

# Safety Data Sheet

## 1. Products and company identification

Product name	ROVAL MC Color Matching Metallic Spray for Galvanized Materials
Supplier Name	SHANGHAI ROVAL ZINC RICH PAINT CORPORATION
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Recommended use	Cosmetic repair of galvanized surface
Date of revision	Dec 7 <sup>th</sup> , 2023

## 2. Hazards identification

### 2.1 Classification of the substance or mixture

#### PHYSICAL AND CHEMICAL HAZARDS

Flammable aerosol: Category 2

#### HEALTH HAZARDS

Acute toxicity inhalation (vapors): Category 4

Skin corrosion/irritation: Category 2

Serious eye damage/Eye irritation: Category 2

Carcinogenicity: Category 2

Reproductive toxicity: Category 1B

STOT: Single exposure: Category 1 (central nerve system, respiratory system, liver, kidney, cardiovascular system)

Category 2

Category 3 (may cause drowsiness or dizziness)

Repeated exposure: Category 1 (nervous system, central nervous system, respiratory system)

Category 2 (hearing)

#### ENVIRONMENTAL HAZARDS:

Acute aquatic toxicity: Category 2

Chronic aquatic toxicity: Category 2

(Note) GHS classification without description: Not classified/Classification not possible

### 2.2 Label elements



Signal word: DANGER

## HAZARD STATEMENT

H223 Flammable aerosol.

H229: Pressurized container: may burst if heated.

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H332: Harmful if inhaled.

H336: May cause drowsiness or dizziness.

H351: Suspected of causing cancer.

H360: May damage fertility or the unborn child.

H370: Causes damage to organs.

H372: Causes damage to organs through prolonged or repeated exposure.

H373: May cause damage to organs through prolonged or repeated exposure.

H411: Toxic to aquatic life with long lasting effects.

## PRECAUTIONARY STATEMENT

### Prevention

P201: Obtain special instruction 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.

P211: Do not spray on an open flame or other ignition source.

P260: Do not breathe dust/fumes/gas/mist/vapors/spray.

P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P271: Use only outdoors or in a well-ventilated area.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

### First aid

P302+P352: IF ON SKIN: Wash with plenty water/shower.

P304+P340: IF INHALED: Remove person to fresh air and Keep 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.

P332+P313: If skin irritation occurs: Get medical advice/attention.

P337+P313: If eye irritation persists: Get medical advice/attention.

P362+P364: Take off contaminated clothing and wash it before reuse.

P391: Collect spillage.

### Storage

P405: Store locked up.

P410+412: Protect from sunlight. Do not expose to temperatures exceeding 40°C/104°F.

### Disposal

P501: Dispose of contents/container in accordance with local/national regulation.

### 3. Composition /information on ingredients

Mixture / Substance selection: Mixture

Chemical identity	% Weigh	CAS number
Aluminum	1~5	7429-90-5
Xylene	16	1330-20-7
Ethyl benzene	15	100-41-4
Butane	20~25	106-97-8
Isobutane	10~15	75-28-5
Propane	10~15	74-98-6

### 4. First-aid measures

IF INHALED

Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER or doctor / physician if you feel unwell.

IF ON SKIN (or hair)

Take off immediately all contaminated clothing. Rinse skin with water / shower.

Wash with plenty of soap and water.

If skin irritation occurs: Get medical advice / attention.

IF IN EYES

Rinse cautiously with water for several minutes. Remove contact lenses. If present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice / attention.

IF SWALLOWED

Do NOT induce vomiting.

Immediately call a POISON CENTER or doctor / physician.

### 5. Fire-fighting measures

5.1 Extinguishing media

In case of fire, use carbon dioxide/dry powder/foam/dry sand to extinguish.

Do not use direct water jet.

5.2 Advice for firefighters

Evacuate non-essential personnel to safe area.

Eliminate all ignition sources if safe to do so.

Cool container with water spray.

Wear fire/flame resistant/retardant clothing.

Wear protective gloves/protective clothing/eye protection/face protection.

### 6. Accidental release measures

6.1 Personnel precautions, protective equipment and emergency procedures

Evacuate area.

Keep unauthorized personnel away.

Wear an air-supplied respirator for handling a spill at a poor ventilated workplace.

Wear proper protective equipment.

Eliminate all sources of ignition and ventilate the area.

## 6.2 Environmental precautions

Prevent spills from entering sewers, watercourses or low areas.

## 6.3 Methods and materials for containment and cleaning up

Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste container.

Fill the disposal into labelled, closable containers.

## 6.4 Preventive measures for secondary accident

Collect spillage.

Prepare extinguishers before catching fire.

Stop leak if safe to do so.

# 7. Handling and storage

## 7.1 Precautions for safe handling

Avoid breathing gas/mist/vapors/spray.

Keep away from heat/sparks/open flames/hot surfaces. -No smoking.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Exhaust/ventilator should be available.

Avoid contact with skin/eyes.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/eye protection/face protection.

Use personal protective equipment as required.

## 7.2 Storage

Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up.

# 8. Exposure controls / personal protection

## 8.1 Control parameters

Chemical identity	ACGIH_TLV (2016)
Aluminum	1mg/m <sup>3</sup> (TWA)
Xylene	100ppm (TWA)
Ethyl benzene	20ppm (TWA)
Butane	1000ppm (TWA)
Isobutane	250ppm (TWA)
Propane	1000ppm (TWA)

## 8.2 Exposure controls

Appropriate engineering controls

Exhaust/ventilator should be available.

