SPI Supplies Division

Structure Probe, Inc.

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02653-AB SPI-Chem™ Benzil Activator for LR Gold Manufacturer's CAGE: 1P573

Resin System

Section 1.1: Identification

Chemical Name/Synonyms...... Benzil

Product or Trade Name...... SPI-Chem™ Benzil Activator for LR Gold Resin System

CAS #'s...... 134-81-6

Chemical Formula...... C₆H₅COCOC₆H₅

Section 1.2: Relevant Uses/Restrictions

Laboratory chemical for use as activator in LR Gold Resin System.

Section 1.3: Supplier of the Safety Data Sheet

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Manufacturer's CAGE: 1P573

Section 1.4: Emergency telephone number

Emergencies

Contacting CHEMTREC:

24 Hour Emergency Use Only #'s... Worldwide phone: 1-(703)-741-5970

Toll-free phone: 1-(800)-424-9300 USA + Canada only

Section 2: Hazard Identification

2.1 Classification of the substance

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Skin irritation (Category 2) Eye irritation (Category 2A)

Specific target organ toxicity – single exposure (Hazard category 3, respiratory system)

2.2 Label elements

Pictogram

Safety Data Sheet

Date Effective: May 6, 2016



Signal Word: Warning

Hazard	atatam	anta:
Hazaro	statem	ents:

- H302 Harmful if swallowed
- H312 Harmful in contact with skin
- H315 Causes skin irritation
- H319 Causes serious eye irritation
- H332 Harmful if inhaled
- H335 May cause respiratory irritation

Precautionary statements:

- P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray
- P280 Wear protective gloves/ protective clothing/ eye protection/ face protection
- P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
- P302 + P352 IF ON SKIN: Wash with plenty of soap and water
- P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position 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.
- P332 + P313 If skin irritation occurs: Get medical advice/ attention.

2.3 Other Hazards:

Hazardous Material Information System USA

NFPA Rating (estimated)

Section 3: Composition

3.1 Substances:

Benzil CAS# 134-81-6 EINECS# 205-157-0 95-100%

Section 4: First Aid Measures

4.1 Description of first aid measures:

Inhalation: Move to a fresh air environment. Contact a physician if breathing becomes difficult.

Skin Contact: Wash skin with soap and water. If irritation persists, seek medical attention.

Eye Contacting: Flush eyes with large amounts of water for fifteen minutes. Separate eyelids with fingers. If irritation persists, seek medical attention.

Ingestion: Do not induce vomiting. Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

4.3 Indication of any immediate medical attention and special treatment needed No data available.

Section 5: Fire Fighting Measures

- 5.1 Extinguishing media: Carbon dioxide, dry chemical powder, alcohol-resistant foam or water spray.
- 5.2 Special hazards arising from the substance or mixture: May emit hazardous fumes under fire conditions.
- 5.3 Advice for firefighters: Wear self-contained respirator and fully protective impervious suit.

Additional information:

Flash point: 180 °C (closed cup).

Section 6: Accidental Release Measures

6.1 Personal precautions

Wear a self-contained breathing apparatus, rubber boots and gloves, and disposable coveralls. Dispose of coveralls after use. Keep unprotected persons away.

6.2 Environmental precautions

Keep spills out of sewers and bodies of water. Dike and contain the spill with inert material.

6.3 Methods and material for containment and cleaning up

Absorb on sand, vermiculite or diatomite. Transfer material to a container for disposal or recovery. Ventilate area and wash spill site after material pickup is complete.

6.4 Reference to other sections

See Section 13 for disposal information.

Section 7: Handling and Storage

7.1 Precautions for safe handling

Protective measures – Avoid breathing dust, vapor, mist or gas. Avoid contact with skin and eyes. Avoid prolonged or repeated exposure. Use only in a chemical fume hood. Open and handle container with care. Keep ignition sources away.

7.2 Conditions for safe storage, including any incompatibilities

Store in a tightly closed container in a dry, well-ventilated place. Store at 15 – 30 °C.

7.3 Specific end uses

Laboratory chemical for use as activator in LR Gold Resin System.

