SAFETY DATA SHEET (SDS)

SECTION 1: Identification

Product Identifier:
Socketing Resin – Powder Hardener (Part B)

Recommended Use:
Industrial curing agent component for wire rope socketing resin systems.

Restrictions on Use:
For professional and industrial use only. Not for consumer use.

Manufacturer/Supplier:
Hubei Haixingrui New Material Technology Co., Ltd.
496 Qinglong Road, Xian'an District
Xianning, Hubei Province, China
Tel: +86-715-8912898
Email: info@hxrmaterials.com

Emergency Telephone Number:
In the event of transportation incidents or chemical emergencies, contact local emergency services and consult this SDS.
For product information during business hours, contact the manufacturer at the number above.

SECTION 2: Hazard(s) Identification

Classification:

Classification (OSHA HCS 2012)	Category
Flammable Liquid	Category 3
Aspiration Hazard	Category 1
Skin Irritation	Category 2
Eye Irritation	Category 2A
Acute Toxicity (Inhalation)	Category 4
Carcinogenicity	Category 1B
Reproductive Toxicity	Category 2
STOT Single Exposure	Category 3
STOT Repeated Exposure	Category 1
Aquatic Toxicity (Acute)	Category 2
Aquatic Toxicity (Chronic)	Category 3

Signal Word: DANGER
Hazard Statement
H226 Flammable liquid and vapor.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H319 Causes serious eye irritation.

H332 Harmful if inhaled.
H361 Suspected of damaging fertility or the unborn child.
H372 Causes damage to organs through prolonged or repeated exposure.
H335 May cause respiratory irritation.
H372 Causes damage to organs through prolonged or repeated exposure.
H401 Toxic to aquatic life.
H412 Harmful to aquatic life with long lasting effects.

Precautionary Statements

Prevention:

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P210 Keep away from heat, sparks, open flames and hot surfaces. No smoking.
- P241 Use explosion-proof electrical, ventilating and lighting equipment.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P260 Do not breathe vapors.
- 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 and eye/face protection.

Response:

- P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor.
- P331 Do NOT induce vomiting.
- P303+P361+P353 IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water/shower.
- P332+P313 If skin irritation occurs: Get medical advice/attention.
- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P312 Call a POISON CENTER or doctor if you feel unwell.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P314 Get medical advice/attention if you feel unwell.
- P363 Wash contaminated clothing before reuse.

Storage:

- P235 Keep cool. Store below 23°C.
- P403 Store in a well-ventilated place.
- P405 Store locked up.
- P410 Protect from sunlight.

Disposal:

- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Supplemental Hazard Information

Physical and Chemical Hazards:

Flammable liquid and vapor. Vapors are heavier than air and may travel along the ground to an ignition source and flash back. May undergo exothermic polymerization when exposed to heat or contamination.

Health Hazards:

May be fatal if swallowed and enters airways. Harmful if inhaled and may cause respiratory irritation. Causes skin and serious eye irritation. Prolonged or repeated exposure may cause damage to the central nervous system, liver and kidneys. Suspected of causing cancer and reproductive harm.
Environmental Hazards:
Toxic to aquatic life with long lasting effects. Prevent release to the environment.

SECTION 3: Composition / Information on Ingredients

Component	CAS Number	Concentration (%)
Unsaturated Polyester Resin	26123-45-5	60–65
Styrene	100-42-5	35–40
N,N-Dimethyl-p-toluidine	99-97-8	0.2–1
3-(Methacryloxy)propyltrimethoxysilane	2530-85-0	1–2

SECTION 4: First-Aid Measures

Description of First Aid Measures

Eye Contact:
Rinse cautiously with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention.

Inhalation:
Remove person to fresh air and keep at rest in a position comfortable for breathing.
If breathing is difficult, trained personnel should administer oxygen.
If breathing has stopped, provide artificial respiration.
Avoid mouth-to-mouth resuscitation if possible; use appropriate respiratory protection.
Seek medical attention. Call a poison center or physician if symptoms occur.

Skin Contact:
Remove contaminated clothing and footwear.
Rinse skin with plenty of water for at least 15 minutes. Wash with soap and water.
Wash contaminated clothing before reuse.
Seek medical attention if irritation develops.

Ingestion:
Rinse mouth. Remove dentures if present.
Do NOT induce vomiting.
If vomiting occurs, keep head low to prevent aspiration into lungs.
Never give anything by mouth to an unconscious person.
If unconscious, place in recovery position and seek immediate medical attention.
Loosen tight clothing such as collar, tie, belt, or waistband.