Eye wash station should be available.

Washing facilities should be available.

Individual protection measures

Respiratory protection

Wear respiratory protection

Hand protection

Wear protective gloves. Recommended material: impermeable or chemical resistant rubber

Eye protection

Wear safety glasses with side -shields or chemical safety goggle.

Skin and body protection

Wear protective clothing.

Wear impervious clothing and boots in case of repeated or prolonged treatment.

## 9. Physical and chemical properties

Physical state	: Liquid
Color	: Silver
Odor	: Smells like solvent
Boiling point	: -42.1°C ~200°C
Flash point	: Paint liquid 21.9°C, propellant -104°C
Auto-ignition temperature	: 250°C
Lower and upper explosion limit/flammability limit:	
Lower explosion limit	: 1.0vol%
Upper explosion limit	: 9.5vol%
Vapor pressure	: 840kPa (20°C)
Specific Gravity	: 0.68

## 10. Stability and Reactivity

### 10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

### 10.2 Chemical stability

Stable under normal storage/handling conditions.

### 10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

### 10.4 Conditions to avoid

Avoid all possible sources of ignition (spark or flame).

### 10.5 Incompatible materials

Reactive or incompatible with the following materials: oxidizing materials

### 10.6 Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 11. Toxicological Information

### Acute Toxicity

Material	Oral	Category	Dermal	Category
Aluminum	Not possible		Not possible	
Xylene	3.5g/kg	Not classified	1.7g/kg	Category 4
Ethyl benzene	3.5g/kg	Not classified	5.0g/kg	Not classified
Butane	Not classified		Not classified	
Isobutane	Not classified		Not classified	
Propane	Not classified		Not classified	

Material	Gas	Category	Vapor	Category	Dust / Mist	Category
Aluminum	Not classified		Not possible		Not possible	
Xylene	Not classified		6350ppm	Category 4	Not possible	
Ethyl benzene	Not classified		4000ppm	Category 4	Not possible	
Butane	Not classified		Not classified		Not classified	
Isobutane	10938ppm	Not classified	Not classified		Not classified	
Propane	38890ppm	Not classified	Not classified		Not classified	

Material	Skin corrosion/Irritation	Eye damage/Irritation	Respiratory sensitization	Skin sensitization
Aluminum	Not possible	Not possible	Not possible	Not possible
Xylene	Category 2	Category 2	Not possible	Not possible
Ethyl benzene	Not classified	Category 2B	Not possible	Not possible
Butane	Not classified	Not classified	Not possible	Not possible
Isobutane	Not classified	Not classified	Not possible	Not possible
Propane	Not classified	Not possible	Not possible	Not possible

Material	Germ cell mutagenicity	Carcinogenicity	Reproductive toxicity
Aluminum	Not possible	Not possible	Not possible
Xylene	Not possible	Not possible	Category 1B
Ethyl benzene	Not classified	Category 2	Category 1B
Butane	Not possible	Not possible	Not possible
Isobutane	Not possible	Not possible	Not possible
Propane	Not possible	Not possible	Not possible

Material	STOT (single)	STOT (Chronic)	Aspiration Hazard
Aluminum	Category 1 (respiratory)	Category 1 (respiratory)	Not possible
Xylene	Category 1 (respiratory, liver, central nerve system, kidney)	Category 1 (respiratory, nervous system)	Category 1
	Category 3 (anesthetic effect)		
Ethyl benzene	Category 3 (irritating to the respiratory tract, anesthetic effect)	Category 2 (hearing apparatus)	Category 1
Butane	Category 3 (anesthetic effect)	Category 1 (central nervous system)	Not classified
Isobutane	Category 1 (cardiovascular system)	Not possible	Not classified
	Category 3 (anesthetic effect)		
Propane	Category 3 (anesthetic effect)	Not possible	Not classified

## 12. Ecological Information

### 12.1 Ecotoxicity

Material	Acute aquatic toxicity	Chronic aquatic toxicity	Hazard to Ozone
Aluminum	Not possible	Not possible	Not possible
Xylene	Category 2	Category 2	Not possible
Ethyl benzene	Category 1	Category 2	Not possible
Butane	Not possible	Not possible	Not possible
Isobutane	Not possible	Not possible	Not possible
Propane	Not possible	Not possible	Not possible

### 12.2 Persistence and degradative

Xylene does not have rapid degradative (BOD: 39%)

Ethyl benzene has rapid derivative, stripping from water (BOD: 81-126%)

### 12.3 Bioaccumulation potential

Xylene may be low potential (log Kow=3.16)

Ethyl Benzene may be low potential (log Kow=3.15)

## 13. Disposal considerations

### Waste treatment methods

Avoid release to the environment.

Dispose of contents/container in accordance with local/national regulation.

Dispose to an authorized waste collection point.

## 14. Transport information

UN No. : 1950

UN Class : 2.1 (Flammable gas)

PG : ---

## **15. Regulatory information**

Safety, health and environmental regulations/legislation specific for the substance or mixture.

Other information is not available.

Other regulatory information

We are not able to check up the regulatory information with regard to the substances in your country or region, therefore, we request this matter would be filled by your responsibility.

## **16. Other information**

International Chemical Safety Cards (ICSCs)/ Hazardous Substances Data Bank (HSDB)

MSDS from The Japan Paint Manufacturers Association (JPMA)

MSDS from manufacturers of raw materials

This data sheet is created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.