

FIBERFIX TOTAL REPAIR

SDB n°: 242960

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Legal remark

Batteries and LED are Articles as defined under GHS and exempt from GHS classification criteria (Section 1.3.2.1.1 of GHS). Therefore, they are no subject to the requirements for information in the Supply Chain (Safety Data Sheets and Labels).

This Safety Data Sheet provides information about FIBERFIX TOTAL REPAIR adhesive. In section 14 (Transport information) and section 15 (Regulatory information), FIBERFIX TOTAL REPAIR batteries and LED have also been considered for information only.

SECTION 1: Product and company identification

1.1. Product identifier

FIBERFIX TOTAL REPAIR

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use: Instant Adhesive, Light-curing adhesive.

1.3. Details of the supplier of the safety data sheet

FIBERFIX
858 S Auto Mall Drive Suite 101
American Fork, Utah 84003
USA

USA
801.701.0096
info@fiberfix.com

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

2.1.1. GHS classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 4)
Eye irritation (Category 2B)

2.2. GHS label elements, including precautionary statements

Pictogram	None.
Signal Word	Warning.
Hazard statements	
H227	Combustible liquid
H320	Causes eye irritation.
Precautionary statements	
P210	Keep away from heat – No smoking.
P264	Wash skin thoroughly after handling.
P280	Wear protective gloves / eye protection.
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.
P362	Take off contaminated clothing and wash before reuse.
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
P403 + P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of container to an approved waste disposal plant.

For full text of these Hazard and Precautionary statements, see Section 16.

2.3. Hazards not otherwise classified (HNOC) or not covered by GHS

None.

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

General chemical description: Cyanoacrylate adhesive

3.2.1. Declaration of the ingredients in accordance with 29 CFR 1910 (OSHA HCS):

Hazardous component	CAS-No.	EC-No.	Content	Classification
2-Methoxyethyl cyanoacrylate	27816-23-5	248-670-5	>70 – ≤98 %	Flam. Liq. 4; H227 Eye irrit. 2B; H320
Vinyl derivatives copolymer	-	-	1 – 10 %	-

Hydroquinone	123-31-9	204-617-8	0.01 – < 0.1%	Acute Tox. 4; H302 Skin Sens. 1; H317 Eye Dam. 1; H318 Muta. 2; H341 Carc. 2; H351 Aquatic Acute 1; H400 Aquatic Chronic 1; H410
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For full text of these Hazard and Precautionary statements, see Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice:

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

In case of skin contact:

Do not pull bonded skin apart. It may be gently peeled apart using a blunt object such as a spoon, preferably after soaking in warm soapy water. Cyanoacrylates give off heat on solidification. In rare cases a large drop will generate enough heat to cause a burn. Burns should be treated normally after the adhesive has been removed from the skin. If lips are accidentally stuck together apply warm water to the lips and encourage maximum wetting and pressure from saliva inside the mouth. Peel or roll lips apart. Do not try to pull the lips apart with direct opposing action.

In case of eye contact:

If the eye is bonded closed, release eyelashes with warm water by covering with wet pad. Cyanoacrylate will bond to eye protein and will cause periods of weeping which will help to debond the adhesive. Keep eye covered until debonding is complete, usually within 1-3 days. Do not force eye open. Medical advice should be sought in case solid particles of cyanoacrylate trapped behind the eyelid cause any abrasive damage.

If swallowed:

Ensure that breathing passages are not obstructed. The product will polymerise immediately in the mouth making it almost impossible to swallow. Saliva will slowly separate the solidified product from the mouth (several hours).

4.2. Most important symptoms and effects, both acute and delayed

Eye	irritation, conjunctivitis.
Skin	redness, inflammation.
Respiratory system	irritation, coughing, breathe shortness, chest tightness.

4.3. Indication of any immediate medical attention and special treatment needed

See section 4.1

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Carbon oxides, nitrogen oxides (NO_x)

5.3. Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary

5.4. Further information

Use water spray to cool unopened containers.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Remove all sources of ignition.

For personal protection, see Section 8.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains

6.3. Methods and materials for containment and cleaning up

Do not use cloths for mopping up. Flood with water to complete polymerization and scrape off the floor. Cured material can be disposed of as non-hazardous waste.

