



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name STARBRITE LIQUID ELECTRICAL TAPE
Version # 04
Revision date 10-22-2010
Product code 841-BLK
Product use Sealant.
Manufacturer information Star brite Distributing, Inc.
4041 SW 47th Avenue
Fort Lauderdale, FL 33314 United States
General Information: (954) 587-6280
24-Hour Emergency: CHEMTREC: (703) 527-3887

2. Hazards Identification

Physical state Liquid.
Appearance Black liquid.
Emergency overview Extremely flammable liquid and vapor - vapor may cause flash fire. Will be easily ignited by heat, spark or flames. Cancer hazard. Irritating to respiratory system. Irritating to eyes and skin. May be harmful if swallowed. Prolonged exposure may cause chronic effects.
OSHA regulatory status This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).
Potential health effects
Routes of exposure Inhalation. Ingestion. Skin contact. Eye contact.
Eyes Irritating to eyes. Eye contact may result in corneal injury.
Skin Irritating to skin. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
Inhalation Irritating to respiratory system. Prolonged inhalation may be harmful.
Ingestion Components of the product may be absorbed into the body by ingestion. Irritating to mouth, throat, and stomach.
Target organs Blood. Cardiac. Eyes. Liver. Lungs. Respiratory system. Skin. Kidneys. Central nervous system. Gastro-intestinal tract.
Chronic effects Unconsciousness. Shortness of breath. Conjunctiva. Edema. Jaundice. Cyanosis (blue tissue condition, nails, lips, and/or skin). Liver injury may occur. Kidney injury may occur. May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion and blurred vision) and/or damage. May cause delayed lung injury. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
Signs and symptoms Irritation of nose and throat. Irritation of eyes and mucous membranes. Shortness of breath. Coughing. Decrease in motor functions. Behavioral changes. Edema. Conjunctivitis. Rash.
Potential environmental effects Components of this product are hazardous to aquatic life. May cause long-term adverse effects in the environment.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Methyl ethyl ketone	78-93-3	15-40
Vinyl chloride - vinyl acetate copolymer	9003-22-9	10-30
Xylene	1330-20-7	10-30
Acetone	67-64-1	5-10
3,4-Epoxy cyclohexanecarboxylic acid (3,4-epoxy cyclohexylmethyl) ester	2386-87-0	3-7
Diethylene glycol dibenzoate	120-55-8	3-7
2-Propenoic acid, 2-methyl-, 2methylpropyl ester, polymer with ethylbenzene and 2-ethylhexyl 2-propenoate	68240-06-2	1-5

Carbon black	1333-86-4	1-5
Talc	14807-96-6	1-5

Composition comments All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First Aid Measures

First aid procedures

Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Skin contact	Remove and isolate contaminated clothing and shoes. For minor skin contact, avoid spreading material on unaffected skin. If skin irritation persists, call a physician.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Get medical attention if symptoms persist.
Ingestion	Rinse mouth. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content does not get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician or poison control center immediately.

Notes to physician Treat symptomatically. Symptoms may be delayed.

General advice Get medical attention if symptoms occur. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use. Discard any shoes or clothing items that cannot be decontaminated.

5. Fire Fighting Measures

Flammable properties Flammable by OSHA criteria. Heat may cause the containers to explode. Vapors may travel considerable distance to a source of ignition and flash back.

Extinguishing media

Suitable extinguishing media	Water. Water spray. Foam. Dry powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use a solid water stream as it may scatter and spread fire.

Protection of firefighters

Specific hazards arising from the chemical Fire may produce irritating, corrosive and/or toxic gases.

Protective equipment and precautions for firefighters Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.

Fire fighting equipment/instructions

Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also consider initial evacuation for 800 meters (1/2 mile) in all directions. ALWAYS stay away from tanks engulfed in flame. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Withdraw immediately in case of rising sound from venting safety devices or any discoloration of tanks due to fire. In the event of fire, cool tanks with water spray. Move containers from fire area if you can do it without risk. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn. Use water spray to cool unopened containers. Cool containers exposed to flames with water until well after the fire is out.

