119 East Main Street **Independence, VA 24348** **Tele: 276-773-2902** **Fax: 276-768-1014** **www.procladsystems.com**		Ref: ST/ SDS/006	ISSUE 17
	Safety Data Sheet	Date of Issue: December 28, 2017	Revi-sion: 005

SECTION 1: IDENTIFICATION

Product name: BMC & SMC Polyester / Vinyl Ester Thermoset Molding Compounds

Synonym:	ProClad
Product Use:	GRP Protection/Non-Metallic Jacketing
Manufacturer:	ProClad Systems, LLC
Address:	119 East Main Street
City:	Independence
State:	Virginia
Zip Code:	24348
Telephone number:	276-773-2902
Fax phone:	276-768-1014

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS-US and GHS-Canada classification

Flammable solids Category 1	Flammable solid
Substances and mixtures which in contact with water emit flammable gases Category 2	In contact with water releases flammable gases
Serious eye damage/eye irritation Category 2A	Causes serious eye irritation
Skin sensitization Category 1	May cause an allergic reaction
Reproductive toxicity Category 2	Suspected of damaging fertility or the unborn child
Specific target organ toxicity (repeated exposure) Category 1	Causes damage to organs through prolonged or repeated exposure

2.2 Label elements

GHS-US and GHS-Canada labeling

Hazard pictograms (GHS-US and GHS-Canada)

Signal word (GHS-US and GHS-Canada)	Danger
Hazard statements (GHS-US and GHS-Canada)	Flammable solid In contact with water releases flammable gases May cause an allergic skin reaction Suspected of damaging fertility or the unborn child Causes damage to organs through prolonged or repeated exposure
Precautionary statements (GHS-US and GHS-Canada)	Obtain special instructions before use Do not handle until all safety precautions have been read and understood Keep away from heat, hot surfaces, open flames, sparks **No Smoking** Do not allow contact with water Handle under inert gas. Protect from moisture Ground/Bond container and receiving equipment Use explosion-proof ventilating equipment Do not breathe dust, fume, gas, mist, spray, vapors Avoid breathing dust, fume, gas, mist, spray, vapors Wash hands, forearms and face thoroughly after handling Do not eat, drink or smoke when using this product Contaminated work clothing must not be allowed out of the workplace Wear protective clothing, protective gloves, eye protection If on skin– wash with plenty of water If in eyes- Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned– get medical advice/attention Get medical advice/attention if you feel unwell Specific treatment (see additional information on this label) If skin irritation or rash occurs– get medical advice/attention Brush off loose particles from skin. Immerse in cool water/ wrap in wet bandages If eye irritation persists– get medical advice/attention Wash contaminated clothing before reuse In case of fire– Use ABC-powder, carbon dioxide (CO_2), dry extinguishing powder, dry sand, foam to extinguish Store in a dry place. Store in a closed container Store locked up Dispose of contents/container to an approved waste disposal Plant

2.3 Other hazards

No additional information available

2.4 Unknown acute toxicity (GHS-US and GHS-Canada)

Not applicable

SECTION 3. COMPOSITION/INFORMATION OF INGREDIENTS

3.1 Substances
Not applicable

3.2 Mixtures

Name	Product identifier	%
styrene	(CAS No) 100-42-5	5- 10
Oxybis(methyl-2, I-ethanediyl) diacrylate	(CAS No) 57472-68-1	1 - 5
Tripropylene glycol diacrylate	(CAS No) 42978-66-5	0,1 - 1

Full text of hazard classes and H-statements– see section 16
The specific chemical identity and/or exact percentage (concentration) of the composition has been withheld as a trade secret.

SECTION 4. FIRST AID MEASURES

4.1 Description of first-aid measures

First-aid measures in general: Move the affected person aaway from the contaminated area. Immediately consult a doctor/medical service. If possible, show them this sheet. Failing this, show them the packaging or label. Do not leave affected person unattended.

First-aid measures after inhalation: Call a physician immediately. If unconscious place in recovery position.

First-aid measures after skin contact: After contact with skin, immediately take off all contaminated clothing, and wash with plenty of water. Rinse immediately with plenty of water for 15 minutes. If symptoms persist, call a physician.

