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 according to GHS
Carcinogenicity – Category 1A
Specific Target Organ Toxicity (Repeated Exposure) – Category 1 (Lungs, inhalation of respirable crystalline silica)
Skin Sensitization – Category 1
Hazardous to the Aquatic Environment – Chronic Category 3

Label Elements (GHS)
Signal Word: Danger
Hazard Statements:
H350 – May cause cancer (by inhalation).
H372 – Causes damage to lungs through prolonged or repeated exposure (inhalation of respirable dust).
H317 – May cause an allergic skin reaction.
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.
P260 Do not breathe dust.
P280 Wear protective gloves and respiratory protection.

P273 Avoid release to the environment.

Response
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P308+P313 IF exposed or concerned: Get medical advice/attention.

Storage
Store in a dry, well-ventilated place.

Disposal
P501 Dispose of contents/container in accordance with applicable regulations.

Other Hazards
Dust may form explosive mixtures in air at high concentrations.
Avoid generation of respirable dust.

SECTION 3: Composition / Information on Ingredients

Substance/Mixture
Mixture

Component Name	CAS Number	Concentration (%)
Crystalline Silica (Quartz)	14808-60-7	80–99
Benzoyl Peroxide	94-36-0	0.5–1

Additional Information
Crystalline silica may be present in respirable form depending on particle size distribution.
Hazard classification is based on respirable crystalline silica and the presence of benzoyl peroxide.

SECTION 4: First-Aid Measures

Description of First Aid Measures
Eye Contact
Immediately flush eyes 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 if irritation persists.

Inhalation
Remove person to fresh air and keep at rest in a position comfortable for breathing.
If respiratory symptoms develop (coughing, shortness of breath, irritation), seek medical attention.
If exposed to high concentrations of respirable dust, medical evaluation is recommended.
Skin Contact
Wash affected skin thoroughly with soap and water.
Remove contaminated clothing and wash before reuse.
If skin irritation or allergic reaction develops, seek medical attention.

Ingestion
Rinse mouth with water. Do not induce vomiting unless directed by medical personnel.
Seek medical advice if symptoms occur.
Never give anything by mouth to an unconscious person.

Most Important Symptoms and Effects, Both Acute and Delayed

- Eye irritation
- Respiratory irritation from dust
- Allergic skin reaction
- Prolonged inhalation of respirable crystalline silica may cause lung damage

Indication of Immediate Medical Attention and Special Treatment Needed
Treat symptomatically.
Monitor for respiratory complications following dust inhalation.

SECTION 5: Fire-Fighting Measures

Suitable Extinguishing Media
Use dry chemical powder, carbon dioxide (CO_2), water spray, or foam.
Unsuitable Extinguishing Media
Do not use high-pressure water jet, as it may disperse dust.
Specific Hazards Arising from the Substance or Mixture

Product is not readily flammable in bulk form. Avoid generation of respirable dust.
Airborne dust may cause respiratory irritation.

In case of fire, hazardous decomposition products may include:

- Carbon monoxide (CO)
- Carbon dioxide (CO_2)
- Irritating organic vapors

Benzoyl peroxide components may decompose at elevated temperatures.

Special Protective Equipment and Precautions for Firefighters
Firefighters should wear full protective equipment and self-contained breathing apparatus (SCBA).
Avoid generating dust during firefighting operations.
Use water spray to cool exposed containers.

SECTION 6: Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures
Avoid breathing dust.
Avoid contact with skin and eyes.
Wear appropriate personal protective equipment (see Section 8).
Avoid generating airborne dust.
Ensure adequate ventilation.
If large amounts of dust are present, use appropriate respiratory protection.

Environmental Precautions
Prevent release to the environment.
Avoid discharge into drains, surface waters, or soil.

Methods and Materials for Containment and Cleaning Up
Avoid dry sweeping that may generate airborne dust.
Use vacuum equipment fitted with HEPA filtration or wet methods to collect spilled material.
Collect material in suitable, closed containers for disposal in accordance with Section 13.
Avoid creating dust clouds.
For large spills, isolate the area and prevent unnecessary personnel entry.
Dispose of contaminated materials in accordance with local regulations.

SECTION 7: Handling and Storage

Handling:
Ensure good workplace ventilation.
Avoid contact with skin and eyes. Avoid inhalation of dust, fumes, vapors, or spray mist.
Wear appropriate personal protective equipment.

Contaminated work clothing should not be worn outside the workplace and must be cleaned before reuse.
When using this product, do not eat, drink, or smoke.
Wash hands thoroughly after handling the product.

