

Cryl-A-Stat ESD 401 SAFETY DATA SHEET

1. IDENTIFICATION

Product Identifier: Cryl-A-Stat ESD 401

Recommended use: Floor Surfacing

Manufacturer Name: Dur-A-Flex, Inc.
95 Goodwin Street
East Hartford, CT 06108

Telephone number: 860-528-9838

Emergency phone number: 1-800- 424-9300 (CHEMTREC)

Date of Preparation: September 8, 2014

2. HAZARD(S) IDENTIFICATION

Classification:

Physical	Health
Flammable Liquid Category 2	Skin Irritation Category 2 Skin Sensitization Category 1 Specific Target Organ Toxicity Single Exposure Category 3 (Respiratory Irritation) Specific Target Organ Toxicity Repeat Exposure Category 2

Labeling:

Danger!



Hazard statement(s)

Flammable liquid and vapor.
Causes skin irritation
May cause an allergic skin reaction
May cause respiratory irritation.
May cause damage to liver and thyroid through prolonged or repeated exposure by ingestion.

Precautionary statement(s)

Keep away from heat, sparks, open flames, and hot surfaces.
No smoking.
Keep container tightly closed.
Ground and bond container and receiving equipment
Use explosion-proof electrical, ventilating and lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Do not breathe mist, vapors or spray.
Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.
Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves, eye protection and face protection.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash with plenty of soap and water.
If skin irritation or rash occurs: Get medical attention.
Wash contaminated clothing before reuse.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER or doctor if you feel unwell.
Get medical attention if you feel unwell.
In case of fire: Use water fog, carbon dioxide, foam or dry chemical to extinguish.
Store in a well-ventilated place. Keep cool. Keep container tightly closed.
Store locked up.
Dispose of contents and container in accordance with local and national regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Concentration
Methyl Methacrylate	80-62-6	60-80%
Acrylate/Methacrylate Polymer	Proprietary	10-20%
Triethylene Glycol Dimethacrylate	109-16-0	1-10%
A mixture of branched and linear C7-C9 alkyl propionates	Proprietary	1-5%
Crystalline Silica, Quartz	14808-60-7	1-5%
Titanium Dioxide	13463-67-7	1-5%

* The titanium dioxide and crystalline silica in this product are inextricably bound in a manner that no exposure occurs during normal use and handling. Therefore this product is not classified as a carcinogen.

The specific identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

Inhalation: Remove victim to fresh air. If breathing is difficult, have qualified personnel administer oxygen. If breathing has stopped, administer artificial respiration. Get medical attention.

Skin contact: Remove contaminated clothing. Wash skin thoroughly with soap and water. If irritation or other symptoms develop, get medical attention. Launder clothing before re-use.

Eye contact: Flush with large quantities of water for several minutes, holding the eyelids apart. Get medical attention if irritation persists.

Ingestion: If conscious, rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious or convulsing person. Get medical attention.

Most important symptoms/effects, acute and delayed: Causes skin irritation. May cause eye and respiratory tract irritation. May cause allergic skin reaction (skin sensitization).

Indication of immediate medical attention and special treatment, if necessary: None required under normal conditions of use.

5. FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media: Use water fog, carbon dioxide, foam or dry chemical. Cool fire exposed containers with water.

Specific hazards arising from the chemical: Vapors are heavier than air and may travel to ignition source and flash back. Heat of fire may cause an exothermic auto polymerization reaction. Emits toxic fumes under fire conditions. Closed containers may explode due to pressure build up when exposed to extreme heat. Combustion may produce carbon oxides, toxic fumes and hydrocarbons.

Special protective equipment and precautions for fire-fighters: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures: Provide explosion-proof ventilation. Avoid contact with skin, eyes or clothing. Avoid breathing vapors. Wear appropriate protective clothing as described in Section 8. Eliminate all ignition sources.

Environmental precautions: Avoid release to the environment. Report releases as required by local, state and federal authorities.

Methods and materials for containment and cleaning up: Contain and collect with an inert absorbent. Place into an appropriate container for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling: Avoid contact with eyes, skin, and clothing. Avoid breathing vapors or mist. Wash thoroughly after handling. Wear protective clothing and equipment as described in Section 8. Use with adequate ventilation. Ground container when pouring. Keep away from heat, sparks, flames and all sources of ignition. Do not expose to direct sunlight. Empty containers retain product residues and can be hazardous. Follow all MSDS precautions when handling empty containers.

