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# ZCRESIN MATERIAL SAFETY DATA SHEET

## RPF90W

### Modified Rosin Pentaerythritol Ester

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**Guangxi Zhongchang Resin Co.,Ltd**  
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Intended use: Chemical intermediate used for manufacture of industrial products.

## 1.PRODUCT IDENTIFICATION

**Product name** RPF90W  
**Chemical Description** rosin ester  
**Chemical Family** organic acids

## 2.COMPOSITION / INFORMATION ON INGREDIENTS

Name	CAS #	EC#	% by Weight
Rosin Ester	94581-15-4	305-514-1	100

See Section 8 for Exposure Controls/ Exposure Limits/ Personal Protection information.

## 3.HAZARDS IDENTIFICATION

### HMIS

health hazard 1  
fire hazard 1  
Reactivity 0  
Personal Protection see Section 8 of this MSDS.

0=Minimal; 1=Slight; 2=Moderate; 3=Serious; 4=Severe; (\*)=Chronic health hazard.

### EMERGENCY EXPOSURE

Dust may cause some irritation. On heating, this product may generate fumes that irritate the eye and may cause respiratory irritation with throat discomfort, coughing, or difficulty

breathing.

#### **POTENTIAL HEALTH EFFECTS**

##### **Eye contact**

Dust may cause some irritation.

Rubbing may cause abrasion of the cornea. Symptoms may include irritation, redness, scratching of the cornea, and tearing. Vapors may also cause eye irritation. If heated product contacts the eye, thermal burns may result.

##### **Skin Contact**

Prolonged or repeated skin contact may cause irritation. When it is heated, this product may cause thermal burns.

##### **Inhalation**

Dust may cause some irritation. On heating, this product may generate fumes that irritate the eye and may cause respiratory irritation with throat discomfort, coughing, or difficulty breathing.

##### **Ingestion**

Ingestion may cause some irritation.

## **4.FIRST AID MEASURES**

### **EYE CONTACT**

Rinse immediately with plenty of water for at least 15 minutes and seek medical attention immediately.

### **SKIN CONTACT**

In case of skin contact, wash immediately with soap and water. If irritation develops or persists, get medical attention.

### **INHALATION**

Seek medical attention if irritation persists.

### **INGESTION**

Contact a physician or poison control center immediately. DO NOT induce vomiting unless directed to do so by medical personnel.

## **5.FIRE FIGHTING MEASURES**

### **FLAMMABILITY OF THE PRODUCT**

Flammable.

### **AUTO-IGNITION TEMPERATURE**

Not available.

### **FLASH-POINT**

CLOSED CUP: 263°C.

### **FLAMMABLE LIMITS**

Not available.

### **HAZARDOUS THERMAL DECOMPOSITION AND COMBUSTION PRODUCTS**

-In case of fire toxic fumes will be formed, as smoke, carbon monoxide, carbon dioxide, and other products of combustion.

#### **EXTINGUISHING MEDIA**

-Suitable: Powder, carbon dioxide, dry chemical, watermist(only large amounts).

-Not to be used: Not applicable.

#### **PROTECTION OF FIREFIGHTERS**

-Wear full protective clothing and use self-contained breathing apparatus.

## **6.ACCIDENTAL RELEASE MEASURES**

#### **PERSONAL PRECAUTIONS:**

Avoid contact with skin and eyes. Avoid skin contact with molten resins. Avoid inhalation of dusts. Avoid inhalation of fumes from molten product.

#### **ENVIRONMENTAL PRECAUTIONS:**

Keep away from drains, surface-water, ground-water and soil

#### **METHODS FOR CLEANING UP:**

Wear appropriate protective equipment and clothing during clean-up. Avoid generation of dust during clean-up. Wear an approved respirator if dust is generated above exposure limits. Attempt to reclaim free product, if this is possible. Shovel material into appropriate container for disposal. Follow all Local, State, Federal and Provincial regulations for disposal.

## **7.HANDLING & STORAGE**

#### **HANDLING**

Keep away from sources of ignition-No smoking.Do not breathe dust. Avoid contact with eyes.Take precautionary measures against static discharges.Avoid dust formation.Risk for dust explosion.On heating,this product may generate fumes that irritate the eye and may cause respiratory irritation with throat discomfort, coughing, or difficulty breathing.

#### **STORAGE**

Keep in a cool, well-ventilated room. Store at ambient temperature and atmospheric pressure.

Avoid dust formation. Risk for dust explosion.