Conditions for Safe Storage:
Store in the original container.
Storage temperature should not exceed 23°C.
Keep in a dry, cool, and well-ventilated area.
Avoid direct sunlight and keep away from suspended combustibles (see Section 10).
Keep storage areas locked.
Remove all sources of ignition.
Store separately from metals, organic materials, and acidic substances.
Keep away from heat sources.

SECTION 8: Exposure Controls / Personal Protection

8.1 Control Parameters

Occupational Exposure Limits – United States
Crystalline Silica (Quartz) – CAS 14808-60-7

- OSHA PEL (Respirable Fraction): 0.05 mg/m³ (8-hour TWA)
- ACGIH TLV (Respirable Fraction): 0.025 mg/m³ (8-hour TWA)
- NIOSH REL (Respirable Fraction): 0.05 mg/m³ (10-hour TWA)

Benzoyl Peroxide – CAS 94-36-0

- ACGIH TLV-TWA: 5 mg/m³ (8-hour TWA)

8.2 Exposure Controls

Engineering Controls

Ensure adequate ventilation. Use local exhaust ventilation where dust is generated.

Personal Protective Equipment (PPE)
Respiratory Protection

If ventilation is insufficient, wear appropriate respiratory protection.
Use a half-mask respirator equipped with a P2 particulate filter (in accordance with EN 143).

Hand Protection
Wear chemical-resistant gloves compliant with EN 374 or equivalent standards.
Suitable materials include PVC, butyl rubber, and neoprene.

Eye Protection
Wear safety glasses with side shields.
When dust is generated, wear protective goggles.
Do not wear contact lenses.
Eye protection must comply with EN 166 or equivalent approved standards.

Skin and Body Protection
Wear appropriate protective clothing.
Select protective equipment according to task and exposure risk, such as:

- Coveralls
- Safety footwear
- Chemical protective clothing

For splash exposure, comply with EN 14605.
For dust exposure, comply with EN ISO 13982.

Environmental Exposure Controls
Prevent release into the environment.

Additional Information
Do not eat, drink, or smoke while using this product.
Follow good occupational hygiene and safety practices.
Wash hands and exposed areas with mild soap and water before eating, drinking, smoking, and after leaving the workplace.

SECTION 9: Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

Appearance: White powder
Physical State: Solid
Odor: Odorless
Odor Threshold: Not available
pH: Not applicable (solid)
Melting/Freezing Point: Not available
Boiling Point/Range: Not applicable (solid)

Flash Point: Not applicable
Evaporation Rate: Not applicable
Flammability (solid, gas): Not classified as flammable
Upper/Lower Flammability or Explosive Limits: Not determined
Vapor Pressure: Not applicable
Vapor Density: Not applicable
Relative Density: Not available
Bulk Density: 2.95 g/cm³
Solubility: Insoluble in water (quartz component)
Partition Coefficient (n-octanol/water): Not available
Auto-ignition Temperature: Not determined
Decomposition Temperature:
Benzoyl peroxide component (≤1%) – decomposition onset approximately 80–90°C
Viscosity: Not applicable (solid)

SECTION 10 Stability and Reactivity

10.1 Reactivity

This product is not reactive under normal conditions of use, storage, and transport.

10.2 Chemical Stability

Stable under recommended storage conditions.
Contains benzoyl peroxide (≤1%), which may slowly decompose if exposed to elevated temperatures, ultraviolet light, or incompatible materials.

10.3 Possibility of Hazardous Reactions

Hazardous polymerization will not occur under normal conditions.
Decomposition of benzoyl peroxide may occur if exposed to strong acids, strong bases, alkalis, organometallic compounds, heat, or UV radiation.

10.4 Conditions to Avoid

Avoid:

- Heat and temperatures above 23°C (73°F)
- Direct sunlight and UV radiation
- Contact with strong acids, strong bases, alkalis, and organometallic salts
- Sources of ignition

10.5 Incompatible Materials

Strong acids, strong bases, alkalis, organometallic compounds, reducing agents, and combustible materials.