Section 8: Exposure Controls and Personal Protection

8.1 Control parameter and Personal Protection

Workplace exposure limits – Contains no substances with occupational exposure limit values.

Biological limit values - no data available.

8.2 Exposure controls

8.2.1 Appropriate engineering controls - Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.2.2 Individual protection measures

Eyes: Wear appropriate protective eyeglass of chemical safety goggles. Make sure that there is an eyewash facility in your vicinity.

Skin: Wear impervious gloves and protective clothing.

Respiratory: Use a NIOSH approved respirator when exposure limits are exceeded or if irritation or other symptoms are experienced.

8.2.3 Environmental exposure controls

Do not let product enter drains.

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance - light yellow crystalline solid

Odor – not available

Odor threshold - not available

pH - not available

Melting point/Freezing point - 94-95 °C

Boiling point/Boiling point range - not available

Flash Point – 180 °C (closed cup)

Evaporation rate – not available

Flammability (solid, gas) - not available

Upper/lower flammability or explosive limits – not available

Vapor Pressure - not available

Vapor density – not available

Relative density - not available

Solubility – not available

Partition coefficient (n-octanol/water) - not available

auto-ignition temperature - not available

Decomposition temperature - not available

Viscosity - not available

Explosive properties – not available

Oxidizing Properties - not available

9.2 Other information

No additional information available.

Section 10: Stability and Reactivity

- 10.1 Reactivity no data available
- 10.2 Chemical Stability Stable under normal temperatures and pressures.
- 10.3 Possibility of Hazardous Reactions no data available
- 10.4 Conditions to avoid Heat, flame, sparks, other ignition sources
- 10.5 Incompatible materials Strong oxidizing agents.
- 10.6 Hazardous decomposition products carbon oxides

Section 11: Toxicological Information

11.1 Information on toxicological effects

a. Acute toxicity

LD50 Oral - mouse - > 3,000 mg/kg

Remarks: Behavioral: Somnolence (general depressed activity).

Dermal: no data available

b. Skin corrosion/irritation

no data available

c. Serious eye damage/eye irritation

Eyes - rabbit

Result: Moderate eye irritation - 24 h

d. Respiratory or skin sensitization

no data available

e. Germ cell mutagenicity

no data available

f. Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

g. Reproductive toxicity

no data available

h. Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation.

i. Specific target organ toxicity - repeated exposure

no data available

j. Aspiration hazard

no data available

Additional Information

RTECS: DD1925000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 12: Ecological Information

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects

No data available

Section 13: Disposal Considerations

13.1 Waste treatment methods

Contact a licensed professional waste disposal service. Dispose in a manner consistent with federal, state and local environmental regulations.

Section 14: Transport Information

DOT - Not regulated

IATA - Not regulated

IMDG - Not regulated

Section 15: Regulatory Information

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

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Acute Health Hazard

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

Benzil CAS-No. 134-81-6

New Jersey Right To Know Components

Benzil CAS-No. 134-81-6

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

European Union:

European Inventory of Existing Chemical Substances (EINECS): 205-157-0

Hazard Code: Xi

Risk Statements: 36/37/38 Safety Statements: 26-36

Canada:

Canadian Domestic Substances List (DSL): Listed

Canadian Non-Domestic Substances List (NDSL): Not listed.

Other Information:

Date prepared: 06 May 2016

Section 16: Other Information

Disclaimer of Liability:

Caution! Do not use SPI Supplies products or materials in applications involving implantation within the body; direct or indirect contact with the blood pathway; contact with bone, tissue, tissue fluid, or blood; or prolonged contact with mucous membranes. Products offered by SPI Supplies are not designed or manufactured for use in implantation in the human body or in contact with internal body fluids or tissues. SPI Supplies will not provide to customers making devices for such applications any notice, certification, or information necessary for such medical device use required by US FDA (Food and Drug Administration) regulation or any other statute. SPI Supplies and Structure Probe, Inc. make no representation, promise, express warranty or implied warranty concerning the suitability of these materials for use in implantation in the human body or in contact with internal body tissues of fluids.

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