SECTION 5: Fire-Fighting Measures

Suitable Extinguishing Media: Dry chemical, carbon dioxide (CO_2), water fog, or alcohol-resistant foam.

Unsuitable Extinguishing Media: Do not use direct high-pressure water stream, as it may spread the burning material.

Specific Hazards Arising from the Chemical: Flammable liquid and vapor. Vapors may form explosive mixtures with air.Vapors are heavier than air and may travel along the ground to an ignition source and flash back. Containers may rupture or explode when exposed to heat.Runoff to sewer systems may create fire or explosion hazards.Contaminated fire-fighting water must be contained and prevented from entering waterways, drains, or sewers.

Hazardous Combustion Products: Carbon monoxide, carbon dioxide, dense smoke, aldehydes, and organic acids.
Protective Equipment and Precautions for Fire-Fighters: Evacuate personnel from the area.Wear full protective equipment and self-contained breathing apparatus (SCBA).Use water spray to cool fire-exposed containers if it can be done without risk.

SECTION 6: Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures
Do not take action involving personal risk or without suitable training.
Evacuate surrounding areas and prevent entry of unnecessary or unprotected personnel.
Avoid contact with skin and eyes. Avoid inhalation of vapors or mist.
Wear appropriate personal protective equipment, including chemical-resistant gloves and eye protection.
Eliminate all ignition sources.

Environmental Precautions
Prevent further leakage or spillage if safe to do so.
Avoid discharge into soil, waterways, drains, or sewer systems.
If the product causes environmental contamination (sewers, waterways, soil, or air), notify the relevant authorities.
This material is toxic to aquatic life and may cause long-term adverse effects in the aquatic environment.

Methods and Materials for Containment and Cleaning Up
Contain spill with non-combustible absorbent materials such as sand, earth, vermiculite, or diatomaceous earth.
Collect contaminated absorbent material in suitable containers for disposal in accordance with local regulations (see Section 13).
Ventilate the area and wash spill site after material pickup is complete.

SECTION 7: Handling and Storage

Precautions for Safe Handling
Wear appropriate personal protective equipment (see Section 8).
Obtain special instructions before use and ensure all safety precautions are understood before handling.
Avoid contact with eyes, skin, and clothing.
Do not breathe vapors or mist.
Do not eat, drink, or smoke when using this product.

Ensure adequate general ventilation. Use local exhaust ventilation where necessary.
Keep away from heat, sparks, open flames, and other ignition sources.
Use explosion-proof electrical, ventilating, and material-handling equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Empty containers may contain product residues and may be hazardous. Do not reuse containers.

Conditions for Safe Storage, Including Any Incompatibilities
Store in original container tightly closed.
Keep in a cool, dry, well-ventilated place.
Storage temperature should not exceed 23°C.
Protect from direct sunlight and ultraviolet radiation.
Keep away from oxidizing agents and incompatible materials (see Section 10).
Store locked up.
Keep away from heat and ignition sources.

SECTION 8: Exposure Controls / Personal Protection

Control Parameters: Occupational exposure limits for individual components should be observed in accordance with applicable national regulations.
Styrene (CAS 100-42-5)
Exposure limits may apply in some jurisdictions.
N,N-Dimethyl-p-toluidine (CAS 99-97-8)
No specific occupational exposure limits established in most jurisdictions.

Engineering Controls:
Use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne concentrations below applicable exposure limits.
Ensure adequate general ventilation in the work area.
Provide mechanical ventilation where necessary.

Individual Protection Measures:
Eye/Face Protection:
Safety goggles or face shield in accordance with recognized standards.

Skin Protection:
Wear chemical-resistant gloves and protective clothing.
If ventilation is insufficient, use an approved organic vapor respirator in accordance with applicable regulations.

Hygiene Measures:
Wash hands thoroughly after handling. Do not eat, drink, or smoke in work areas.

SECTION 9: Physical and Chemical Properties

Property	Value
Appearance	Light yellow liquid

Odor	Pungent odor
Flash Point	31°C (Closed Cup)
Initial Boiling Point and Boiling Range	145°C
Lower explosive limit (LEL)	1.1%
Upper explosive limit (UEL)	6.1%
Vapor Pressure	0.84 kPa (25°C)
Vapor Density	3.6 (air = 1)
Relative Density	1.05 (water = 1)
Solubility	Insoluble in water; soluble in organic solvents
Auto-ignition Temperature	490°C
Decomposition Temperature	≥120°C
Viscosity (23°C)	300–400 mPa·s

SECTION 10: Stability and Reactivity

Reactivity: The product is designed to polymerize when mixed with appropriate catalyst and accelerator systems. Under certain conditions, uncontrolled exothermic polymerization may occur.