6.4. Reference to other sections

See advice in section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Ventilation (low level) is recommended when using large volumes.

Use of dispensing equipment is recommended to minimise the risk of skin or eye contact

Hygiene measures:

Wash hands before work breaks and after finishing work.

Do not eat, drink or smoke while working. □

Good industrial hygiene practices should be observed.

7.2. Conditions for safe storage, including any incompatibilities

For optimum shelf life store in original containers under refrigerated conditions at 2 - 8°C (35.6 - 46.4 °F)

7.3. Specific end use(s)

Adhesive

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits (OEL):

Substance	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
2-Methoxyethyl cyanoacrylate 27816-23-5	-	-	-	0.2 ppm TWA
Hydroquinone 123-31-9	1 mg/m ³ TWA	2 mg/m ³ TWA	-	-

Biological occupational exposure limits:

Substance	Value on basis: ACGIH BEI	Parameters	Biological specimen	Remarks
Hydroquinone 123-31-9	1.5 %	Methemoglobin	In blood	During or end of shift

8.2. Exposure controls

Appropriate engineering controls:

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

Personal protective equipment:

Eye/face protection:

Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN166 (EU).

Skin protection:

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body protection:

Use impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection:

Ensure adequate ventilation.



Control of environmental exposure:

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Odor	Odorless.
pH	No data available/Not applicable.
Initial boiling point	No data available/Not applicable.
Flash point	80 – 93.3 °C.
Decomposition temperature	No data available/Not applicable.
Vapour pressure	No data available/Not applicable.
Density	1.19 g/cm ³ .
Bulk density	No data available/Not applicable.
Viscosity	No data available/Not applicable.
Viscosity (kinematic)	No data available/Not applicable.
Explosive properties	No data available/Not applicable.
Qualitative solubility (solvent: water)	Polymerises in presence of water.
Solidification temperature	No data available/Not applicable.
Melting point	No data available/Not applicable.
Flammability	No data available/Not applicable.
Auto-Ignition temperature	No data available/Not applicable.
Explosive limits	No data available/Not applicable.
Partition coefficient n-octanol/water	No data available/Not applicable.
Evaporation rate	No data available/Not applicable.
Vapour density	No data available/Not applicable.
Oxidizing properties	No data available/Not applicable.

9.2. Other safety information

No data available/Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available/Not applicable.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

No data available/Not applicable.

10.4. Conditions to avoid

Heat, flames and sparks.



10.5. Incompatible materials

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

10.6. Hazardous decomposition products

Other decomposition products – no data available.

In the event of fire: see Section 5.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Aspiration hazard:

Irritating to respiratory system

Acute oral toxicity:

No data available/Not applicable.

Acute dermal toxicity:

No data available/Not applicable.

Skin corrosion/irritation:

No data available/Not applicable.

Serious eye damage/irritation:

No data available/Not applicable.

Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Hydroquinone 123-31-9	Sensitising	Guinea pig maximisation test	Guinea pig	-

Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Hydroquinone 123-31-9	negative	Bacterial reverse mutation assay (e.g. Ames test)	with and without	-	EU Method B.13/14 (Mutagenicity)

Repeated dose toxicity:

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
Hydroquinone 123-31-9	NOAEL \geq 250 mg/kg	oral: gavage	14 days, 5 days/week. 12 doses	rat	OECD Guideline 407 (repeated Dose 28-Day Oral Toxicity in Rodents)
Hydroquinone 123-31-9	LOAEL \leq 500 mg/kg	oral: gavage	14 days, 5 days/week. 12 doses	rat	OECD Guideline 407 (repeated Dose 28-Day Oral Toxicity in Rodents)

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 probable, possible or confirmed human carcinogen by ACGIH.

NTP: 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 NTP.

OSHA: 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 OSHA.

SECTION 12: Ecological information

12.1. Toxicity

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Hydroquinone 123-31-9	LC50	0.638 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
Hydroquinone 123-31-9	EC50	0.134 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Hydroquinone 123-31-9	EC50	0.335 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Hydroquinone 123-31-9	NOEC	0.0057 mg/l	chronic Daphnia	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)

12.2. Persistence and degradability

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
Hydroquinone 123-31-9	readily biodegradable	Aerobic	75 – 81 %	EU Method C.4-E (Determination of the "Ready" Biodegradability: Closed Bottle Test)

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product disposal:

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Disposal of uncleaned packages:

Dispose of as unused product.

