

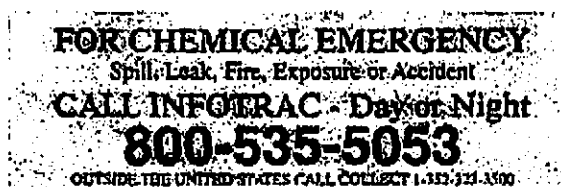
## SAFETY DATA SHEETS

**This SDS packet was issued with item:**

071205012

**The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).**

071204916 071205053

**Material Safety Data Sheet**

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

**U.S. Department of Labor**

Occupational Safety and Health Administration

(Non-Mandatory Form)

Form Approved

OMB No. 1218-0072



<b>IDENTITY (As Used on Label and List)</b>	<b>Note:</b> Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.
<b>Astron LC Hard Reline</b>	

**Section I**

<b>Manufacturer's Name</b> <b>Astron Dental Corporation</b>	<b>Emergency Telephone Number</b> <b>1-800-535-5053</b>
<b>Address (Number, Street, City, State, and ZIP Code)</b> 815 Oakwood Road	<b>Telephone Number for Information</b> <b>1-800-323-4144</b>
<b>Lake Zurich, IL 60047</b>	<b>Date Prepared</b> 01/01/13
	<b>Signature of Preparer (optional)</b>

**Section II - Hazardous Ingredients/Identity Information**

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
<b>Liquid Component: Methacrylic acid butyl ester</b>				
<b>Powder Component: Methacrylate polymer (non-hazardous)</b>				


### Section III - Physical/Chemical Characteristics

Boiling Point	292°C	Specific Gravity (H <sub>2</sub> O = 1)	1.005
Vapor Pressure (mm Hg)	7 @ 160°C	Melting Point	N/A
Vapor Density (AIR = 1)	1	Evaporation Rate (Butyl Acetate = 1)	N/A
Solubility In Water Negligible			
Appearance and Odor Clear, pale yellow liquid, mild odor.			

### Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used) 110°C	Flammable Limits	LEL N/A	UEL N/A
Extinguishing Media Chemical foam, carbon dioxide, dry chemicals, water spray.			
Special Fire Fighting Procedures Keep a safe distance. Cool exposed material with cold water spray. Vapors are heavier than air and may travel to the source of ignition.			
Unusual Fire and Explosion Hazards Sealed containers exposed to elevated temperatures may rupture explosively from polymerization. Vapors are heavier than air.			

## Section V - Reactivity Data

Stability	Unstable		Conditions to Avoid <b>Heat and ignition sources.</b>
	Stable	X	
Incompatibility (Materials to Avoid) <b>Reducing and oxidizing agents. Can soften paint and rubber.</b>			
Hazardous Decomposition or Byproducts <b>Carbon dioxide, carbon monoxide, and smoke.</b>			
Hazardous Polymerization	May Occur	X	Conditions to Avoid <b>Excessive heat. No hazard when stored accordingly.</b>
	Will Not Occur		

## Section VI - Health Hazard Data

Route(s) of Entry:	Inhalation? <b>Nausea</b>	Skin? <b>Rash</b>	Ingestion? <b>Nausea</b>
Health Hazards (Acute and Chronic)			
Carcinogenicity: <b>No</b>	NTP? <b>No</b>	IARC Monographs? <b>No</b>	OSHA Regulated? <b>No</b>
Signs and Symptoms of Exposure			
Medical Conditions Generally Aggravated by Exposure			
Emergency and First Aid Procedures <b>Flush eyes with warm water for 15 minutes. Wash skin with soap &amp; water. If inhaled, move to fresh air. If ingested, induce vomiting and seek immediate medical attention.</b>			

## Section VII - Precautions for Safe Handling and Use

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Steps to Be Taken in Case Material is Released or Spilled	
For high vapor concentration, evacuate area, eliminate ignition sources. Absorb spills with inert material and transfer to a suitable container for disposal.	
Waste Disposal Method	
Should not be allowed to drain into sewers. Incinerate liquid in proper equipment. Follow all local, state and federal regulation regarding disposal of material.	
Precautions to Be taken in Handling and Storing	
Store in a cool, dry place away from heat and light.	
Other Precautions	
Always use according to directions.	

## Section VIII - Control Measures

Respiratory Protection ( <i>Specify Type</i> ) When vapors exceed 100 ppm, use a self-contained breathing apparatus.			
Ventilation	Local Exhaust Keep concentration below 100 ppm	Special	None
	Mechanical (General) None	Other	None
Protective Gloves		Eye Protection	
Impervious, neoprene type		Safety goggles	
Other Protective Clothing or Equipment			
Eyewash and safety shower is recommended.			
Work/Hygienic Practices			
Practice good personal hygiene.			