Specific methods In the event of fire, cool tanks with water spray. Use water spray to cool unopened containers.

6. Accidental Release Measures

Personal precautions

Local authorities should be advised if significant spillages cannot be contained. Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. See Section 8 of the MSDS for Personal Protective Equipment.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not contaminate water.

Methods for containment

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if you can do so without risk. Dike the spilled material, where this is possible. Use water spray to reduce vapors or divert vapor cloud drift. Prevent entry into waterways, sewers, basements or confined areas.

Methods for cleaning up

Should not be released into the environment.

Large Spills: Dike far ahead of spill for later disposal. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece).

Never return spills to original containers for re-use. This material and its container must be disposed of as hazardous waste. Following product recovery, flush area with water. Clean surface thoroughly to remove residual contamination.

Other information

Clean up in accordance with all applicable regulations.

7. Handling and Storage**Handling**

May be ignited by open flame. Keep away from sources of ignition - No smoking. Avoid inhalation and contact with skin and eyes. Avoid contact during pregnancy/while nursing. Use only in area provided with appropriate exhaust ventilation. Avoid prolonged exposure. Avoid release to the environment. Handle and open container with care. See Section 8 of the MSDS for Personal Protective Equipment.

Storage

Flammable liquid storage. Follow rules for flammable liquids. Do not handle or store near an open flame, heat or other sources of ignition. Store in a cool and well-ventilated place. Keep out of the reach of children. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Keep away from food, drink and animal feedingstuffs. Use care in handling/storage.

8. Exposure Controls / Personal Protection**Occupational exposure limits****US. ACGIH Threshold Limit Values**

Components	Type	Value	Form
Acetone (67-64-1)	STEL	750 ppm	
	TWA	500 ppm	
Carbon black (1333-86-4)	TWA	3.5 mg/m3	
	STEL	300 ppm	
Methyl ethyl ketone (78-93-3)	TWA	200 ppm	
	TWA	2 mg/m3	Respirable fraction.
Talc (14807-96-6)	STEL	150 ppm	
Xylene (1330-20-7)	TWA	100 ppm	

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Acetone (67-64-1)	PEL	1000 ppm	
		2400 mg/m3	
Carbon black (1333-86-4)	PEL	3.5 mg/m3	
		590 mg/m3	
Talc (14807-96-6)	TWA	200 ppm	
		0.3 mg/m3	Total dust.
		2.4 mppcf	Respirable.
		0.1 mg/m3	Respirable.
Xylene (1330-20-7)	PEL	20 mppcf	
		435 mg/m3	
		100 ppm	

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value	Form
Acetone (67-64-1)	STEL	750 ppm	
		1800 mg/m3	
	TWA	1200 mg/m3	
Carbon black (1333-86-4)	TWA	500 ppm	
		3.5 mg/m3	

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value	Form
Methyl ethyl ketone (78-93-3)	STEL	300 ppm	
	TWA	885 mg/m3	
		590 mg/m3	
Talc (14807-96-6)	TWA	200 ppm 2 mg/m3	Respirable particles.

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value	Form
Acetone (67-64-1)	STEL	500 ppm	
	TWA	250 ppm	
Carbon black (1333-86-4)	TWA	3.5 mg/m3	
Methyl ethyl ketone (78-93-3)	STEL	100 ppm	
	TWA	50 ppm	
Talc (14807-96-6)	TWA	2 mg/m3	Respirable.
Xylene (1330-20-7)	STEL	150 ppm	
	TWA	100 ppm	

Canada. Ontario OELs. (Ministry of Labor - Control of Exposure to Biological or Chemical Agents)