SECTION 14: Transport information

All batteries in all forms of transportation (ground, air or sea) must be packed in a safe and responsible manner. Regulatory concerns from all agencies for safe packaging require batteries to be packed in a way that prevents short circuits and to be contained in strong outer packaging to prevent spillage of contents. All original packaging for **FIBERFIX TOTAL REPAIR** are compliant with these regulatory concerns.

Lithium metal batteries contained in **FIBERFIX TOTAL REPAIR** are exempt from the classification as dangerous goods as they meet the requirements of the special provisions listed below. Essentially, this means the batteries are properly packaged and labelled, they contain less than 1 g of lithium and pass the tests defined in UN's Manual of Tests and Criteria, part III, sub-section 38.3.

Regulatory Body	Special provisions
UN	UN3091
IATA, ICAO	Packing instruction P970 Section II, A48, A99, A154, A164, A181, A185
IMDG	188, 230, 957
ADR	188, 230, 376, 377, 636
RID	188, 230, 360, 376, 377, 636
ADN	188, 230, 360, 376, 377, 636

Although lithium metal batteries contained in **FIBERFIX TOTAL REPAIR** are classified as non-dangerous goods, there is a limitation of 5 kg net quantity of batteries per outer package when shipped by air. This means that a maximum of 1,562 units of **FIBERFIX TOTAL REPAIR** can be shipped per package by air. For additional information please refer to the phone number in Sections 1.3 and 1.4 of this document.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name	Combustible liquid, n.o.s. (Cyanoacrylate ester)
Hazard class or division	Combustible liquid
Identification number	NA 1993
Packing group	III
Exceptions	(Not more than 450 Liters), Unrestricted.

International Air Transportation (ICAO/IATA)

Proper shipping name	Aviation regulated liquid, n.o.s. (Cyanoacrylate ester)
Hazard class or division	9
Identification number	UN 3334
Packing group	None.

Water transportation (IMO/IMDG)

Proper shipping name	Not regulated.
Hazard class or division	None.
Identification number	None.
Packing group	None.

SECTION 15: Regulatory information

United States Regulatory Information

TSCA 8 (b) Inventory Status	All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.
TSCA 12 (b) Export Notification	None above reporting De Minimis.



SARA 302 Components	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 Components	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	Immediate Health, Delayed Health, Fire, Reactive.
California Proposition 65	This product does not contain any chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

European Regulatory Information

VOC Content (1999/13/EEC): < 3 %

Lithium metal batteries contained in **FIBERFIX TOTAL REPAIR** comply with European Directive 2006/66/EC and its Article 4 amendment of Directive 2013/56/EU. Therefore the batteries are marked with the crossed-out wheeled bin and the same symbol is printed on the packaging.

LED device contained in **FIBERFIX TOTAL REPAIR**- including light, batteries and every component in the plastic case – complies with RoHS Directive 2011/65/EU and its Annex II amendment of Directive (EU) 2015/863. Therefore the device must bear the CE mark and the same symbol is printed on the packaging.

SECTION 16: Other information

The labelling of the product is indicated in Section 2. The full text of all abbreviations indicated by codes in this safety data sheet are as follows:

Flam. Liq.	Flammable liquids.
Eye irrit.	Eye irritation.
Acute Tox.	Acute toxicity
Skin Sens.	Skin sensitisation.
Eye Dam.	Serious eye damage.
Muta.	Germ cell mutagenicity.
Carc.	Carcinogenicity.
Aquatic Acute	Aquatic acute toxicity.
Aquatic Chronic	Chronic aquatic toxicity.
H227	Combustible liquid.
H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H341	Suspected of causing genetic defects.
H351	Suspected of causing cancer.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
P210	Keep away from heat – No smoking.



P264	Wash skin thoroughly after handling.
P280	Wear protective gloves / eye protection.
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.
P362	Take off contaminated clothing and wash before reuse.
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
P403 + P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of container to an approved waste disposal plant.

Further information

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.

This safety data sheet was prepared in accordance with 29 CFR 1910 (OSHA HCS).