\* U.S.G.P.O.: 1986 - 491 - 529/45775

**SAFETY DATA SHEET**

Issue Date 2015-05-31

Revision Date 2015-5-31

Revision: R0

**1. PRODUCT AND COMPANY IDENTIFICATION****Product Identifier:**

**Product Name:** Astron LC Hard Powder  
**Alternate Name(s):** Astron - Light Cured Hard Powder

**Recommended Use of the substance or mixture and Restrictions on Use:**

**Intended Use:** See Technical Data Sheet  
**Application Method:** See Technical Data Sheet

**Details of the Supplier of the Safety Data Sheet:**

**Company Name:** Astron Dental Corporation  
**Supplier Address:** 815 Oakwood Road, Unit G  
Lake Zurich, IL. 60047 (USA)  
**Email:** customerservice@astrondental.com

**Emergency Telephone Numbers**

**Customer Service:** 800-323-4144 / 847-726-8787 (During Business Hours, 8:00am – 4:00pm CST)  
**24 hour Emergency:** Infotrac: 800-535-5053

**2. HAZARDS IDENTIFICATION**

**Classification of the Substance or Mixture:** Combustible Dust – May form combustible dust concentrations in air.

**Label Elements:** Using the Toxicity Data listed in Section 11 and 12 the product is labeled as follows:

**Warning****[Prevention]**

P210 Keep away from heat / sparks / open flames / hot surfaces – No smoking.  
P240 Ground / bond container and receiving equipment.  
P241 Use explosion-proof electrical / ventilation / light / equipment.  
P280 Wear protective gloves / eye protection / face protection.

**[Response]**

P370+P378 In case of fire; Use extinguishing media listed in Section 5 of SDS for extinction.

**[Storage]**

No GHS storage statements

**[Disposal]**

No GHS disposal statements

**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.



<b>Ingredient/Chemical Designations</b>	<b>Weight %</b>	<b>GHS Classification</b>	<b>Notes</b>
PROPENOIC ACID, 2-METHYL-, ETHYL ESTER, HOMOPOLYMER CAS Number: 0009003-42-3	75 – 100	Combustible Dust	[1]

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

[1] Substance classified with a health or environmental hazard.

[2] Substance with a work place exposure limit.

[3] PBT-substance or vPvB-substance.

\*The full texts of phrases are shown in Section 16

#### 4. FIRST AID MEASURES

##### Description of First Aid Measures:

**General:** In all cases of doubt, or when symptoms persist, seek medical assistance. 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 a 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.

##### Most important symptoms and effects, both acute and delayed:

**Overview:** No specific symptom data.

#### 5. FIRE-FIGHTING MEASURES

**Extinguishing Media:** Water, CO<sub>2</sub> and/or dry chemical. Avoid extinguishing methods which may generate dust clouds. Water stream can disperse dust into the air producing fire hazards and possible explosion hazards if exposed to ignition source.

**Special Hazards arising from the substance or Mixture:** Hazardous decomposition, Methacrylate monomer and Oxides of Carbon when burned. Keep away from heat / sparks / open flames / hot surfaces – no smoking.

Ground / bond container and receiving equipment; Use explosion – proof electrical / ventilation / light / equipment.

**Hazardous Combustion Products:** Firefighters should wear self-contained breathing apparatus.

Dust explosions are possible. Polymer dust is combustible. The explosive limits of polymer dust particles suspended in air are approximately those of coal dust.

ERG Guide #: ---

#### 6. ACCIDENTAL RELEASE MEASURES

##### Personal precautions, protective equipment and emergency procedures:

**Personal Precautions:** Put on appropriate personal protective equipment. (See Section 8).

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

**Environmental Precautions:** Do not allow spills to enter drains or water ways.



**Methods and material for containment and clean up:** Sweep and/or vacuum to clean up spills. Do not use procedures which cause dispersion of dust into the air if any possibility of ignition exists. Dispose in accordance with Local, State and Federal regulations.

## 7. HANDLING AND STORAGE

**Precautions for Safe Handling:** Avoid dust generation when handling product to minimize explosion potential. Use only in well ventilated areas. See section 2 for further details. – [Prevention]

**Conditions for Safe Storage, including any Incompatibilities:** Handle containers carefully to prevent damage and spillage. Keep container tightly closed. Incompatible materials: Strong oxidizing agent. See Section 2 for further details. – [Storage]

**Specific end use(s)**  
No data available.

## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

### Control Parameters:

#### Exposure:

CAS No.	Ingredient	Source	Value
0009003-42-3	PROPENOIC ACID, 2-METHYL-, ETHYL ESTER, HOMOPOLYMER	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit

The exposure limits for nuisance dust are: OSHA PEL: 15 mg/m<sup>3</sup> (50 mppcf\*) TWA, ACGIH 10 mg/m<sup>3</sup>