Components	Type	Value	Form
Acetone (67-64-1)	STEL	750 ppm	
	TWA	500 ppm	
Carbon black (1333-86-4)	TWA	3.5 mg/m3	
Methyl ethyl ketone (78-93-3)	STEL	885 mg/m3	
	TWA	300 ppm	
		590 mg/m3	
Talc (14807-96-6)	TWA	200 ppm 2 mg/m3 2 fibers/ml	Respirable.
Xylene (1330-20-7)	STEL	150 ppm	
	TWA	650 mg/m3	
		435 mg/m3 100 ppm	

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

Components	Type	Value	Form
Acetone (67-64-1)	STEL	1000 ppm	
	TWA	2380 mg/m3	
		1190 mg/m3	
Carbon black (1333-86-4)	TWA	500 ppm	
	TWA	3.5 mg/m3	
Methyl ethyl ketone (78-93-3)	STEL	300 mg/m3	
	TWA	100 ppm	
		150 mg/m3	
Talc (14807-96-6)	TWA	50 ppm	
Xylene (1330-20-7)	TWA	3 mg/m3	Respirable dust.
	STEL	150 ppm	
	TWA	651 mg/m3 434 mg/m3 100 ppm	

Mexico. Occupational Exposure Limit Values

Components	Type	Value
Acetone (67-64-1)	STEL	3000 mg/m3
	TWA	1260 ppm
		1000 ppm
Carbon black (1333-86-4)	TWA	2400 mg/m3
	STEL	7 mg/m3
	TWA	3.5 mg/m3

Mexico. Occupational Exposure Limit Values

Components	Type	Value
Methyl ethyl ketone (78-93-3)	STEL	885 mg/m3
	TWA	300 ppm
		590 mg/m3
Talc (14807-96-6)	TWA	200 ppm
	TWA	2 fibers/cm3
Xylene (1330-20-7)	STEL	150 ppm
	TWA	655 mg/m3
		435 mg/m3
		100 ppm

Engineering controls

Ensure adequate ventilation, especially in confined areas. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Personal protective equipment

Eye / face protection

Wear safety glasses with side shields (or goggles).

Skin protection

Wear protective gloves. Wear appropriate chemical resistant clothing. Wear chemical protective equipment that is specifically recommended by the manufacturer.

Respiratory protection

Wear positive pressure self-contained breathing apparatus (SCBA). Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection.

General hygiene considerations

Avoid contact with eyes. Avoid contact with skin. Keep away from food and drink. Handle in accordance with good industrial hygiene and safety practices. Always observe national occupational health and hygiene requirements including requirements for medical surveillance.

9. Physical & Chemical Properties

Appearance	Black liquid.
Color	Black.
Odor	Solvent -like.
Odor threshold	Not available.
Physical state	Liquid.
Form	Liquid.
pH	Not available.
Melting point	Not available.
Freezing point	Not available.
Boiling point	Not available.
Flash point	60.8 °F (16 °C) Setaflash Closed Tester
Evaporation rate	Not available.
Flammability limits in air, upper, % by volume	< 11.5
Flammability limits in air, lower, % by volume	> 0.3
Vapor pressure	Not available.
Vapor density	Not available.
Specific gravity	Not available.
Solubility (water)	Not miscible.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.

Viscosity 1800 cP

10. Chemical Stability & Reactivity Information

Chemical stability Material is stable under normal conditions.
Conditions to avoid Heat, flames and sparks. Contact with incompatible materials.
Incompatible materials Amines. Ammonia. Caustics. Isocyanates. Strong acids. Strong oxidizing agents.
Hazardous decomposition products No hazardous decomposition products are known.

