



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name M-2000 LIQUID FLASHING
Version # 04
Revision date 25-August-2008
CAS # Mixture
Manufacturer CETCO
Building Materials Group
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Arlington Heights, IL 60004 US
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<http://www.cetco.com/bmg/home.htm>
General Information (800) 527-9948
CHEMTREC® (800) 424-9300

2. Hazards Identification

Potential health effects

Eyes Liquid or vapors may irritate the eyes. Symptoms include itching, burning, redness and tearing.
Skin Can cause moderate injury (reddening and swelling). May cause sensitization by skin contact.
Inhalation Inhalation of vapors or mists of the product may be irritating to the respiratory system. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. May cause sensitization by inhalation.
Ingestion Ingestion may cause irritation to mucous membranes. Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chronic effects Danger of serious damage to health by prolonged exposure. Repeated exposure may lead to respiratory sensitization reactions, producing an asthma-like condition. Contains cancerous components.

3. Composition / Information on Ingredients

Components	CAS #	Percent
CALCIUM CARBONATE	1317-65-3	10 - 20
CARBON BLACK	1333-86-4	2.5 - 10
ANTHRACENE	120-12-7	1 - 2.5
Di(2-ethylhexyl)phthalate	117-81-7	0.1 - 1
Toluene-2,4-diisocyanate	584-84-9	0.1 - 1
Non-hazardous and other components below reportable levels		60 - 80

4. First Aid Measures

First aid procedures

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.
Skin contact Wash affected area with mild soap and water. Rinse skin with water. Get medical attention if irritation develops or persists.
Inhalation Remove to fresh air. If the affected person is not breathing, apply artificial respiration. If breathing is difficult, give oxygen. If symptoms persist, get medical attention.
Ingestion If the material is swallowed, get immediate medical attention or advice -- Do not induce vomiting. Call a physician or Poison Control Center immediately.

5. Fire Fighting Measures

Flammable properties The product is not flammable.

Extinguishing media**Suitable extinguishing media**

Dry chemical, CO₂, water spray or regular foam.

Protection of firefighters**Protective equipment and precautions for firefighters**

Cool containers with flooding quantities of water until well after fire is out. Withdraw immediately in case of rising sound from venting safety devices or any discoloration of tanks due to fire.

Hazardous combustion products

Carbon monoxide, carbon dioxide, various hydrocarbon fragments as well as thick smoke.

6. Accidental Release Measures**Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

Methods for containment

Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas. Eliminate all sources of ignition or flammables that may come into contact with a spill of this material.

Methods for cleaning up

Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Use clean non-sparking tools to collect absorbed material.

7. Handling and Storage**Handling**

Use this product with adequate ventilation. Do not breathe gas/fumes/vapor/spray. Do not get this material in contact with skin or eyes. Wash hands after handling and before eating.

Ground and bond containers when transferring material. Use spark-proof tools and explosion-proof equipment. Keep this product from heat, sparks, or open flame.

Storage

Keep this material away from food, drink and animal feed. Keep away from heat, sparks, and flame. Keep in a dry, cool and well-ventilated place. Keep container closed when not in use.

8. Exposure Controls / Personal Protection**Occupational exposure limits****ACGIH****Components****Type****Value**

CARBON BLACK (1333-86-4)

TWA

3.5 mg/m³

Di(2-ethylhexyl)phthalate (117-81-7)

TWA

5 mg/m³

Toluene-2,4-diisocyanate (584-84-9)

STEL

0.02 ppm

TWA

0.005 ppm

U.S. - OSHA**Components****Type****Value****Form**

CALCIUM CARBONATE (1317-65-3)

PEL

5 mg/m³

Respirable fraction.

15 mg/m³

Total dust.

TWA

5 mg/m³

Respirable fraction.

15 mg/m³

Total dust.

CARBON BLACK (1333-86-4)

PEL

3.5 mg/m³

TWA

3.5 mg/m³

Di(2-ethylhexyl)phthalate (117-81-7)

PEL

5 mg/m³

STEL

10 mg/m³

TWA

5 mg/m³

Toluene-2,4-diisocyanate (584-84-9)

Ceiling

0.02 ppm

0.14 mg/m³

STEL

0.02 ppm

0.15 mg/m³

TWA

0.005 ppm

0.04 mg/m³

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.

Personal protective equipment

Eye / face protection	Wear safety glasses; chemical goggles (if splashing is possible). Eye wash fountain is recommended.
Skin protection	Use of protective coveralls and long sleeves is recommended. Where contact is likely, wear chemical-resistant gloves, a chemical suit, rubber boots, and chemical safety goggles plus a face shield.
Respiratory protection	If ventilation is not sufficient to effectively prevent buildup of aerosols or vapors, appropriate NIOSH/MSHA respiratory protection must be provided. A NIOSH- approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. 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	Use good industrial hygiene practices in handling this material. Keep away from food, drink and animal feeding stuffs. Wash hands before breaks and immediately after handling the product. Contaminated work clothing should not be allowed out of the workplace.