10.6 Hazardous Decomposition Products

Under normal storage and use conditions, hazardous decomposition products are not expected.
Thermal decomposition or combustion may produce:

- Smoke
- Carbon oxides
- Irritating organic vapors

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

- Inhalation
- Skin contact
- Eye contact

Symptoms Related to Physical, Chemical, and Toxicological Characteristics
Eye Contact:
Dust may cause mechanical irritation, redness, and discomfort.
Skin Contact:
May cause skin irritation. Prolonged or repeated exposure may result in sensitization.
Inhalation:
Dust may cause respiratory tract irritation. Prolonged exposure to respirable crystalline silica may result in lung damage.
Ingestion:
May cause gastrointestinal irritation.
Delayed and Immediate Effects; Chronic Effects from Short- and Long-Term Exposure

Carcinogenicity:
This product contains respirable crystalline silica (quartz), which is classified as:
- IARC: Group 1 – Carcinogenic to humans
- NTP: Known to be a human carcinogen
- OSHA: Regulated carcinogen

Carcinogenic risk is associated with inhalation of respirable crystalline silica particles.
Benzoyl peroxide (CAS 94-36-0) is classified by IARC as:
- Group 3 – Not classifiable as to its carcinogenicity to humans.

Numerical Measures of Toxicity
Acute toxicity data for the mixture are not available.
Component data available upon request.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Ecotoxicity

This product is considered hazardous to aquatic organisms and may cause long-term adverse effects in the aquatic environment.

Component Ecotoxicity Data
Benzoyl Peroxide (CAS 94-36-0)
Fish (Semi-static Test)
LC50 (96 h) – 0.06 mg/L
Species: Oncorhynchus mykiss (Rainbow trout)
OECD Test Guideline 203

Aquatic Invertebrates (Static Test)
EC50 (48 h) – 0.11 mg/L
Species: Daphnia magna
OECD Test Guideline 202

Algae (Static Test)
ErC50 (72 h) – 0.0711 mg/L
Species: Pseudokirchneriella subcapitata
OECD Test Guideline 201

NOEC (72 h) – 0.02 mg/L
OECD Test Guideline 201

Activated Sludge
EC50 (0.5 h) – 35 mg/L
OECD Test Guideline 209

Chronic Aquatic Invertebrate Toxicity
EC10 (21 d) – 0.001 mg/L
Species: Daphnia magna
OECD Test Guideline 211

12.2 Persistence and Degradability

Benzoyl Peroxide (CAS 94-36-0)
Readily biodegradable under aerobic conditions.
28-day exposure: 71% degradation.
OECD Test Guideline 301D.

12.3 Bioaccumulative Potential

No components present at ≥0.1% are identified as:

- Persistent, Bioaccumulative and Toxic (PBT), or
- Very Persistent and Very Bioaccumulative (vPvB)

12.4 Mobility in Soil

Quartz (CAS 14808-60-7)
Low mobility in soil.

12.5 Other Adverse Effects

No additional environmental hazards are known under normal conditions of use.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

Dispose of contents and container in accordance with all applicable federal, state, and local regulations.

Waste generation should be minimized where possible.
Product residues and contaminated packaging should be handled by a licensed waste disposal contractor.

Do not discharge untreated product into drains, surface waters, or soil unless in compliance with applicable regulatory authority.

Empty containers may retain product residue and vapors. Residual vapors may form flammable or explosive mixtures inside the container.

Do not cut, weld, or reuse empty containers unless they have been properly cleaned and rendered safe.

Prevent spillage from entering soil, waterways, drains, or sewer systems.

Consult local environmental regulatory agencies for proper waste classification.

SECTION 14: TRANSPORT INFORMATION

U.S. DOT (49 CFR): Not regulated as a hazardous material.
IMDG (Marine Transport): Not regulated.
IATA (Air Transport): Not regulated.

Special Precautions for Transport

Transport in tightly sealed containers.
Keep containers upright and secure during transport.
Ensure personnel are aware of appropriate procedures in the event of accidental release.

SECTION 15: REGULATORY INFORMATION

U.S. Federal Regulations
This product is classified in accordance with OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SARA 311/312 Hazard Categories
Health Hazards:

- Carcinogenicity
- Specific Target Organ Toxicity (Repeated Exposure)
- Skin Sensitization

Physical Hazards:

- Avoid generation of respirable dust.

SARA 313
This product does not contain substances subject to reporting under Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA).

TSCA Inventory
All components are listed on or exempt from the U.S. Toxic Substances Control Act (TSCA) Inventory.

California Proposition 65

This product contains respirable crystalline silica, which is known to the State of California to cause cancer.

International Regulations (For Reference)

- Does not contain substances listed in REACH Annex XVII.
- Does not contain substances listed in REACH Candidate List (SVHC).
- Does not contain substances listed in REACH Annex XIV.

Hazard Statements (Labeling Reference)
H317: May cause an allergic skin reaction.
(Confirm consistency with Section 2 classification before final release.)

SECTION 16: Other Information

Issue Date: October 23, 2025
Version: 01

The information provided is believed accurate as of issue date.
Users are responsible for safe handling and regulatory compliance.