Safety Data Sheet
Carbon Removing Compound, 5 Gallon

SDS Revision Date: **08/23/2018**

LIGHTHOUSE for the BLIND ST. LOUIS, MO.

1. Identification of the substance/mixture and of the company/ undertaking

1.1. Product identifier

Product Identity	Carbon Removing Compound, 5 Gallon
Alternate Names	Specification: P-C-111D Type II LHB Part Number: 0374---000 National Stock Number: 6850-00-965-2332 CAGE Code: 0FTT5

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

Intended use	See product label.
Application Method	See product label.

1.3. Details of the supplier of the safety data sheet

Company Name	LHB Industries 8833 Fleischer Place Berkeley, MO 63134
Emergency	
24 hour Emergency Telephone No.	(800) 633-8253 (PERS)
Customer Service: LHB Industries	(314) 423-4333

2. Hazard identification of the product

2.1. Classification of the substance or mixture

Acute Tox. 5;H313	May be harmful in contact with skin. (Not adopted by US OSHA)
Acute Tox. 4;H332	Harmful if inhaled.
Skin Corr. 1B;H314	Causes severe skin burns and eye damage.
Eye Dam. 1;H318	Causes serious eye damage.
Repr. 2;H361D	Suspected of damaging the unborn child.
STOT SE 3;H335	May cause respiratory irritation.

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2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.

Danger

H313 May be harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H361d Suspected of damaging the unborn child.

[Prevention]:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P261 Avoid breathing dust / fume / gas / mist / vapors / spray.

P264 Wash thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves / eye protection / face protection.

[Response]:

P301+330+331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+361+353 IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.

P304+312 IF INHALED: Call a POISON CENTER or doctor / physician if you feel unwell.

P305+351+338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

P308+313 IF exposed or concerned: Get medical advice / attention.

P310 Immediately call a POISON CENTER or doctor / physician.

P340 Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P363 Wash contaminated clothing before reuse.

[Storage]:

P403+233 Store in a well ventilated place. Keep container tightly closed.

P405 Store locked up.

[Disposal]:

P501 Dispose of contents / container in accordance with local / national regulations.

3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Ethanolamine **CAS Number: 0000141-43-5**	**10 - 25**	**Acute Tox. 4;H332** **Acute Tox. 4;H312** **Acute Tox. 4;H302** **Skin Corr. 1B;H314**	**[1][2]**
Ethylene glycol monobutyl ether **CAS Number: 0000111-76-2**	**1.0 - 10**	**Acute Tox. 4;H332** **Acute Tox. 4;H312** **Acute Tox. 4;H302** **Eye Irrit. 2;H319** **Skin Irrit. 2;H315**	**[1][2]**
Diethylene glycol monomethyl ether **CAS Number: 0000111-77-3**	**1.0 - 10**	**Repr. 2;H361d***	**[1]**
Butyl diglycol **CAS Number: 0000112-34-5**	**1.0 - 10**	**Eye Irrit. 2;H319**	**[1]**
Oleic acid **CAS Number: 0000112-80-1**	**1.0 - 10**	**Not Classified**	**[1]**

[1] Substance classified with a health or environmental hazard.
[2] Substance with a workplace exposure limit.
[3] PBT-substance or vPvB-substance.
*The full texts of the phrases are shown in Section 16.

4. First aid measures

4.1. Description of first aid measures

General In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

Inhalation Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

Eyes Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.

Skin	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
Ingestion	If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

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

Overview	ROUTES OF EXPOSURE: Exposure may be by INHALATION and/or SKIN or EYE contact, depending on conditions of use. To minimize exposure, follow recommendations for proper use, ventilation, and personal protective equipment. ACUTE EFFECTS OF OVEREXPOSURE: Corrosive to skin and eyes. Eye contact may produce tissue damage that may be permanent. Skin contact may produce severe irritation or burns. Harmful quantities may be absorbed through skin in extreme cases. Inhalation may cause upper respiratory irritation or central nervous system depression. Ingestion can cause nausea, vomiting, and gastrointestinal upset. CHRONIC EFFECTS OF OVEREXPOSURE: Repeated or prolonged skin contact may produce chronic inflammation or dermatitis, characterized by redness, scaling, or itching. Repeated eye exposure may produce chronic inflammation of the eye or corneal damage. See section 2 for further details.
Inhalation	Harmful if inhaled.
Eyes	Causes serious eye damage.
Skin	May be harmful in contact with skin. (Not adopted by US OSHA) Causes severe skin burns and eye damage.