Chemical Stability: Stable under recommended storage conditions. The product contains polymerization inhibitors to prevent premature polymerization.

Possibility of Hazardous Reactions: Uncontrolled exothermic polymerization may occur if exposed to excessive heat, contamination, or incompatible materials. In closed containers, pressure build-up may result in rupture, fire, or explosion.

Conditions to Avoid: Avoid heat, sparks, open flames, and elevated temperatures.
Avoid exposure to ultraviolet (UV) radiation, including fluorescent lighting.
Storage temperature should not exceed 23°C.
Avoid contamination.

Incompatible Materials: Strong oxidizers, amines, acids, and metal salts, which may promote polymerization.

Hazardous Decomposition Products: Under fire conditions, may produce carbon monoxide, carbon dioxide, dense smoke, aldehydes, and organic acids.

SECTION 11: Toxicological Information

Information on Likely Routes of Exposure: Inhalation, skin contact, eye contact, ingestion.
Acute Toxicity: Harmful if inhaled. May cause respiratory tract irritation.May cause skin irritation and serious eye irritation.
Aspiration Hazard: May be fatal if swallowed and enters airways.
Chronic Effects: Prolonged or repeated exposure may cause damage to the central nervous system, liver and kidneys.

Carcinogenicity: Styrene (CAS 100-42-5) is classified by IARC as Group 2A (Probably carcinogenic to humans).
Reproductive Toxicity: Suspected of damaging fertility or the unborn child.

SECTION 12: Ecological Information

Toxicity
This product is classified as hazardous to the aquatic environment. The following data are based primarily on available information for styrene.

- Styrene (CAS 100-42-5)
- EC50 (Algae, 72 h): 4.9 mg/L
- EC50 (Daphnia, 48 h): 4.7 mg/L
- LC50 (Fish, 96 h): 10 mg/L

Toxic to aquatic life.
Harmful to aquatic life with long lasting effects.

Persistence and Degradability
Styrene is expected to be biodegradable under aerobic conditions.
However, release into the environment should be avoided.

Bioaccumulative Potential
Moderate potential for bioaccumulation.

Mobility in Soil
May volatilize from soil and water surfaces.
Limited mobility in soil.

Other Adverse Effects
No additional information available.

SECTION 13: Disposal Considerations

Waste generation should be minimized wherever possible.

Dispose of product, solutions, and by-products in accordance with applicable local, regional, national, and international regulations.

Waste materials should be handled by a licensed waste disposal contractor.

Do not discharge untreated material into drains, waterways, or soil.

Contaminated packaging should be recycled where possible. If recycling is not feasible, dispose of in accordance with applicable regulations.

Empty containers may retain product residues and vapors, which may form flammable or explosive mixtures. Do not cut, weld, drill, or grind containers unless they have been thoroughly cleaned.

Prevent material from entering soil, surface water, groundwater, or sewage systems.

SECTION 14: Transport Information

UN Number	UN1866
Proper Shipping Name	RESIN SOLUTION
Hazard Class	3
Packing Group	III

Special Precautions for User

Transport in tightly closed, upright containers.
Keep away from heat, sparks, open flames, and sources of ignition.
Ensure transport personnel are aware of appropriate emergency procedures in case of accident or spillage.

Transport in Bulk According to Annex II of MARPOL and the IBC Code

Not applicable.

SECTION 15: Regulatory Information

This product has been classified and labeled in accordance with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).
All components are listed or exempt from listing on applicable chemical inventories in major jurisdictions.
Users are responsible for ensuring compliance with applicable local, regional, national, and international regulations.

SECTION 16: Other Information

Revision Information
Revision Date: 2026-03-02
Version: 1.0
Supersedes: New issue

Abbreviations and Acronyms
ADR – European Agreement concerning the International Carriage of Dangerous Goods by Road
IMDG – International Maritime Dangerous Goods Code
IATA – International Air Transport Association
LC50 – Lethal Concentration, 50%
LD50 – Lethal Dose, 50%
EC50 – Effective Concentration, 50%
STOT – Specific Target Organ Toxicity
GHS – Globally Harmonized System

Disclaimer
The information provided in this Safety Data Sheet is based on current knowledge and is intended to describe the product for the purposes of health, safety, and environmental

requirements only. It should not be construed as guaranteeing any specific property of the product.

Users are responsible for ensuring that they comply with all applicable laws and regulations relating to the handling, storage, use, and disposal of this product.