9. Physical & Chemical Properties

Appearance	Viscous.
Color	Black to brown.
Odor	Solvent.
Odor threshold	Not available.
Physical state	Liquid.
Form	Not available.
pH	Not available.
Melting point	Not available.
Freezing point	Not available.
Boiling point	Not available.
Flash point	206.6 °F (97 °C)
Evaporation rate	Not available.
Flammability	Not available.
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Vapor pressure	Not available.
Vapor density	Heavier than air
Specific gravity	1.09
Relative density	Not available.
Solubility (water)	Negligible
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
VOC	53 g/l
Percent volatile	4 %

10. Chemical Stability & Reactivity Information

Chemical stability	Stable at normal conditions.
Conditions to avoid	Avoid high temperatures.
Incompatible materials	Strong acids, alkalis and oxidizing agents.
Hazardous decomposition products	Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.
Possibility of hazardous reactions	Will not occur.

11. Toxicological Information

Toxicological data

Product

M-2000 LIQUID FLASHING (Mixture)

Test Results

Acute Dermal LD50 Rabbit: 4837 mg/kg estimated
Acute Dermal LD50 Rat: 5054 mg/kg estimated
Acute Inhalation LC50 Guinea pig: 1628 mg/l estimated
Acute Inhalation LC50 Mouse: 1252 mg/l estimated
Acute Inhalation LC50 Rat: 1753 mg/l estimated
Acute Inhalation LC50 Rat: 107 mg/l/4h estimated
Acute Inhalation LC50-R Rabbit: 1377 mg/l estimated

Components

Di(2-ethylhexyl)phthalate (117-81-7)

Test Results

Acute Dermal LD50 Guinea pig: 10000 mg/kg
Acute Dermal LD50 Rabbit: 24500 mg/kg
Acute Inhalation LC50 Rat: 10.6201 mg/l/4h
Acute Oral LD50 Guinea pig: 26300 mg/kg
Acute Oral LD50 Mouse: > 30000 mg/kg
Acute Oral LD50 Rabbit: 33900 mg/kg
Acute Oral LD50 Rat: 6860 mg/kg

ANTHRACENE (120-12-7)

Acute Dermal LD50 Rat: 1320.0001 mg/kg

CARBON BLACK (1333-86-4)

Acute Oral LD50 Rat: 16000.0001 mg/kg

Toluene-2,4-diisocyanate (584-84-9)

Acute Dermal LD50 Rabbit: 3000.1 mg/kg

Acute Oral LD50 Rat: 15400.0001 mg/kg

Acute Inhalation LC50 Guinea pig: 13 mg/l 4.00 Hours

Acute Inhalation LC50 Mouse: 10 mg/l 4.00 Hours

Acute Inhalation LC50 Rat: 14 mg/l/4h

Acute Inhalation LC50 Rat: 14 mg/l 4.00 Hours

Acute Inhalation LC50-R Rabbit: 11 mg/l 4.00 Hours

Acute Oral LD50 Rat: 5800 mg/kg

* Estimates for product may be based on additional component data not shown.

Sensitization

May cause sensitization by inhalation and skin contact.

Carcinogenicity

IARC Monographs on Occupational Exposures to Chemical Agents: Overall evaluation

ANTHRACENE (120-12-7)

3 Classification not possible from current data.

CARBON BLACK (1333-86-4)

2B Possible carcinogen.

Di(2-ethylhexyl)phthalate (117-81-7)

3 Classification not possible from current data.

Toluene-2,4-diisocyanate (584-84-9)

2B Possible carcinogen.

US ACGIH Threshold Limit Values: A3 carcinogen

Di(2-ethylhexyl)phthalate (117-81-7)

Group A3 Confirmed animal carcinogen with unknown relevance to humans.

US ACGIH Threshold Limit Values: A4 carcinogen

CARBON BLACK (1333-86-4)

Group A4 Not classifiable as a human carcinogen.

Toluene-2,4-diisocyanate (584-84-9)

Group A4 Not classifiable as a human carcinogen.

US NTP Report on Carcinogens: Anticipated carcinogen

Di(2-ethylhexyl)phthalate (117-81-7)

Anticipated carcinogen.