5. Fire-fighting measures

5.1. Extinguishing media

This is a water based product and not expected to burn

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: Carbon dioxide and carbon monoxide

Avoid breathing dust / fume / gas / mist / vapors / spray.

5.3. Advice for fire-fighters

Cool closed containers exposed to fire by spraying them with water. Do not allow run off water and contaminants from fire fighting to enter drains or water ways.

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6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

In case of a major spill or spillage in a confined space evacuate the area and check that solvent vapor levels are below the Lower Explosive Limit before re-entering.

6.2. Environmental precautions

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up

Avoid inhalation. Use good ventilation. Read entire label before using and follow all label directions. Wipe, scrape or soak up contents in an inert material. Pick up spill for recovery or disposal and place in a closed container. Dispose of in accordance with applicable Federal, State and Local regulations.

7. Handling and storage

7.1. Precautions for safe handling

See section 2 for further details. - [Prevention]:

7.2. Conditions for safe storage, including any incompatibilities

Keep out of reach of children.
Handle containers carefully to prevent damage and spillage.
Store in a cool dry place.

Incompatible materials: Oxidizing agents, strong acids.

See section 2 for further details. - [Storage]:

7.3. Specific end use(s)

No data available.

8. Exposure controls and personal protection

8.1. Control parameters

Exposure

CAS No.	Ingredient	Source	Value
0000111-76-2	Ethylene glycol monobutyl ether	OSHA	TWA 50 ppm (240 mg/m3) [skin]
		ACGIH	TWA: 20 ppmRevised 2003,
		NIOSH	TWA 5 ppm (24 mg/m3) [skin]
		Supplier	No Established Limit

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0000111-77-3	Diethylene glycol monomethyl ether	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit
0000112-34-5	Butyl diglycol	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit
0000112-80-1	Oleic acid	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit
0000141-43-5	Ethanolamine	OSHA	TWA 3 ppm (6 mg/m3)
		ACGIH	TWA: 3 ppm STEL: 6 ppm
		NIOSH	TWA 3 ppm (8 mg/m3) ST 6 ppm (15 mg/m3)
		Supplier	No Established Limit

Carcinogen Data

CAS No.	Ingredient	Source	Value
0000111-76-2	Ethylene glycol monobutyl ether	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;
0000111-77-3	Diethylene glycol monomethyl ether	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0000112-34-5	Butyl diglycol	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0000112-80-1	Oleic acid	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0000141-43-5	Ethanolamine	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;

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8.2. Exposure controls

Respiratory	Use NIOSH/MSHA approved respirator, following manufacturer's recommendations when concentrations exceed permissible exposure limits.
Eyes	Use safety glasses with side shields or chemical goggles. If exposure causes eye discomfort, use a full-face respirator.
Skin	Chemical resistant clothing such as coveralls/apron and boots should be worn. Chemical impervious gloves required.
Engineering Controls	Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.
Other Work Practices	Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

9. Physical and chemical properties

Appearance	Light amber Liquid
Odor	Mild
Odor threshold	Not Measured
pH	11.0-12.0
Melting point / freezing point	Not Measured
Initial boiling point and boiling range	212F
Flash Point	None to Boiling
Evaporation rate (Ether = 1)	Slower than Ether
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	**Lower Explosive Limit:** N/A
	Upper Explosive Limit: N/A
Vapor pressure (Pa)	Not Measured
Vapor Density	> 1
Specific Gravity	0.99
Solubility in Water	Soluble
Partition coefficient n-octanol/water (Log Kow)	Not Measured
Auto-ignition temperature	Not Measured

Decomposition temperature	Not Measured
Viscosity (cSt)	Not Measured
VOC Content	36% by weight
Density	8.25 lb/gal
% Volatile (by volume)	Not Measured

9.2. Other information

No other relevant information.

10. Stability and reactivity

10.1. Reactivity

Hazardous Polymerization will not occur.

10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

Reacts violently with acids.

