According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 01.31.2019

#### Light-Cured Cyanoacrylate

#### **SECTION 1: Identification**

#### **Product identifier**

Product name: Light-Cured Cyanoacrylate Product code: 33301

# Recommended use of the product and restriction on use

Relevant identified uses: Instant Adhesive, Light-curing adhesive Uses advised against: Not determined or not applicable. Reasons why uses advised against: Not determined or not applicable.

#### Manufacturer or supplier details

#### Manufacturer: United States

J-B Weld Company, LLC 400 CMH Road Sulphur Springs, TX 75482 903-885-7696 info@jbweld.com

#### Emergency telephone number:

United States InfoTrac Transportation Emergencies (24 hour): 800-535-5053 Poison Control Centers (24 hour): medical emergencies 800-222-1222

# SECTION 2: Hazard(s) identification

#### **GHS classification:**

Flammable liquids, category 4 Carcinogenicity, category 2

#### Label elements

#### Hazard pictograms:



Signal word: Warning

#### Hazard statements:

H227 Combustible liquid.

H351 Suspected of causing cancer.

#### **Precautionary statements:**

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

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

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood. P281 Use personal protective equipment as required.

P370+P378 In case of fire: Use agents recommended in section 5 for extinction.



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#### Light-Cured Cyanoacrylate

P308+P313 If exposed or concerned: Get medical advice/attention P403+P235 Store in a well ventilated place. Keep cool. P405 Store locked up. P501 Dispose of contents/container in accordance with local regulations.

# Hazards not otherwise classified: None

#### **SECTION 3: Composition/information on ingredients**

Identification	Name	Weight %
CAS number: 123-31-9	Hydroquinone	<2

#### Additional Information: None

#### **SECTION 4: First aid measures**

# **Description of first aid measures**

#### **General notes:**

Not determined or not applicable.

#### After inhalation:

Loosen clothing as necessary and position individual in a comfortable position Maintain an unobstructed airway Get medical advice/attention if you feel unwell

#### After skin contact:

Rinse affected area with soap and water If symptoms develop or persist, seek medical attention

#### After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes If symptoms develop or persist, seek medical attention

#### After swallowing:

Rinse mouth thoroughly Seek medical attention if irritation, discomfort, or vomiting persists

#### Most important symptoms and effects, both acute and delayed

#### Acute symptoms and effects:

Not determined or not applicable.

#### **Delayed symptoms and effects:**

Not determined or not applicable.

#### Immediate medical attention and special treatment

#### Specific treatment:

Not determined or not applicable.

#### Notes for the doctor:

Not determined or not applicable.

#### **SECTION 5: Firefighting measures**

#### Extinguishing media

Suitable extinguishing media:

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Use Water (fog only), dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam

# Unsuitable extinguishing media:

Not determined or not applicable.

#### Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors Carbon oxides and Nitrogen oxides (NOx)

#### Special protective equipment for firefighters:

Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit

#### Special precautions:

Shut off sources of ignition Carbon monoxide and carbon dioxide may form upon combustion Heating causes a rise in pressure, risk of bursting and combustion

#### **SECTION 6: Accidental release measures**

#### Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation Ensure air handling systems are operational Wear protective eye wear, gloves and clothing

#### **Environmental precautions:**

Should not be released into the environment Prevent from reaching drains, sewer or waterway

#### Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing Use spark-proof tools and explosion-proof equipment Absorb with non-combustible liquid-binding material (sand, diatomaceus earth (clay), acid binders, universal binders)

Dispose of contents / container in accordance with local regulations

#### **Reference to other sections:**

Not determined or not applicable.

#### **SECTION 7: Handling and storage**

#### Precautions for safe handling:

Use only with adequate ventilation. Avoid breathing mist or vapor. Do not eat, drink, smoke or use personal products when handling chemical substances. Take precautionary measures against electrostatic discharges. Use only non-sparking tools. **Conditions for safe storage, including any incompatibilities:** Keep container tightly sealed.

Protect from freezing and physical damage.

Store in a cool, well-ventilated area.

Store away from all ignition sources (open flames, hot surfaces, direct sunlight, spark sources).

#### SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

#### **Occupational Exposure limit values:**

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

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Country (Legal Basis)	Substance	Identifier	Permissible concentration
NIOSH	Hydroquinone	123-31-9	NIOSH C 2.0 mg/m <sup>3</sup>
	Hydroquinone	123-31-9	IDLH: 50 mg/m <sup>3</sup>
ACGIH	Hydroquinone	123-31-9	TLV TWA 1.0 mg/m³ 8-hr
United States (OSHA)	Hydroquinone	123-31-9	Z-1 PEL 2.0 mg/m <sup>3</sup>

#### **Biological limit values:**

No biological exposure limits noted for the ingredient(s).

#### Information on monitoring procedures:

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. Biological monitoring may also be appropriate for some substances.

#### Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above. Use explosion-proof ventilation equipment.

#### Personal protection equipment

#### Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

#### Skin and body protection:

Select glove material impermeable and resistant to the substance.

Wear appropriate clothing to prevent any possibility of skin contact.

#### **Respiratory protection:**

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

#### General hygienic measures:

Avoid contact with skin, eyes and clothing. Wash hands before breaks and at the end of work. Wash contaminated clothing before reuse.

#### **SECTION 9: Physical and chemical properties**

#### Information on basic physical and chemical properties

Appearance	Liquid
Odor	Odorless
Odor threshold	Not determined or not available.
рН	Not determined or not available.
Melting point/freezing point	Not determined or not available.
Initial boiling point/range	Not determined or not available.
Flash point (closed cup)	80 – 93.3 <sup>o</sup> C
Evaporation rate	Not determined or not available.
Flammability (solid, gas)	Not determined or not available.

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#### Light-Cured Cyanoacrylate

Upper flammability/explosive limit	Not determined or not available.
Lower flammability/explosive limit	Not determined or not available.
Vapor pressure	Not determined or not available.
Vapor density	Not determined or not available.
Density	1.19 g/cm³
Relative density	Not determined or not available.
Solubilities	Polymerizes in presence of water.
Partition coefficient (n-octanol/water)	Not determined or not available.
Auto/Self-ignition temperature	Not determined or not available.
Decomposition temperature	Not determined or not available.
Dynamic viscosity	Not determined or not available.
Kinematic viscosity	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

#### **Other information**

#### SECTION 10: Stability and reactivity

#### Reactivity:

Does not react under normal conditions of use and storage.

#### Chemical stability:

Stable under normal conditions of use and storage.

#### Possibility of hazardous reactions:

None under normal conditions of use and storage.

#### **Conditions to avoid:**

Heat, flames and sparks.

#### Incompatible materials:

Reducing agents, water, amines, alcohols, alkali metals, oxidizing agents.

#### Hazardous decomposition products:

None known.

# **SECTION 11: Toxicological information**

#### Acute toxicity

**Assessment:** Based on available data, the classification criteria are not met. **Product data:** No data available.

#### Substance data:

Name	Route	Result
Hydroquinone	oral	LD50 Rat: 367 mg/kg

#### Skin corrosion/irritation

Assessment: Based on available data, the classification criteria are not met.

#### Product data:

No data available.

Substance data: No data available.

#### Serious eye damage/irritation

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#### Light-Cured Cyanoacrylate

**Assessment:** Based on available data, the classification criteria are not met.

#### **Product data:**

No data available.

#### Substance data:

Name	Result
Hydroquinone	Causes serious eye damage

#### Respiratory or skin sensitization

Assessment: Based on available data, the classification criteria are not met.

#### Product data:

No data available.

#### Substance data:

Name	Result
Hydroquinone	May cause an allergic skin reaction.

#### Carcinogenicity

#### Assessment:

Suspected of causing cancer

Product data: No data available.

#### Substance data:

Name	Species	Result
Hydroquinone	Not applicable	This component has been reported to be possibly
		carcinogenic.

#### International Agency for Research on Cancer (IARC):

Name	Classification	
Hydroquinone	Group 3 - Not classifiable as to its carcinogenicity to humans	

#### National Toxicology Program (NTP): None of the ingredients are listed.

#### Germ cell mutagenicity

Assessment: Based on available data, the classification criteria are not met.