First-aid measures after eye contact: Remove contact lenses, if present and easy to do. Continue rinsing. Rinse immediately and thoroughly, pulling the eye-lids well away from the eye (15 minutes minimum). If eye irritation persists, consult a specialist.

First-aid measures after ingestion: in all cases of doubt, or when symptoms persist, seek medical advice. IF SWALLOWED, rinse mouth. Do NOT induce vomit-ing. Do not give milk.

4.2 Most important symptoms and effects, both acute and delayed
No additional information available.

4.3 Indication of any immediate medical attention and special treatment needed
If you feel unwell, seek medical advice.

SECTION 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Alcohol resistant foam, dry chemical powder, carbon dioxide

Unsuitable extinguishing media: High volume water jet.

5.2 Special hazards arising from the substance or mixture

Fire hazard: Do not allow run-off from fire-fighting to enter drains or water courses

Reactivity: Stable under normal conditions

5.3 Advice for firefighters

Firefighting instructions	Comply with local regulations for disposal
Protection during firefighting	In case of fire– wear self-contained breathing apparatus
Other information	Use water spray/stream to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow to enter drains or surface waters.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

Protective equipment	Wear suitable protective clothing

6.1.2 For emergency responders

No additional information available

6.2 Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3 Methods and material for containment and cleaning up

For containment	Collect all waste in suitable and labeled containers and dispose of according to local legislation.
Methods for clean up	Collect spillage. Large spills– scoop solid spill into closing containers. Store in a well-ventilated place. Keep container tightly closed.

6.4 Reference to other sections

See Section 8.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Precautions for safe handling	Take precautionary measures against static discharge. Exposure may produce an allergic reaction. Avoid contact with skin. Avoid inhalation of vapors.
Hygiene measures	Do not eat, drink or smoke when using this product.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions	Store in a dry, well-ventilated place away from sources of heat, ignition and direct sunlight. Containers which are opened should be properly resealed and kept upright to prevent leakage.
Storage temperature	<25° C
Heat-ignition	This material can be ignited by heat, sparks, flames or other sources of ignition (e.g. static electricity, pilot lights, mechanical/electrical equipment, abd electronic devices such as cell phones, computers, calculators and pagers which have not been certified as intrinsically safe) Electrical equipment should be protected to the appropriate standard.

SECTION 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

8.1 Control parameters

Tripropylene glycol diacrylate (42978-66-5)		
Not applicable		
styrene (100-42-5)		
ACGIH	ACGIH TWA (mg/m³)	85 mg/m³

ACGIH	ACGIH TWA (ppm)	20 ppm
ACGIH	ACGIH STEL (mg/m³)	170 mg/m³
ACGIH	ACGIH STEL (ppm)	40 ppm
ACGIH	Remark (ACGIH)	CNS impair; URT irr; peripheral
OSHA	OSHA PEL (TWA) (mg/m³)	420 mg/m³
OSHA	OSHA PEL (TWA) (ppm)	100 ppm
OSHA	OSHA PEL (Ceiling) (ppm)	200 ppm
OSHA	Remark (OSHA)	(Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift: 600 ppm 5 mins. in any 3 hrs.)
IDLH	US IDLH (ppm)	700 ppm
NIOSH	NIOSH REL (TWA) (mg/m³)	215 mg/m³
NIOSH	NIOSH REL (TWA) (ppm)	50 ppm
NIOSH	NIOSH REL (STEL) (mg/m³)	425 mg/m³
NIOSH	NIOSH REL (STEL) (ppm)	100 ppm
Canada (Quebec)	VECD (mg/m³)	426 mg/m³ 425 mg/m³ (peau, C3)
Canada (Quebec)	VECD (ppm)	100 ppm
Canada (Quebec)	VEMP (mg/m³)	213 mg/m³
Canada (Quebec)	VEMP (ppm)	50 ppm
Alberta	OEL STEL (mg/m³)	170 mg/m³
Alberta	OEL STEL (ppm)	40 ppm
Alberta	OEL TWA (mg/m³)	85 mg/m³
Alberta	OEL TWA (ppm)	20 ppm
British Columbia	OEL STEL (ppm)	75 ppm
British Columbia	OEL TWA (ppm)	50 ppm
British Columbia	Notations and remarks	2B
Ontario	OEL STEL (ppm)	100 ppm
Ontario	OEL TWA (ppm)	35 ppm
-ethanediyl) diacrylate (57472-68-1) Not applicable		

8.2 Exposure controls

Materials for protective clothing
Chemical resistant safety shoes. Overalls.

