensive Odor Control Act:	Content of specific substance (Toluene)
Ship Safety Act:	Inflammable liquid with medium flash point
Civil Aeronautics Act:	Inflammable liquid

16. Other

The description in this document has been prepared based on reference materials, information and data that we have obtained until now, but it may be revised if there is a new finding. The amount of contents, and physical and chemical properties described in this document are not guaranteed values.