#### Product data:

No data available.

#### Substance data:

Name	Result
Hydroquinone	Suspected of causing genetic defects.

#### **Reproductive toxicity**

Assessment: Based on available data, the classification criteria are not met.

#### Product data:

No data available.

Substance data: No data available.

#### Specific target organ toxicity (single exposure)

**Assessment:** Based on available data, the classification criteria are not met.

#### Product data:

No data available.

Substance data: No data available.

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#### Light-Cured Cyanoacrylate

# Specific target organ toxicity (repeated exposure) Assessment: Based on available data, the classification criteria are not met. Product data: No data available. Substance data: No data available. Aspiration toxicity Assessment: Based on available data, the classification criteria are not met. Product data: No data available. Substance data: No data available data, the classification criteria are not met. Product data: No data available. Substance data: No data available. Information on likely routes of exposure: No data available. Symptoms related to the physical, chemical and toxicological characteristics: No data available.

**Other information:** 

No data available.

#### **SECTION 12: Ecological information**

#### Acute (short-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

#### Product data: No data available.

# Substance data:

Name	Result	
Hydroquinone	LC50 - Oncorhynchus mykiss (rainbow trout) - 0.04 - 0.1 mg/l - 96.0 h	
	EC50 - Daphnia magna (Water flea) - 0.13 mg/l - 48 h	
	EC50 - Pseudokirchneriella subcapitata (green algae) - 0.335 mg/l - 72 h	

#### Chronic (long-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

#### Product data: No data available.

#### Substance data:

Name	Result
Hydroquinone	EC50: 0.08 mg/l - Daphnia magna (21 days)

#### Persistence and degradability

Product data: No data available.

#### Substance data:

Name	Result
Hydroquinone	Readily biodegradable.

#### **Bioaccumulative potential**

Product data: No data available.

#### Substance data:

Name	Result
Hydroquinone	No potential for bioaccumulation.

#### Mobility in soil

Product data: No data available.

Substance data: No data available.

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#### Light-Cured Cyanoacrylate

#### Other adverse effects: No data available.

#### SECTION 13: Disposal considerations

#### **Disposal methods:**

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities

#### **SECTION 14: Transport information**

#### United States Transportation of dangerous goods (49 CFR DOT)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None
Additional Information	This material is not subject to the Hazardous Materials Regulations as it is a combustible liquid shipped in a non bulk packaging, therefore meeting the criteria specified in 49 CFR 173.150(f)(2)

#### International Maritime Dangerous Goods (IMDG)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

#### International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	UN 3334	
UN proper shipping name	Aviation regulated liquids, n.o.s. (Cyanoacrylate ester)	
UN transport hazard class(es)	9	
Packing group	None	
Environmental hazards	None	
Special precautions for user	None	

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code		
Bulk Name	None	
Ship type	None	
Pollution category	None	

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#### Light-Cured Cyanoacrylate

#### SECTION 15: Regulatory information

# **United States regulations**

Inventory listing	(TSCA):		
123-31-9	Hydroquinone		Listed
Significant New	Use Rule (TSCA Section 5): Not determined.		
Export notification	on under TSCA Section 12(b): Not determined.		
SARA Section 30	2 extremely hazardous substances:		
123-31-9	Hydroquinone		Listed
SARA Section 31	3 toxic chemicals:		
123-31-9	Hydroquinone		Listed
CERCLA:			-
123-31-9	Hydroquinone Lis	sted	100 lb
RCRA: Not determ	ined.		_
Section 112(r) of	f the Clean Air Act (CAA): Not determined.		
Ma <u>ssachusetts</u> R	light to Know:		
123-31-9	Hydroquinone		Listed
New Jersey Right	t to Know:		
123-31-9	Hydroquinone		Listed
New York Right 1	to Know:		
123-31-9	Hydroquinone		Listed

123-31-9HydroquinoneCalifornia Proposition 65: None of the ingredients are listed.

