

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Identification**

Product form : Mixture
Product name : EYE BLACK REMOVER
Product code : CA3880

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

No additional information available

1.3. Details of the supplier of the safety data sheet

Brody Chemical
6125 W. Double Eagle Cr.
Salt Lake City, UT 84118 - USA
T (801) 963-2436

1.4. Emergency telephone number

Emergency number : 1-800-424-9300

SECTION 2: Hazard(s) identification**2.1. Classification of the substance or mixture****Classification (GHS-US)**

Eye Dam. 1 H318 - Causes serious eye damage
Skin Sens. 1 H317 - May cause an allergic skin reaction
Full text of H-phrases: see section 16

2.2. Label elements**GHS-US labeling**

Hazard pictograms (GHS-US) :



Signal word (GHS-US) : Danger
Hazard statements (GHS-US) : H317 - May cause an allergic skin reaction
H318 - Causes serious eye damage
Precautionary statements (GHS-US) : P261 - Avoid breathing spray, vapors
P272 - Contaminated work clothing must not be allowed out of the workplace
P280 - Wear eye protection, protective gloves
P302+P352 - If on skin: Wash with plenty of soap and water
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a POISON CENTER
P321 - Specific treatment (see ... on this label)
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention
P363 - Wash contaminated clothing before reuse
P501 - Dispose of contents/container to in accordance with all regulations

2.3. Other hazards

Other hazards not contributing to the classification : None under normal conditions.

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients**3.1. Substance**

Not applicable

3.2. Mixture

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Name	Product identifier	%	Classification (GHS-US)
(+)-limonene	(CAS No) 5989-27-5	10-15	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
disodium metasilicate, pentahydrate	(CAS No) 10213-79-3	3-5	Skin Corr. 1B, H314 STOT SE 3, H335
Ethylene glycol monobutyl ether	(CAS No) 109-86-4	3-5	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Inhalation:vapour), H332
Sodium Hydroxide, Solution	(CAS No) 1310-73-2	1-3	Met. Corr. 1, H290 Skin Corr. 1A, H314 Eye Dam. 1, H318

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
- First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
- First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

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

- Symptoms/injuries after inhalation : Irritation of the respiratory tract.
- Symptoms/injuries after skin contact : May cause an allergic skin reaction.
- Symptoms/injuries after eye contact : Serious damage to eyes.
- Symptoms/injuries after ingestion : Gastrointestinal complaints. Nausea.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Non-flammable.
- Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

5.3. Advice for firefighters

- Firefighting instructions : Exercise caution when fighting any chemical fire.
- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing spray, vapors.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Take up liquid spill into absorbent material.
- Other information : Dispose of materials or solid residues at an authorized site.

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6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Avoid breathing spray, vapors. Wear personal protective equipment.
- Hygiene measures : Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store in a well-ventilated place. Keep cool.
- Incompatible products : Oxidizing agent. Strong acids.
- Incompatible materials : Heat sources.
- Storage area : Keep container in a well-ventilated place. Keep locked up. Keep only in the original container. Store in a cool area. Store in a well-ventilated place.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Ethylene glycol monobutyl ether (109-86-4)		
ACGIH	ACGIH TWA (ppm)	0.1 ppm (2-Methoxyethanol (EGME); USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
ACGIH	Remark (ACGIH)	Hematologic eff; repro eff
OSHA	OSHA PEL (TWA) (mg/m ³)	80 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	25 ppm

Sodium Hydroxide, Solution (1310-73-2)		
ACGIH	ACGIH Ceiling (mg/m ³)	2 mg/m ³
ACGIH	Remark (ACGIH)	URT, eye, & skin irr
OSHA	OSHA PEL (TWA) (mg/m ³)	2 mg/m ³

8.2. Exposure controls

- Appropriate engineering controls : Ensure good ventilation of the work station.
- Hand protection : Protective gloves.
- Eye protection : Safety glasses.
- Skin and body protection : Wear suitable protective clothing.
- Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.
- Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Appearance : Liquid.
- Color : clear Amber
- Odor : Citrus fruits
- Odor threshold : No data available
- pH : No data available
- Melting point : Not applicable
- Freezing point : No data available
- Boiling point : 100 °C
- Flash point : Non-flammable
- Relative evaporation rate (butyl acetate=1) : 1
- Flammability (solid, gas) : No data available

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Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Vapor pressure	: 18 mm Hg @ 70 F.
Relative density	: No data available
Relative vapor density at 20 °C	: No data available
Specific gravity / density	: 1.05 kg/l
Solubility	: Water: 100 %
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Strong acids. Oxidizing agent.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Likely routes of exposure : Inhalation; Skin and eye contact

Acute toxicity : Not classified

(+)-limonene (5989-27-5)	
LD50 oral rat	4400 mg/kg body weight (Rat; OECD 423: Acute Oral Toxicity – Acute Toxic Class Method; Literature study; > 2000 mg/kg bodyweight; Rat; Read-across)
LD50 dermal rabbit	> 5000 mg/kg body weight (Rabbit; Weight of evidence; Equivalent or similar to OECD 402)
ATE US (oral)	4400.000 mg/kg body weight

Ethylene glycol monobutyl ether (109-86-4)	
LD50 oral rat	2370 mg/kg (Rat)
LD50 dermal rabbit	1280 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	> 6.2 mg/l/4h (Rat)
ATE US (oral)	500.000 mg/kg body weight
ATE US (dermal)	1280.000 mg/kg body weight
ATE US (gases)	4500.000 ppmV/4h
ATE US (vapors)	11.000 mg/l/4h
ATE US (dust, mist)	1.500 mg/l/4h

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Causes serious eye damage.