11. Toxicological Information

Toxicological data

Components	Test Results
Xylene (1330-20-7)	Acute Oral LD50 Mouse: 1590 mg/kg
Carbon black (1333-86-4)	Acute Oral LD50 Rat: 6670 mg/kg Acute Oral LD50 Rat: > 8000 mg/kg
Methyl ethyl ketone (78-93-3)	Acute Dermal LD50 Rabbit: > 8000 mg/kg Acute Inhalation LC50 Rat: 11700 mg/l 4 Hours Acute Oral LD50 Rat: 2300 - 3500 mg/kg
Acute effects	Irritating to eyes and skin. May be harmful if inhaled and swallowed. Vapors may cause drowsiness and dizziness.
Local effects	Components of the product may be absorbed into the body through the skin. Blood disorder may occur after ingestion. Liver toxicity. Irritating to skin. Irritating to respiratory system. Irritating to eyes and skin.
Sensitization	May cause allergic skin reaction.
Chronic effects	Prolonged exposure may cause chronic effects. Prolonged or repeated exposure may cause lung injury. Repeated absorption may cause disorder of central nervous system, liver, kidneys and blood. Repeated exposure may cause skin dryness or cracking.
Subchronic effects	Kidney injury may occur.
Carcinogenicity	Hazardous by OSHA criteria. Risk of cancer cannot be excluded with prolonged exposure.
ACGIH Carcinogens	
Acetone (CAS 67-64-1)	A4 Not classifiable as a human carcinogen.
Carbon black (CAS 1333-86-4)	A4 Not classifiable as a human carcinogen.
Talc (CAS 14807-96-6)	A4 Not classifiable as a human carcinogen.
Xylene (CAS 1330-20-7)	A4 Not classifiable as a human carcinogen.
IARC Monographs. Overall Evaluation of Carcinogenicity	
Carbon black (CAS 1333-86-4)	2B Possibly carcinogenic to humans.
Talc (CAS 14807-96-6)	2B Possibly carcinogenic to humans.
Vinyl chloride - vinyl acetate copolymer (CAS 9003-22-9)	3 Not classifiable as to carcinogenicity to humans.
Xylene (CAS 1330-20-7)	3 Not classifiable as to carcinogenicity to humans.
Epidemiology	Hazardous by OSHA criteria.
Mutagenicity	Not available.
Neurological effects	Hazardous by OSHA criteria.
Reproductive effects	Components in this product have been shown to cause birth defects and reproductive disorders in laboratory animals.
Teratogenicity	Components in this product have been shown to cause birth defects and reproductive disorders in laboratory animals.
Further information	Symptoms may be delayed.

12. Ecological Information

Ecotoxicological data

Components	Test Results
Acetone (67-64-1)	LC50 Fathead minnow (<i>Pimephales promelas</i>): > 100 mg/l 96 hours

Components	Test Results
Methyl ethyl ketone (78-93-3)	LC50 Sheepshead minnow (Cyprinodon variegatus): > 400 mg/l 96 hours
Ecotoxicity	Components of this product are hazardous to aquatic life. Contains a substance which causes risk of hazardous effects to the environment.
Environmental effects	Harmful to aquatic organisms. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Persistence and degradability	Not available.
Bioaccumulation / Accumulation	No data available.
Partition coefficient (n-octanol/water)	Not available.
Mobility in environmental media	The product is insoluble in water.

13. Disposal Considerations

Waste codes	D001: Waste Flammable material with a flash point <140 °F D035: Waste Methyl ethyl ketone
Disposal instructions	This material and its container must be disposed of as hazardous waste. Incinerate the material under controlled conditions in an approved incinerator. Do not incinerate sealed containers. Do not allow this material to drain into sewers/water supplies.
Waste from residues / unused products	Dispose in accordance with applicable federal, state, and local regulations.