12. Ecological Information

Ecotoxicological data

Product

M-2000 LIQUID FLASHING (Mixture)

Test Results

EC50 Daphnia: 14.97 mg/l 48.00 Hours estimated

LC50 Fish: 0.5126 mg/l 96.00 Hours estimated

Components

Di(2-ethylhexyl)phthalate (117-81-7)

Test Results

EC50 Daphnia: 9.4 mg/L 48.00 Hours

Components	Test Results
Di(2-ethylhexyl)phthalate (117-81-7)	EC50 Water flea (Daphnia pulex): 0.133 mg/l 48.00 Hours IC50 Algae: 130.0001 mg/L 72.00 Hours LC50 Fathead minnow (Pimephales promelas): > 0.16 mg/l 96.00 Hours LC50 Fish: 10.0001 mg/L 96.00 Hours
ANTHRACENE (120-12-7)	EC50 Daphnia: 0.754 mg/L 48.00 Hours EC50 Water flea (Daphnia magna): 0.081 - 0.112 mg/l 48.00 Hours LC50 Bluegill (Lepomis macrochirus): 0 - 0.0032 mg/l 96.00 Hours LC50 Fish: 19.195 mg/L 96.00 Hours
Toluene-2,4-diisocyanate (584-84-9)	LC50 Fathead minnow (Pimephales promelas): 108.8 - 240.4 mg/l 96.00 Hours

* Estimates for product may be based on additional component data not shown.

Ecotoxicity No data available for this product.

Environmental effects No data available for this product.

Persistence and degradability Not available.

13. Disposal Considerations

Waste codes

US RCRA Hazardous Waste U List: Reference

Di(2-ethylhexyl)phthalate (117-81-7)	U028
Toluene-2,4-diisocyanate (584-84-9)	U223

Disposal instructions Dispose in accordance with all applicable regulations.

14. Transport Information

DOT

Not regulated as hazardous goods.

DOT

Not regulated as dangerous goods.

IATA

Not regulated as hazardous goods.

IMDG

Not regulated as hazardous goods.

15. Regulatory Information

US federal regulations

US EPCRA (SARA Title III) Section 302 - Extremely Hazardous Spill: Reportable quantity

Toluene-2,4-diisocyanate (584-84-9)	100 LBS
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US EPCRA (SARA Title III) Section 302 - Extremely Hazardous Substance: Threshold Planning Quantity

Toluene-2,4-diisocyanate (584-84-9)	500 LBS
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US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration

ANTHRACENE (120-12-7)	1.0 %
Di(2-ethylhexyl)phthalate (117-81-7)	0.1 %
Toluene-2,4-diisocyanate (584-84-9)	0.1 %

CERCLA (Superfund) reportable quantity

ANTHRACENE: 5000.0000
Di(2-ethylhexyl)phthalate: 100.0000
Toluene-2,4-diisocyanate: 100.0000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

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

Section 302 extremely hazardous substance

No

Section 311 hazardous chemical

Yes

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of New and Existing Chemicals (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
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 and birth defects or other reproductive harm.

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

CARBON BLACK (1333-86-4) Listed.
 Di(2-ethylhexyl)phthalate (117-81-7) Listed.

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

CARBON BLACK (1333-86-4) Listed: February 21, 2003 Carcinogenic.
 Di(2-ethylhexyl)phthalate (117-81-7) Listed: January 1, 1988 Carcinogenic.

US - California Proposition 65 - CRT: Listed date/Developmental toxin

Di(2-ethylhexyl)phthalate (117-81-7) Listed: October 24, 2003 Developmental toxin.

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

Di(2-ethylhexyl)phthalate (117-81-7) Listed: October 24, 2003 Male reproductive toxin.

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

ANTHRACENE (120-12-7) 500 LBS
 Di(2-ethylhexyl)phthalate (117-81-7) 500 LBS
 Toluene-2,4-diisocyanate (584-84-9) 500 LBS

US - Pennsylvania RTK - Hazardous Substances: Listed substance

ANTHRACENE (120-12-7) Listed.
 CALCIUM CARBONATE (1317-65-3) Listed.
 CARBON BLACK (1333-86-4) Listed.
 Di(2-ethylhexyl)phthalate (117-81-7) Listed.
 Toluene-2,4-diisocyanate (584-84-9) Listed.

US - Pennsylvania RTK - Hazardous Substances: Special hazard

Di(2-ethylhexyl)phthalate (117-81-7) Special hazard.
 Toluene-2,4-diisocyanate (584-84-9) Special hazard.

16. Other Information**Further information**

This safety datasheet only contains information relating to safety and does not replace any product information or product specification.

HMIS ratings

HMIS®	HMIS®	HMIS®	HMIS®	HMIS®	HMIS®	HMIS®
HMIS®						
HEALTH		*	2			
FLAMMABILITY		1				
PHYSICAL HAZARD		1				
PERSONAL PROTECTION						

NFPA ratings

Health: 2
Flammability: 1
Instability: 1

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The manufacturer expressly does not make any representations, warranties, or guarantees as to its accuracy, reliability or completeness nor assumes any liability, for its use. It is the user's responsibility to verify the suitability and completeness of such information for each particular use.

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Issue date

25-August-2008

This data sheet contains changes from the previous version in section(s):

Toxicological Information: Carcinogenicity

Other information

CETCO is a wholly owned division/subsidiary of AMCOL International Corp.