#### **SECTION 16: Other information**

# Abbreviations and Acronyms: None

Pennsylvania Right to Know:

## Disclaimer:

This product has been classified in accordance with OSHA HCS 2012 guidelines. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

#### NFPA: 0-1-0 HMIS: 0-1-0

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#### **End of Safety Data Sheet**

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Listed

# Safety Data Sheet for Lithium Button Cell Series

## Document Number: SDS-CR2016

# SECTION 1 - Product and company identification

Manufacturer's Name : Zhaoqing New Leader Battery Ind. Ltd. Emergency & Information Phone No. : 0758-7766802 Address : Chuang Ye Road, No. 10 Section Industry, Dinghu County, Zhaoqing Guangdong, Signature of Prepare (Optional)

# **SECTION 2– Hazardous Ingredients**

#### **IMPORTANT:**

Use under normal conditions, the lithium battery is hermetically sealed.

**Ingestion**: Swallowing may lead to serious injury or death in as little as 2 hours due to chemical burns and potential of the esophagus. *IMMEDIATELY SEE DOCTOR*; Do not induct vomiting or give food or drink.

Inhalation: Contents of an open battery can cause respiratory irritation.

Skin Contact: Contents of an open battery can cause skin irritation.

Eye Contact: Contents of an open battery can cause severe irritation.

# **SECTION 3–Identity Information**

Substance Name	Chemical Identification CAS#	% Weight
Lithium	7439 - 93 - 2	8%
Propylene Carbonate	108 - 32 - 7	10%
Manganese Dioxide	1313 - 13 - 9	24%
Dimethoxymethane	109-87-5	7%
Lithium Perchlorate	7791 - 03 - 9	3%
Graphite	7782 – 42 - 5	6%
Steel	7439 – 89 -6	42%

Route(s) of Entry

Inhalation : N.A.

Skin : N.A.

Ingestion : N.A.

Health Hazard (Acute and Chronic) / Toxicological information

In case of electrolyte leakage, skin will be itchy when contaminated with electrolyte

In contact with electrolyte can cause severe irritation and chemical burns

Inhalation of electrolyte vapors may cause irritation of the upper respiratory tract and lungs

# Safety Data Sheet for Lithium Button Cell Series

#### Document Number: SDS-CR2016

#### SECTION 4 – First Aid Measures

Ingestion: Swallowing may lead to serious injury or death in as little as 2 hours due to chemical burns and potential of the esophagus. **IMMEDATELY SEE DOCTOR**; Do not induce vomiting or give food or drink.

Inhalation : Provide fresh air and seek medical attention.

Skin Contact : Remove contaminated clothing and wash skin with soap and water

Eye Contact : Immediately flush eyes thoroughly with water for at least 15 minutes, lifting upper and lower lids, until no evidence of the chemical remains. Seek medical attention.

# **SECTION 5 – Control Fire Measures**

In case of fire where lithium batteries are present, flood area with water or smother with a Class D fire extinguishant appropriate for lithium metal, such as lith-X. Water may not extinguish burning batteries but will cool the adjacent batteries and control the spread of fire. Burning batteries will burn themselves out. Virtually all fires involving lithium batteries can be controlled by flooding with water. However, the contents of the battery will react with water and form hydrogen gas. In a confined space, hydrogen gas can from an explosive mixture. In this situation, smothering agents are recommended. A smothering agent will extinguish burning lithium batteries. Emergency Responders should wear self-contained breathing apparatus. Burning lithium manganese dioxide battery produce toxic and corrosive lithium hydroxide fumes.

# SECTION 6 – Accidental Release or Spillage

Ventilation Requirements: Room ventilation may be required in areas where there are open or leaking batteries Respiratory Protection : Avoid exposure to electrolyte fumes from open or leaking batteries Eye Protection: Water safety glasses with side shields if handling an open or leaking batteries Gloves: Use neoprene or natural rubber gloves if handling an open or leaking batteries, battery materials should be collected in a leak-proof container.

# SECTION IX – Safety Warning for Swallowed Hazardous



Keep out of reach of children. Swallowing may lead to serious injury or death in as little as 2 hours due to chemical burns and potential perforation of the esophagus. Immediately see doctor or ring **LOCAL EMERGENCY CALL.** Keep in original package until ready to use. Dispose of used batteries immediately.