Hand protection
Wear suitable gloves. A waterproof cream can protect exposed skin. Do not use if contact has already taken place. In the case of wanting to re-use gloves, clean with soap and water before taking off and air them well. Replace when worn.

Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. If excessive exposure exists, use only approved air-purifying or supplied-air respirator operated in a positive pressure mode. Consult supplier for specific recommendations.
Environmental exposure controls	Do not empty into drains.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	Solid
Colour	No data available
Odor	Strong
Odor threshold	No data available
pH	No data available
Melting point	No data available
Freezing point	No data available
Boiling point	No data available
Flash point	No data available
Relative evaporation rate (butyl acetate = 1)	No data available
Flammability (solid, gas)	No data available
Vapor pressure	No data available
Relative vapor density at 20° C	No data available
Relative density	No data available
Solubility	No data available
Log pow	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity, kinematic	>20,5 cSt
Viscosity, dynamic	No data available
Explosion limits	No data available
Explosive properties	No data available
Oxidizing properties	No data available

9.2 Other information

No additional information available

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity

Stable under normal conditions

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions

Vapors may form explosive mixture with air.

10.4 Conditions to avoid

No additional information available.

10.5 Incompatible materials

Strong acids. Strong bases. Oxidizing agents. Peroxides.

10.6 Hazardous decomposition products

Stable under normal conditions.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity Not classified

Tripropylene glycol diacrylate (42978-66-5)	
LD50 oral rat	> 2000 (2000 - 5000) mg/kg
LD50 dermal rabbit	> 2000 (2000 - 3650) mg/kg
ATE US (oral)	2000,000 mg/kg body weight
ATE US (dermal)	2000,000 mg/kg body weight
styrene (100-42-5)	
ATE US (vapors)	11,000 mg/l/4h

Oxybis(methyI-2,1-ethanediyl) diacrylate (57472-68-1)	
LD50 oral rat	4600 mg/kg
ATE US (oral)	4600,000 mg/kg body weight

Skin corrosion/irritation · · Not classified
Serious eye damage/irritation Causes serious eye irritation.
Respiratory or skin sensitization · · May cause an allergic skin reaction.
Germ cell mutagenicity · · Not classified
Carcinogenicity · · Not classified

styrene (100-42-5)	
IARC group	2B - Possibly carcinogenic to humans
National Toxicology Program (NTP) Status	3 - Reasonably anticipated to be Human Carcinogen
In OSHA Hazard Communication Carcinogen list	Yes

Reproductive toxicity Suspected of damaging fertility or the unborn child.
Specific target organ toxicity-single exposure Not classified
Specific target organ toxicity-repeated exposure Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard Not classified

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

Tripropylene glycol diacrylate (42978-66-5)	
LC50 fish 1	4,6- 10 mg/l
EC50 Daphnia 1	89 mg/l
ErC50 (algae)	65,9 mg/l
NOEC chronic fish	2,15 mg/l

styrene (100-42-5)	
LC50 fish 1	10 mg/l
EC50 Daphnia 1	mg/l
ErC50 (algae)	4,9 mg/l

NOEC chronic crustacea	1 mg/l

12.2.Persistence and degradability

QC-2550 UV (SL-1407-C9)	
Persistence and degradability	No data available.

12.3.Bioaccumulative potential

QC-2550 UV (SL-1407-C9)	
Bioaccumulative potential	No data available.
styrene (100-42-5)	
Log Pow	3

12.4. Mobility in soil

No additional information available

12.5 Other adverse effects

Other adverse effects	No data available.
Effect on global warming	No known effects from this product.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Regional legislation (waste)	Disposal must be according to official regulations.
Sewage disposal recommendations	Do not allow to enter into surgace water or drains.
Waste disposal recommendations	Disposes of in accordance with relevant local regulations. Handle contaminated packages in the same way as the substance itself.