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Respiratory or skin sensitization	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

(+)-limonene (5989-27-5)

IARC group	3 - Not classifiable
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Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified

Specific target organ toxicity (repeated exposure)	: Not classified
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Aspiration hazard	: Not classified
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Symptoms/injuries after inhalation	: Irritation of the respiratory tract.
Symptoms/injuries after skin contact	: May cause an allergic skin reaction.
Symptoms/injuries after eye contact	: Serious damage to eyes.
Symptoms/injuries after ingestion	: Gastrointestinal complaints. Nausea.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
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disodium metasilicate, pentahydrate (10213-79-3)

LC50 fish 1	210 mg/l (LC50; 96 h)
EC50 Daphnia 1	216 mg/l (EC50; 96 h)

(+)-limonene (5989-27-5)

LC50 fish 1	720 µg/l (LC50; OECD 203: Fish, Acute Toxicity Test; 96 h; Pimephales promelas; Flow-through system; Fresh water; Experimental value)
EC50 Daphnia 1	0.36 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)
Threshold limit algae 1	150 mg/l (EC50; OECD 201: Alga, Growth Inhibition Test; 72 h; Desmodesmus subspicatus; Static system; Fresh water; Read-across)

Ethylene glycol monobutyl ether (109-86-4)

LC50 fish 1	14977 mg/l (LC50; 96 h; Salmo gairdneri)
EC50 Daphnia 1	> 10000 mg/l (EC50; 24 h)
Threshold limit algae 2	> 10000 mg/l (EC0; 192 h)

12.2. Persistence and degradability

disodium metasilicate, pentahydrate (10213-79-3)

Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

(+)-limonene (5989-27-5)

Persistence and degradability	Readily biodegradable in water. Forming sediments in water. Adsorbs into the soil.
ThOD	3.29 g O ₂ /g substance

Ethylene glycol monobutyl ether (109-86-4)

Persistence and degradability	Readily biodegradable in water. Photodegradation in the air.
Chemical oxygen demand (COD)	1.62 g O ₂ /g substance
ThOD	1.68 g O ₂ /g substance
BOD (% of ThOD)	0.07

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Sodium Hydroxide, Solution (1310-73-2)	
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the components available.

12.3. Bioaccumulative potential

disodium metasilicate, pentahydrate (10213-79-3)	
Bioaccumulative potential	No bioaccumulation data available.

(+)-limonene (5989-27-5)	
BCF fish 1	864.8 - 1022 (BCF; Pisces)
Log Pow	4.38 (Experimental value; OECD 117: Partition Coefficient (n-octanol/water), HPLC method; 37 °C)
Bioaccumulative potential	Potential for bioaccumulation ($4 \geq \text{Log Kow} \leq 5$).

Ethylene glycol monobutyl ether (109-86-4)	
Log Pow	-0.88
Bioaccumulative potential	Bioaccumulation: not applicable.

Sodium Hydroxide, Solution (1310-73-2)	
Bioaccumulative potential	Does not contain bioaccumulative component(s).

12.4. Mobility in soil

(+)-limonene (5989-27-5)	
Log Koc	Koc,SRC PCKOCWIN v2.0; 1120 - 6324; QSAR

Ethylene glycol monobutyl ether (109-86-4)	
Surface tension	0.033 N/m (20 °C)

12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT
Not regulated for transport

TDG

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

disodium metasilicate, pentahydrate (10213-79-3)	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	

(+)-limonene (5989-27-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

Ethylene glycol monobutyl ether (109-86-4)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	

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Sodium Hydroxide, Solution (1310-73-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory
Not subject to reporting requirements of the United States SARA Section 313

RQ (Reportable quantity, section 304 of EPA's List of Lists)	1000 lb
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15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

Ethylene glycol monobutyl ether (109-86-4)

U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	Yes	No	Yes	63

Ethylene glycol monobutyl ether (109-86-4)

U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

Sodium Hydroxide, Solution (1310-73-2)

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

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Full text of H-phrases:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhalation) Category 4
Acute Tox. 4 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Flam. Liq. 3	Flammable liquids Category 3
Met. Corr. 1	Corrosive to metals Category 1
Skin Corr. 1A	Skin corrosion/irritation Category 1A
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H226	Flammable liquid and vapor
H290	May be corrosive to metals
H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H332	Harmful if inhaled
H335	May cause respiratory irritation
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

NFPA health hazard

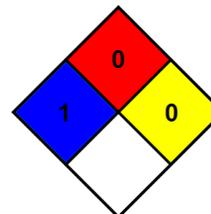
: 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

NFPA fire hazard

: 0 - Materials that will not burn.

NFPA reactivity

: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health

: 1 Slight Hazard - Irritation or minor reversible injury possible

Flammability

: 0 Minimal Hazard - Materials that will not burn

Physical

: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Personal Protection

: B

B - Safety glasses, Gloves

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product