# Safety Data Sheet for Lithium Button Cell Series

## Document Number: SDS-CR2016

## **SECTION 7** – Handling and Storage

*Storage* : Store in a cool, well ventilated area. Elevated temperatures can result in shortened battery life. In locations that handle large quantities of lithium batteries, such as warehouse, lithium batteries should be isolated from unnecessary combustible.

*Mechanical Containment:* If potting or sealing the battery in an airtight or watertight container is required, consult your New Leader Battery Limited representative for precautionary suggestions. Do not obstruct safety release vents on batteries, Encapsulation of batteries will not allow cell venting and can cause high pressure rupture.

Handling: Accidental short circuit for a few seconds will not seriously affect the battery. Prolonged short circuit will cause the battery to lose energy, generate significant heat and can cause the safety release vent to open. Source of short circuits include jumbled batteries in bulk containers, metal jewelry, metal covered tables or metal belts used for assembly of batteries into devices. Damaging a lithium battery may result in an internal short circuit.

<u>The contents of an open battery</u>, including a vented battery, when exposed to water, may result in a fire and/or explosion. Crushed or damaged batteries may result in a fire.

<u>If soldering or welding to the battery</u> is required, consult us for proper precaution to prevent seal damage or short circuit.

*Charging*: This battery is manufactured in a charged state. Its is not designed for recharging. Recharging can cause battery leakage or in some case, high pressure rupture. Inadvertent charging can occur if a battery is installed backwards

# **SECTION 8 – Exposure Controls / Person Protection**

Ventilation Requirements : N.A. Respiratory Protection: N.A. Eyes Protection : N.A. Gloves : N.A.

# SECTION 9– Physical / Chemical Characteristics

Boiling Point : N.A. Specific Gravity (H2O = 1) : N.A. Melting Point : N.A.

# Safety Data Sheet for Lithium Button Cell Series

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Vapor Pressure (mm Hg) : N.A. Vapor Density (AIR = 1) : N.A. Evaporation Rate (Buty1 Acetate) : N.A. Solubility in Water : N.A. Appearance and Odor , Cylindrical Shape, Odorless

# SECTION 10 – Reactivity Data

Stability : stable Conditions to Avoid : Stable Incompatibility : Materials to Avoid Lithium manganese batteries do not met any of the criteria established in 40CFR 261.2 for reactivity

# **SECTION 11** – Toxicological Information : N.A.

# SECTION 12 – Ecological Information : N.A.

# SECTION 13- Disposal Method :

Dispose of the batteries according to government regulations.

# **SECTION 14 – Transport** Information

The Batteries in all forms of transportation (e.g. Truck, air, or sea) must be packaged in a safe and responsible manner. Regulatory concerns form all agencies for safe packaging require that batteries be packaged in s manner that prevents short circuits and be contained in (Strong Carton / Packaging) that prevents spillage of contents. The lithium button cell are exempt from the classification as dangerous goods as they meet the requirements of the special provisions listed below (Essentially, they are properly packaged and labeled, Contains less than 1 gram of lithium and pass the tests defined in UN model regulation section 38.3).

Regulatory Parties	Special Provisions
ADR	188,230,310,636,656
IMDG	188,230,310,957
UN	UN3090, UN3091
US DOT	29,A54,A101,A100
IATA, ICAO	Packaging Instructions 968 – 970 (section II)

Ref: Summary of Packing Instruction (2020 IATA Dangerous Goods Regulations 61th Edition) the minimum

# Safety Data Sheet for Lithium Button Cell Series

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requirements necessary to transport as non-restricted goods are as follows

- 1. For a lithium metal/lithium alloy cell, the lithium content is not more than 1g.
- 2. Each package must be displayed a battery handling label. (Tel no and emergency call must be printed on label)
- 3. Each consignment must be accompanied with a declaration of non-dangerous goods document.
- 4. The Original package (NL) must be capable of with standard a 1.2m drop test.

# Lithium Content: 0.144g

**SECTION 15 – Regulatory Information:** Special requirement be according to the local regulations.

# SECTION 16 - Other Information : None