SECTION 14. TRANSPORT INFORMATION

Department of Transportation (DOT)
In accordance with DOT
Not regulated

Transportation of Dangerous Goods
Not regulated

Transport by sea
Not regulated

Air transport
Not regulated

SECTION 15. REGULATORY INFORMATION

15.1 US Federal Regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

styrene	CAS No 100-42-5	
styrene (100-42-5)		
SARA Section 313 - Emission Reporting		
Oxybis(methyl-2,1-ethanediyl) diacrylate (57472-68-1)		
EPA TSCA Regulatory Flag	P - P - indicates a commenced PMN substance	

15.2 US State Regulations

California Proposition 65– This product contains, or may contain, trace quantities of a substance(s) known to the state of California to cause cancer, developmental and/or reproductive harm.

TITANIUM DIOXIDE	CAS No 13463-67-7	0,1-1%
Carbon black	CAS No 1333-86-4	< 0, 10/0
styrene	CAS No 100-42-5	5-10%

U.S. - California - SCAQMD - Toxic Air Contaminants - Non-Cancer Acute
U.S. - California - SCAQMD - Toxic Air Contaminants - Non-Cancer Chronic
U.S. - California - Toxic Air Contaminant List (AB 1807, AB 2728)
U.S. - Illinois - Toxic Air Contaminant Carcinogens
U.S. - Illinois - Toxic Air Contaminants
U.S. - Massachusetts - Allowable Ambient Limits (AALs)
U.S. - Massachusetts - Allowable Threshold Concentrations (ATCs)
U.S. - Massachusetts - Drinking Water - Maximum Contaminant Levels (MCLs)
U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 1
U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 2
U.S. - Massachusetts - Oil & Hazardous Material List - Reportable Quantity
U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 1
U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 2
U.S. - Massachusetts - Right To Know List
U.S. - Massachusetts - Threshold Effects Exposure Limits (TELs)
U.S. - Massachusetts - Toxics Use Reduction Act
U.S. - New Jersey - Discharge Prevention - List of Hazardous Substances
U.S. - New Jersey - Environmental Hazardous Substances List
U.S. - New Jersey - Primary Drinking Water Standards - Maximum Contaminant Levels - MCLs
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - New Jersey - Special Health Hazards Substances List
U.S. - New Jersey - Water Quality - Ground Water Quality Criteria
U.S. - New Jersey - Water Quality - Practical Quantitation Levels (PQLs)
U.S. - California - Safer Consumer Products - Initial List of Candidate Chemicals and Chemical Groups
U.S. - Pennsylvania - Drinking Water - Maximum Contaminant Levels (MCLs)
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List

15.3 Canadian Federal Regulations

All chemical substances in this product are listed on the Canadian Domestic Substances List (DSL) or the Canadian Non-Domestic Substances List (NDSL) inventory.

SECTION 16. OTHER INFORMATION

Revision date	12/28/2017
Version	2.0

Abbreviations and acronyms

REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
SVHC	Substance of very high concern
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
IMDG	International Maritime Dangerous Goods
IATA	International Air Transport Association
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
MARPOL 73/78	International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978. ("MARPOL" is short for marine pollution and 73/78 short for the years 1973 and 1978.)
IBC	The International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
OSHA	Occupational Safety & Health Administration
TWA	Time Weighted Average
STEL	Occupational Exposure Limits - Short Term Exposure Limits (STELs)
ACGIH	American Conference of Government Industrial Hygienists
TLV	Threshold Limit Value
IARC	International Agency for Research on Cancer

DISCLAIMER: The information contained in this Safety Data Sheet relates specifically to the product as a whole and may not be valid if used in combination with other materials or in any specified process. The information on ProClad is accurate to the best of our knowledge but does not purport to be all inclusive and should only be used as a general guide. It is the user's responsibility to ensure the product is suitable for a particular usage. The user assumes all responsibility for compliance with applicable Local and EU Regulations. We do not accept liability for damage or loss that may occur from the use of this information.