

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date: 6/27/2023 Supersedes: 3/14/2018 Version: 3.0

## **SECTION 1: Identification**

## 1.1. Identification

Product form : Mixture
Product name : Light-Core

## 1.2. Recommended use and restrictions on use

Use of the substance/mixture : For Rx Only

#### 1.3. Supplier

#### Manufacturer

BISCO, Inc.

1100 W. Irving Park Rd. Schaumburg, IL , 60193

U.S.A.

T 1-800-247-3368 or 1-847-534-6000 sales@bisco.com - www.bisco.com

## 1.4. Emergency telephone number

Emergency number : CHEMTREC - 24-Hour Hazmat Emergency Communications Center

Domestic: 1-800-424-9300 Outside the U.S.: 1-703-527-3887, collect calls accepted

## **SECTION 2: Hazard(s) identification**

#### 2.1. Classification of the substance or mixture

#### **GHS US classification**

Serious eye damage/eye irritation Category 2 H319 Causes serious eye irritation
Skin sensitization, Category 1 H317 May cause an allergic skin reaction
Specific target organ toxicity - Single exposure, Category 3, H335 May cause respiratory irritation

Respiratory tract irritation

Full text of H statements : see section 16

## 2.2. GHS Label elements, including precautionary statements

## **GHS US labeling**

Hazard pictograms (GHS US)



Signal word (GHS US) : Warning

Hazard statements (GHS US) : H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation H335 - May cause respiratory irritation

Precautionary statements (GHS US)

: P261 - Avoid breathing dust, fume, vapors.

P264 - Wash hands thoroughly after handling

P272 - Contaminated work clothing must not be allowed out of the workplace.

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P302+P352 - If on skin: Wash with plenty of water and soap

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

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P312 - Call a poison center/a doctor if you feel unwell

P321 - Specific treatment (see First aid measures on this label)

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P363 - Wash contaminated clothing before reuse.

P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

P501 - Dispose in a safe manner in accordance with local/national regulations

#### 2.3. Other hazards which do not result in classification

No additional information available

## 2.4. Unknown acute toxicity (GHS US)

Not applicable

## **SECTION 3: Composition/Information on ingredients**

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	GHS US classification
Glass Filler	CAS-No.: N/A	30 - 50	Eye Irrit. 2, H319 STOT SE 3, H335
BisGMA	CAS-No.: 1565-94-2	5 - 10	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 STOT SE 3, H335
Ethoxylated Bis A Dimethacrylate	CAS-No.: 41637-38-1	1 - 5	Aquatic Chronic 4, H413
Triethylene Glycol Dimethacrylate	CAS-No.: 109-16-0	1 - 5	Skin Sens. 1B, H317

Full text of hazard classes and H-statements : 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. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

## 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after skin contact : May cause an allergic skin reaction.

Symptoms/effects after eye contact : May cause eye irritation.

## 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

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## **SECTION 5: Fire-fighting measures**

## 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.

## 5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released.

## 5.3. Special protective equipment and precautions for fire-fighters

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 dust, fume, 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 : Mechanically recover the product.

Other information : Dispose of materials or solid residues at an authorized site.

#### 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

dust, fume, 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.

## SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

No additional information available

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## 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

## 8.3. Individual protection measures/Personal protective equipment

#### 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

## Personal protective equipment symbol(s):



Explosive properties

Oxidizing properties





## **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

Physical state : Solid

Appearance : Viscous Paste.
Color : Translucent / Blue

Odor : Acrylic

Odor threshold No data available рΗ No data available Melting point No data available Freezing point Not applicable Boiling point No data available Flash point Not applicable Relative evaporation rate (butyl acetate=1) : No data available Flammability (solid, gas) Non flammable. Vapor pressure No data available Relative vapor density at 20°C No data available Relative density Not applicable No data available Solubility Partition coefficient n-octanol/water (Log Pow) No data available Auto-ignition temperature Not applicable Decomposition temperature No data available Viscosity, kinematic Not applicable Viscosity, dynamic : No data available **Explosion limits** Not applicable

No data available

: No data available

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## 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

No additional information available

## 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

Acute toxicity (oral) Not classified Acute toxicity (dermal) Not classified Acute toxicity (inhalation) Not classified

Triethylene Glycol Dimethacrylate (109-16-0)	
LD50 oral rat	10837 mg/kg Source: NLM,THOMSON
LD50 dermal	> 2000 mg/kg body weight (US EPA, 14 day(s), Mouse, Male, Experimental value, Skin, 14 day(s))
ATE US (oral)	10837 mg/kg body weight
Ethoxylated Bis A Dimethacrylate (41637-38-1	)
LD50 oral rat	> 2000 mg/kg Source: ECHA
LD50 dermal rat	> 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Readacross, Dermal, 15 day(s))
Skin corresion/irritation	Not classified

Skin corrosion/irritation Not classified

Triethylene Glycol Dimethacrylate (109-16-0)		
рН	6.8 - 7.2	
Ethoxylated Bis A Dimethacrylate (41637-38-1)		
pH	4.7 (< 0.01 %, 20 °C, OECD 105: Water Solubility)	

Serious eye damage/irritation : Causes serious eye irritation.