Conditions for safe storage, including any incompatibilities: Store in a cool, dry, well ventilated area. Keep container tightly closed when not in use. Do not store in direct sunlight. Prevent moisture contact. Protect from physical damage. Keep away from oxidizers and other incompatible materials.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure guidelines:

Methyl Methacrylate	100 ppm TWA OSHA PEL 50 ppm TWA ACGIH TLV 100 ppm ACGIH TLV STEL
Acrylate/Methacrylate Polymer	None Established
Triethylene Glycol Dimethacrylate	None Established
A mixture of branched and linear C7-C9 alkyl propionates	None Established
Crystalline Silica, Quartz	0.025 mg/m ³ TWA ACGIH TLV <u>10 mg/m³</u> % SiO ₂ +2 TWA OSHA PEL (respirable)
Titanium Dioxide	15 mg/m ³ TWA OSHA PEL (total dust) 10 mg/m ³ TWA ACGIH TLV

Appropriate engineering controls: Use with adequate general or local exhaust ventilation to maintain exposures below occupational exposure limits. Use explosion-proof equipment where required.

Personal Protective Equipment:

Respiratory protection: None required with adequate ventilation. An approved air-purifying respirator with an organic vapor cartridge may be permissible under certain limited circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection. Selection and use of respiratory equipment must be in accordance with appropriate regulations and good industrial hygiene practice.

Skin protection: Wear impervious gloves.

Eye protection: Wear safety chemical goggles when the possibility exists for eye contact due to splashing or spraying material.

Other: Wear impervious clothing if needed to prevent any contact with this product, such as gloves, apron, boots, or whole body suit.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.): Moderately turbid fluid.

Odor: Sweet ester odor

Odor threshold: Not available	pH: Not available
Melting Point/Freezing Point: Not available	Boiling Point: 212°F / 100°C
Flash point: 50 °F / 10°C (Setaflash)	Evaporation rate: >1 (butyl acetate = 1)
Flammability (solid, gas): Not applicable	
Flammable limits: LEL: 2.1% (Methyl Methacrylate)	UEL: 12.5% (Methyl Methacrylate)
Vapor pressure: 35 mmHg @ 20°C (Methyl Methacrylate)	Vapor density: >1
Relative density: ~1	Solubility(is): 16 g/L (in water)
Partition coefficient: n-Octanol/water: Not applicable	Auto-ignition temperature: >500°F / 260°C (Methyl Methacrylate)
Decomposition temperature: Not available	Viscosity: Not available

10. STABILITY AND REACTIVITY

Reactivity: Polymerization can occur.

Chemical stability: Stable when stabilized. The product is unstable at elevated temperatures and pressures.

Possibility of hazardous reactions: Methyl methacrylate can undergo hazardous polymerization if exposed to excessive heat, peroxides and polymerization catalysts.

Conditions to avoid: Avoid heat, sparks and open flames.

Incompatible materials: Avoid contact with oxidizing agents, reducing agents, peroxides and polymerization catalysts.

Hazardous decomposition products: Thermal decomposition may produce carbon oxides, toxic fumes and hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Inhalation: May cause respiratory tract irritation. Methyl methacrylate has been shown to cause respiratory irritation in studies in laboratory animals.

Ingestion: Swallowing may cause gastrointestinal irritation, nausea and diarrhea.

Skin contact: Causes skin irritation. Methyl methacrylate has been shown to cause severe irritation when tested undiluted on rabbit skin. Causes skin sensitization. Cases of contact dermatitis has been reported in workers exposed to methyl methacrylate.

Eye contact: May cause eye irritation. Methyl methacrylate has been shown to cause mild irritation to the conjunctiva in animal studies.

Chronic effects from short- and long-term exposure: In subchronic inhalation studies with methyl methacrylate, systemic toxic effects were seen in rats to the liver, kidney, brain, spleen and bone marrow >1000 ppm. Oral administration of methyl methacrylate to rats resulted in a NOAEL of 200 mg/kg. In a subchronic oral study in rats, a mixture of branched and linear C7-C9 alkyl propionates was shown to cause elevated serum liver enzyme levels and enlarged livers. Treatment-related effects, including mild anemia and toxic effects in the liver, were seen. Slight activity of the thyroid gland was also recorded and considered a secondary response to the effects in the liver. The no observable effect level (NOEL) was 2 mg/kg.

Reproductive Toxicity: This product is not expected to cause adverse reproductive or developmental effects. Methyl methacrylate did not cause reproductive effects on male fertility when animals were exposed to 9000 ppm. No teratogenicity, embryotoxicity or fetotoxicity has been observed at exposure levels up to and including 2028 ppm

Sensitization: Methyl methacrylate and triethylene glycol dimethyl acrylate have been shown to cause sensitization in animal studies.

Mutagenicity: Methyl methacrylate was negative in sister chromatid exchange assay in mammalian cells and in and in a vivo chromosome aberration assay.