14. Transport Information

Product Specific Note:	This product meets the limited quantities exception as follows: DOT: Consumer Commodity ORM-D up to 1 liter. IMDG: Limited quantities up to 1 liter. Otherwise, the following descriptions apply:
-------------------------------	--

DOT

Basic shipping requirements:

UN number	UN1993
Proper shipping name	Flammable liquids, n.o.s. (Acetone, Methyl ethyl ketone)
Hazard class	3
Packing group	II
Labels required	3

Additional information:

Special provisions	IB2, T7, TP1, TP8, TP28
Packaging exceptions	150
Packaging non bulk	202
Packaging bulk	242
ERG number	128

IATA

Basic shipping requirements:

UN number	1993
Proper shipping name	Flammable liquid, n.o.s. (Acetone, Methyl ethyl ketone)
Hazard class	3
Packing group	II

Additional information:

ERG code	3L
-----------------	----

IMDG

Basic shipping requirements:

UN number	1993
Proper shipping name	FLAMMABLE LIQUID, N.O.S. (Acetone, Methyl ethyl ketone)

Hazard class 3
Packing group II
EmS No. F-E, S-E*

TDG

Basic shipping requirements:

Proper shipping name FLAMMABLE LIQUID, N.O.S. (Acetone, Methyl ethyl ketone)
Hazard class 3
UN number UN1993
Packing group II
Marine pollutant No
Additional information:
Special provisions 16



DOT



IATA



IMDG



TDG

15. Regulatory Information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
 All components are on the U.S. EPA TSCA Inventory List.

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration

Xylene (CAS 1330-20-7) 1.0 %

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

Xylene (CAS 1330-20-7) Listed.

CERCLA (Superfund) reportable quantity (lbs)

Methyl ethyl ketone 5000
 Xylene 1000
 Acetone 5000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
 Delayed Hazard - Yes
 Fire Hazard - Yes
 Pressure Hazard - No
 Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical No

Drug Enforcement Agency (DEA) Not controlled

Canadian regulations

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

WHMIS status

Controlled

WHMIS classification

B2 - Flammable/Combustible
D1B - Immediate/Serious-TOXIC
D2A - Other Toxic Effects-VERY TOXIC
D2B - Other Toxic Effects-TOXIC

WHMIS labeling**Inventory status**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

State regulations

WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Hazardous Substances (Director's): Listed substance

Acetone (CAS 67-64-1)	Listed.
Carbon black (CAS 1333-86-4)	Listed.
Methyl ethyl ketone (CAS 78-93-3)	Listed.
Talc (CAS 14807-96-6)	Listed.
Xylene (CAS 1330-20-7)	Listed.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Carbon black (CAS 1333-86-4)	Listed.
------------------------------	---------

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Carbon black (CAS 1333-86-4)	Listed: February 21, 2003 Carcinogenic.
------------------------------	---

US - Massachusetts RTK - Substance: Listed substance

Acetone (CAS 67-64-1)	Listed.
Carbon black (CAS 1333-86-4)	Listed.
Methyl ethyl ketone (CAS 78-93-3)	Listed.
Talc (CAS 14807-96-6)	Listed.

US - New Jersey Community RTK (EHS Survey): Reportable threshold

Xylene (CAS 1330-20-7)	500 LBS
------------------------	---------

US - New Jersey RTK - Substances: Listed substance

Acetone (CAS 67-64-1)	Listed.
Carbon black (CAS 1333-86-4)	Listed.
Methyl ethyl ketone (CAS 78-93-3)	Listed.
Talc (CAS 14807-96-6)	Listed.
Xylene (CAS 1330-20-7)	Listed.

US - Pennsylvania RTK - Hazardous Substances: Listed substance

Acetone (CAS 67-64-1)	Listed.
Carbon black (CAS 1333-86-4)	Listed.
Methyl ethyl ketone (CAS 78-93-3)	Listed.
Talc (CAS 14807-96-6)	Listed.
Xylene (CAS 1330-20-7)	Listed.

16. Other Information

Further information

HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings

Health: 2*
Flammability: 4
Physical hazard: 0

NFPA ratings

Health: 2
Flammability: 4
Instability: 0

Disclaimer

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. Star brite assumes no responsibility for injury to the vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, Star brite assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in his use of the material.

Issue date

10-22-2010