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рН	6.8 - 7.2	
Ethoxylated Bis A Dimethacrylate (41637-38-1)		
рН	4.7 (< 0.01 %, 20 °C, OECD 105: Water Solubility)	
Respiratory or skin sensitization	: May cause an allergic skin reaction.	
Germ cell mutagenicity	: Not classified	
Carcinogenicity	: Not classified	
Reproductive toxicity	: Not classified	
STOT-single exposure	: May cause respiratory irritation.	
BisGMA (1565-94-2)		
STOT-single exposure	May cause respiratory irritation.	
Glass Filler (N/A)		
STOT-single exposure	May cause respiratory irritation.	
STOT-repeated exposure	: Not classified	
Triethylene Glycol Dimethacrylate (109-16-	0)	
LOAEC (inhalation,rat,gas,90 days)	350 ppm Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study), Remarks on results: other:	
NOAEL (oral,rat,90 days)	1000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)	
NOAEC (inhalation,rat,gas,90 days)	100 ppm Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study), Remarks on results: other:	
Aspiration hazard	: Not classified	
Viscosity, kinematic	: Not applicable	
Ethoxylated Bis A Dimethacrylate (41637-3	B-1)	
Viscosity, kinematic	No data available in the literature	
Symptoms/effects after skin contact	: May cause an allergic skin reaction.	

## SECTION 12: Ecological information

40.4	T 14	
12.1.	Toxicity	

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

Triethylene Glycol Dimethacrylate (109-16-0)			
LC50 - Fish [1]	16.4 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)		
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)		
EC50 72h - Algae [2]	72.8 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)		
ErC50 algae	> 100 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Nominal concentration)		
LOEC (chronic)	100 mg/l Test organisms (species): Daphnia magna Duration: '21 d'		
NOEC (chronic)	32 mg/l Test organisms (species): Daphnia magna Duration: '21 d'		

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Ethoxylated Bis A Dimethacrylate (41637-38-1)		
LC50 - Fish [1] > 100 mg/l Source: ECAH		
EC50 72h - Algae [1]	> 100 mg/l Source: ECAH	
BisGMA (1565-94-2)		
LC50 - Fish [1] 0.537 mg/l Source: ECOSAR		

## 12.2. Persistence and degradability

Triethylene Glycol Dimethacrylate (109-16-0)		
Persistence and degradability	Readily biodegradable in water.	
Ethoxylated Bis A Dimethacrylate (41637-38-1)		
Persistence and degradability	Not readily biodegradable in water.	
BisGMA (1565-94-2)		
Persistence and degradability Biodegradability in water: no data available.		

## 12.3. Bioaccumulative potential

Triethylene Glycol Dimethacrylate (109-16-0)			
Partition coefficient n-octanol/water (Log Pow)	2.3 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method)		
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).		
Ethoxylated Bis A Dimethacrylate (41637-38-1)			
Partition coefficient n-octanol/water (Log Pow)	5.62 (Practical experience/observation, OECD 117: Partition Coefficient (n-octanol/water), HPLC method)		
Bioaccumulative potential	High potential for bioaccumulation (Log Kow > 5).		
BisGMA (1565-94-2)			
Partition coefficient n-octanol/water (Log Pow)	4.94 (Estimated value)		
Bioaccumulative potential	No bioaccumulation data available.		

## 12.4. Mobility in soil

Triethylene Glycol Dimethacrylate (109-16-0)		
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.89 (log Koc, SRC PCKOCWIN v2.0, Calculated value)	
Ecology - soil	Highly mobile in soil.	
Ethoxylated Bis A Dimethacrylate (41637-38-1)		
Surface tension	No data available in the literature	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.56 - 3.88 (log Koc, Calculated value)	
Ecology - soil	Low potential for mobility in soil.	

## 12.5. Other adverse effects

No additional information available

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## **SECTION 13: Disposal considerations**

## 13.1. Disposal methods

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

## **SECTION 14: Transport information**

In accordance with DOT / TDG / IMDG / IATA

## 14.1. UN number

Not regulated for transport

## 14.2. UN proper shipping name

Proper Shipping Name (DOT) : Not applicable
Proper Shipping Name (TDG) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable

## 14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : Not applicable

TDG

Transport hazard class(es) (TDG) : Not applicable

IMDG

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : Not applicable

## 14.4. Packing group

Packing group (DOT) : Not applicable
Packing group (TDG) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable

## 14.5. Environmental hazards

Other information : No supplementary information available.

## 14.6. Special precautions for user

DOT

No data available

**TDG** 

No data available

**IMDG** 

No data available

IATA

No data available

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## 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## **SECTION 15: Regulatory information**

#### 15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:

Glass Filler CAS-No. N/A 30 - 50%

Contains chemical(s) subject to TSCA 12b export notification if product is shipped outside the U.S

Glass Filler CAS-No. N/A 30 - 50%

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

## 15.2. International regulations

#### **CANADA**

#### **Triethylene Glycol Dimethacrylate (109-16-0)**

Listed on the Canadian DSL (Domestic Substances List)

## **Ethoxylated Bis A Dimethacrylate (41637-38-1)**

Listed on the Canadian DSL (Domestic Substances List)

## BisGMA (1565-94-2)

Listed on the Canadian DSL (Domestic Substances List)

#### **EU-Regulations**

No additional information available

## National regulations

## Triethylene Glycol Dimethacrylate (109-16-0)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

## 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

## **SECTION 16: Other information**

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#### Full text of H-phrases

H315 Causes skin irritation

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Full text of H-phrases	
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H413	May cause long lasting harmful effects to aquatic life

Indication of changes:				
Section	Changed item	Change	Comments	
	Revision date	Added		
	Signal word (GHS US)	Added		
	Precautionary statements (GHS US)	Modified		
	Hazard statements (GHS US)	Modified		
	Supersedes	Added		
	Issue date	Removed		
2.1	GHS-US classification	Modified		
3	Composition/Information on ingredients	Modified		
4	Symptoms/effects after eye contact	Modified		
4	First-aid measures after eye contact	Modified		
6	Emergency procedures	Modified		
7.1	Precautions for safe handling	Modified		

Safety Data Sheet (SDS), USA

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.