Carcinogenicity: Titanium dioxide is listed by IARC as a group 2B carcinogen (possible human carcinogen). Respirable crystalline silica, quartz is listed by IARC as a group 1 carcinogen (carcinogenic to humans), by NTP as a "known to be a human carcinogen" and by ACGIH as an A2 (suspected human carcinogen). These components are encapsulated in a polymer matrix so no inhalable exposure occurs during use or disposal. None of the other components >0.1 are listed by OSHA, IARC, NTP or ACGIH as a carcinogen.

Acute Toxicity Values: No toxicity data for the product. Acute Toxicity Estimate: Oral rat LD50 >12048 mg/kg

Methyl Methacrylate: Oral rat LD50 7800 mg/kg; Inhalation rat LC50 3750 mg/L/8 hr; Dermal rabbit LD60 >5000 mg/kg
 Acrylate/Methacrylate Polymer: No toxicity data available
 A mixture of branched and linear C7-C9 alkyl propionates: Oral rat LD50 >2000 mg/kg, Dermal rat LD50 >2000 mg/kg
 Triethylene Glycol Dimethacrylate: Dermal rabbit LD50 > 2000 mg/kg
 Crystalline Silica, Quartz: Oral rat LD50 >22,500 mg/kg
 Titanium Dioxide: Oral rat LD50 > 5000 mg/kg, Inhalation rat LC50 6.82 mg/L/4 hr,

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Methyl Methacrylate: 96 hr LC50 Pimephales promelas 130 mg/L; 24 hr LC50 daphnia magna 1760 mg/L
 Acrylate/Methacrylate Polymer: No data available
 Triethylene Glycol Dimethacrylate: 96 hr LC50 Danio rerio 16.4 mg/L; 72 hr EC50 Pseudokirchnerella subcapitata > 100 mg/L
 A mixture of branched and linear C7-C9 alkyl propionates: 96 hr LC50 Brachydanio rerio > 9.9 mg/l, 48 hr EC50 daphnia magna 3.2 mg/l, 72 hr EC50 Scenedesmus sp. >2 mg/L
 Titanium Dioxide: Oral rat LD50 > 5000 mg/kg, Inhalation rat LC50 6.82 mg/L/4 hr,
 Crystalline Silica: 72 hr LC50 carp >10,000 mg/L

Persistence and degradability: Methyl methacrylate and triethylene glycol dimethacrylate are readily biodegradable.

Bioaccumulative potential: Methyl methacrylate has a BCF of 2.97.

Mobility in soil: Methyl methacrylate has a high mobility in soil.

Other adverse effects: None known.

13. DISPOSAL CONSIDERATIONS

Dispose in accordance with all local, state and federal regulations.

14. TRANSPORT INFORMATION

	UN Number	Proper shipping name	Hazard Class	Packing Group	Environmental Hazard
DOT	UN1247	Methyl Methacrylate Monomer, Stabilized	3	II	None
TDG	UN1247	Methyl Methacrylate Monomer, Stabilized	3	II	None
IMDG	UN1247	Methyl Methacrylate Monomer, Stabilized	3	II	None
IATA	UN1247	Methyl Methacrylate Monomer, Stabilized	3	II	None

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not applicable – product is transported only in packaged form.

Special precautions: None known

15. REGULATORY INFORMATION

CERCLA: This product has a Reportable Quantity (RQ) of 1250 lbs. (based on the RQ for Methyl Methacrylate of 1000 lbs). Releases above the RQ must be reported to the National Response Center. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

SARA Hazard Category (311/312): Acute Health, Chronic Health, Fire Hazard, Reactive Hazard

SARA 313 Information: This product contains the following chemicals subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372):

Methyl Methacrylate	80-62-6	60-80%
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California Proposition 65

This product contains the following chemicals known to the State of California to cause cancer or reproductive toxicity (birth defects): None

EPA TSCA Inventory: All of the ingredients in this product are listed on the EPA TSCA Inventory.

CANADA:

Canadian WHMIS Classification: Class B (Flammable Liquid), Class D Division 2 Subdivision B (Toxic Material Causing other Toxic Effects)

This product has been classified under the CPR and this SDS discloses information elements required by the CPR.

16. OTHER INFORMATION

NFPA Rating: Health = 2 Flammability = 3 Instability = 2
HMIS Rating: Health = 2 Flammability = 3 Physical Hazard = 2

SDS Revision History: Converted to GHS format. All sections revised.

Date of preparation: September 8, 2014

Date of last revision: New SDS

The above information is accurate to the best of our knowledge. However, since data, safety standards, and government regulations are subject to change and the conditions of handling and use, or misuse, are beyond our control, Dur-A-Flex, Inc. MAKES NO WARRANTY, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN AND USE.