### Carcinogen Data:

CAS No.	Ingredient	Source	Value
0009003-42-3	PROPENOIC ACID, 2-METHYL-, ETHYL ESTER, HOMOPOLYMER	OSHA	Select Carcinogen: No
		NTP	Known: No // Suspected: No
		IARC	Group 1: No // Group 2a: No // Group 3: No // Group 4: No

**Respiratory:** If workers are exposed to concentrations above the exposure limit, they must use appropriate certified respirators

**Eye:** Protective safety glasses recommended.

**Skin:** If it is anticipated that prolonged skin contact will occur, use gloves designed for routine industrial use.

**Engineering Controls:** Provide adequate ventilation. This should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentration 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

<b>Appearance:</b>	Fine clear to pigmented Powder
<b>Odor:</b>	Faint
<b>Odor Threshold:</b>	Not Determined
<b>pH:</b>	Not Measured
<b>Melting point / Freezing point:</b>	Not Measured
<b>Initial boiling point &amp; boiling range:</b>	Not Measured
<b>Flash Point:</b>	304°C, 508°F
<b>Evaporation rate (Ether = 1):</b>	Not Measured
<b>Flammability (solid, gas):</b>	Not Applicable
<b>Upper/Lower Flammability or Explosive Limits:</b>	Lower Explosive Limit: Not Measured Upper Explosive Limit: Not Measured
<b>Vapor Pressure (Pa):</b>	Not Measured
<b>Vapor Density:</b>	Not Measured
<b>Specific Gravity:</b>	Not Measured
<b>Solubility in Water:</b>	Insoluble
<b>Partition coefficient n-octanol/water (Log Kow):</b>	Not Measured
<b>Auto-ignition Temperature:</b>	Not Measured
<b>Decomposition Temperature:</b>	Not Measured



Issue Date 2015-05-31  
Viscosity (cSt):  
Other Information: No other relevant information

Revision Date 2015-05-31  
Not Measured

Revision: R0

## 10. STABILITY AND REACTIVITY

**Reactivity:** Hazardous Polymerization will not occur.  
**Chemical Stability:** Stable under normal circumstances.  
**Possibility of Hazardous Reactions:** No data available.  
**Conditions to Avoid:** Heating above 240° C // 464° F.  
**Incompatible Materials:** Strong oxidizing agents.  
**Hazardous decomposition products:** Methacrylate Monomer and Oxides of Carbon when burned.

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

Ingredient	Oral LD50 mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust / Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
PROPENOIC ACID, 2-METHYL-, ETHYL ESTER, HOMOPOLYMER – (9003-42-3)	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)	-	Not Applicable
Acute toxicity (inhalation)	-	Not Applicable
Skin corrosion / irritation	-	Not Applicable
Serious eye damage / irritation	-	Not Applicable
Respiratory sensitization	-	Not Applicable
Skin sensitization	-	Not Applicable
Germ cell mutagenicity	-	Not Applicable
Carcinogenicity	-	Not Applicable
Reproductive toxicity	-	Not Applicable
STOT-single exposure	-	Not Applicable
STOT-repeated exposure	-	Not Applicable
Aspiration hazard	-	Not Applicable

## 12. ECOLOGICAL INFORMATION

### Toxicity:

No additional information provided for this product.

See Section 3 for chemical specific data.

### Aquatic Eco-Toxicity

Ingredient	96 hr LC50 fish, mg/l	48hr EC50 crustacea, mg/l	ErC50 algae, mg/l
PROPENOIC ACID, 2-METHYL-, ETHYL ESTER, HOMOPOLYMER-(9003-42-3)	Not Available	Not Available	Not Available

### Persistence and degradability

There is no data available on the preparation itself.

### Bio-accumulative potential

Not Measured.

### Mobility in soil

No data available.

### Results of PBT and vPvB assessment.

This product contains no PBT/vPvB chemicals.

### 13. DISPOSAL CONSIDERATIONS

**Waste Treatment Methods:** Observe all Federal, State and Local regulations when disposing of this substance. Reuse of empty drums or containers is not recommended.

### 14. TRANSPORT INFORMATION

	D.O.T. (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
U.N. number	N/A	N/R	N/R
U.N. proper shipping	N/R	N/R	N/R
Transport Hazard class(es)	DOT Hazard Class: N/A	IMDG: N/A Sub Class: N/A	Air Class: N/A
Packing group	N/A	N/A	N/A
Environmental hazards	-	Marine Pollutant: No	-
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:** Not Regulated

#### US EPA Tier II Hazards

Fire:	Yes
Sudden Release of Pressure:	No
Reactive:	No
Immediate(Acute):	No
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:

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

#### Proposition 65 – Carcinogens (>0.0%):

Titanium dioxide.

#### 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.

#### New Jersey RTK Substances (>1%):

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

**Pennsylvania RTK Substances (>1%):**

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

**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 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: N/A

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