## **8.EXPOSURE CONTROLS / PERSONAL PROTECTION**

#### **PERSONAL PROTECTIVE EQUIPMENT**

##### **Eye/Face:**

Wear chemical goggles and face shield if handling molten material.

##### **Skin and body protection:**

Use impervious gloves and suitable protective clothing to prevent all skin contact should be worn, such as coveralls and long sleeves.

**Respiratory:**

Suitable respiratory equipment in case of insufficient ventilation. Filter type:P2

Observe exposure limits for Particulates (NOC):

**ACGIH TLV TWA:** 10 mg/m<sup>3</sup> Total dust; **ACGIH TLV TWA:** 3 mg/m<sup>3</sup> Respirable dust;

**OSHA PEL TWA:** 15 mg/m<sup>3</sup> Total dust; **OSHA PEL TWA:** 5 mg/m<sup>3</sup> Respirable dust.

**9.PHYSICAL & CHEMICAL PROPERTIES**

Physical appearance	Solid
Odor	Slight
Color	yellow. (Light.)
Molecular Weight	Not available.
Specific Gravity (25°C)	Approximately 1.07
Boiling Point	>280°C
PH	Not applicable
Vapor Density	Not available
Percent Volatile (EPA Method 24)	Negligible
Solubility in Water	Insoluble
Density (vs. water)	>1
Flash Point	CLOSED CUP: >263°C.
R/B Softening Point	90±3°C
Acid No. (per ASTM D-465)	25 Max.

**10.STABILITY & REACTIVITY****CHEMICAL STABILITY**

This product is stable under the recommended storage conditions.

**CONDITIONS TO AVOID**

Avoid strong oxidizing agents. Avoid dispersion of dust in air. Avoid ignition sources where dust is produced.

**INCOMPATIBILITY WITH OTHER MATERIALS**

May react with strong oxidizing agents.

**HAZARDOUS DECOMPOSITION PRODUCTS**

Smoke, carbon monoxide, carbon dioxide, and other products of combustion.

**HAZARDOUS POLYMERIZATION**

Hazardous polymerization will not occur.

**SPECIAL REMARKS**

Hot or molten product may darken or lose other quality properties unless stored under an inert gas blanket. Mixing water with hot or molten product may cause violent splattering due to rapid steam generation.

**10.STABILITY & REACTIVITY**

**CONDITIONS TO AVOID**

Excessive heating when Storage.

Avoid strong oxidizing agents. Avoid dispersion of dust in air. Avoid ignition sources where dust is produced.

**MATERIALS TO AVOID**

Strong oxidizing agents, dispersion of dust in air. ignition sources where dust is produced.

**HAZARDOUS DECOMPOSITION PRODUCTS**

Smoke, carbon monoxide, carbon dioxide, and other products of combustion.

**11. TOXICOLOGICAL INFORMATION****TOXICITY TO ANIMALS****Rosin Ester:**

ORAL, rat, LD50 = > 5000 to > 10000 mg/kg;

DERMAL, rabbit, LD50 = > 2000 mg/kg;

This product was found to produce mild eye and skin irritation in rabbits. Product was not found to be a skin sensitizer in guinea pigs. Product was non-mutagenic in the Ames Salmonella Assay.

**TOXICITY TO HUMANS**

Contact may cause skin or eye irritation. Ingestion may cause nausea, vomiting, and diarrhea. Inhalation of dust may cause respiratory irritation.

Prolonged or repeated exposure to vapors/fumes generated by heating this product may cause respiratory irritation with throat discomfort, coughing or breathing difficulty.

**CARCINOGENIC EFFECTS:** None of this product's components are listed as carcinogens by ACGIH, IARC, NIOSH, NTP or OSHA. **MUTAGENIC EFFECTS:** Not available. **TERATOGENIC EFFECTS:** Not available. No information available on the toxicity of this product to the reproductive system.

**12. ECOLOGICAL INFORMATION****MOBILITY:**

Not known.

**PERSISTENCE AND DEGRADABILITY:**

Not known

**BIOACCUMULATION:**

Not known

**ECOTOXICITY**

This product is biodegradable under aerobic and anaerobic conditions.

**13. DISPOSAL CONSIDERATIONS****WASTE DISPOSAL**

Dispose of waste material according to Local, State, Federal, and Provincial

Environmental Regulations.

## **14. TRANSPORT INFORMATION**

### **Classification**

Not Classification

## **15. REGULATORY INFORMATION**

### **FEDERAL REGULATIONS**

OSHA: Not hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

## **16. OTHER INFORMATION**

Not Classification