10.4. Conditions to avoid

Do not mix with alkalis.

10.5. Incompatible materials

Oxidizing agents, strong acids.

10.6. Hazardous decomposition products

Carbon dioxide and carbon monoxide

11. Toxicological information

Acute toxicity

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LD50, mg/L/4hr	Inhalation Dust/Mist LD50, mg/L/4hr	Inhalation Gas LD50, ppm
Ethanolamine - (141-43-5)	1,720.00, Rat - Category: 4	1,015.00, Rabbit - Category: 4	No data available	No data available	No data available
Ethylene glycol monobutyl ether - (111-76-2)	1,414.00, Guinea Pig - Category: 4	1,200.00, Guinea Pig - Category: 4	173.00, Guinea Pig - Category: NA	No data available	No data available
Diethylene glycol monomethyl ether - (111-77-3)	7,000.00, Rat - Category: NA	20,400.00, Rabbit - Category: NA	No data available	No data available	No data available
Butyl diglycol - (112-34-5)	5,660.00, Rat - Category: NA	2,700.00, Rabbit - Category: 5	No data available	No data available	No data available
Oleic acid - (112-80-1)	No data available	No data available	No data available	No data available	No data available

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	5	May be harmful in contact with skin. (Not adopted by US OSHA)
Acute toxicity (inhalation)	4	Harmful if inhaled.
Skin corrosion/irritation	1B	Causes severe skin burns and eye damage.
Serious eye damage/irritation	1	Causes serious eye damage.
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	2	Suspected of damaging the unborn child.
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

12. Ecological information

12.1. Toxicity

The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and GHS and is not classified as dangerous for the environment, but contains substance(s) dangerous for the environment. See section 3 for details

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Ethanolamine - (141-43-5)	150.00, Oncorhynchus mykiss	65.00, Daphnia magna	15.00 (72 hr), Desmodesmus subspicatus
Ethylene glycol monobutyl ether - (111-76-2)	220.00, Fish (Piscis)	1,000.00, Daphnia magna	Not Available
Diethylene glycol monomethyl ether - (111-77-3)	7,500.00, Lepomis macrochirus	500.00, Daphnia magna	500.00 (72 hr), Selenastrum capricornutum
Butyl diglycol - (112-34-5)	1,300.00, Lepomis macrochirus	100.00, Daphnia magna	Not Available
Oleic acid - (112-80-1)	Not Available	Not Available	Not Available

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

Not Measured

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects

No data available.

13. Disposal considerations

13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.

14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
14.1. UN number	UN1760	UN1760	UN1760
14.2. UN proper shipping name	UN1760, Corrosive Liquid, n. o. s. (Ethanolamine), 8	Corrosive Liquid, n. o. s. (Ethanolamine)	Corrosive Liquid, n. o. s. (Ethanolamine)
14.3. Transport hazard class(es)	**DOT Hazard Class:** 8	**IMDG:** 8	**Air Class:** 8
14.4. Packing group	II	II	II

14.5. Environmental hazards

IMDG Marine Pollutant: No

14.6. Special precautions for user

No further information

15. Regulatory information

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

Toxic Substance Control Act (TSCA) All components of this material are either listed or exempt from listing on the TSCA Inventory.

WHMIS Classification D2A E

US EPA Tier II Hazards

Fire: No

Sudden Release of Pressure: No

Reactive: No

Immediate (Acute): Yes

Delayed (Chronic): No

EPCRA 311/312 Chemicals and RQs:
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 302 Extremely Hazardous :
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals:

Butyl diglycol

Diethylene glycol monomethyl ether

Ethylene glycol monobutyl ether

Proposition 65 - Carcinogens (>0.0%):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Developmental Toxins (>0.0%):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.
Proposition 65 - Male Repro Toxins (>0.0%):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.
N.J. RTK Substances (>1%):

Ethanolamine

Ethylene glycol monobutyl ether

Penn RTK Substances (>1%):

Diethylene glycol monomethyl ether

Ethanolamine

Ethylene glycol monobutyl ether

Oleic acid

16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H361d Suspected of damaging the unborn child.

SDS Revision Date: **08/23/2018**

This is the first version in the GHS SDS format. Listings of changes from previous versions in other formats are not applicable.

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