

Armor Top Colorants SAFETY DATA SHEET

1. IDENTIFICATION

Product Identifier: Armor Top Colorants

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: February 27, 2015

2. HAZARD(S) IDENTIFICATION

Classification:

Physical	Health
Flammable Liquid Category 4	Not Hazardous

Labeling:

Warning!

Hazard statement(s)

Combustible liquid.

Precautionary statement(s)

Keep away from flames and hot surfaces. No smoking.
Wear protective gloves.
In case of fire: Use water spray, carbon dioxide, alcohol foam or dry chemical to extinguish Store in a well-ventilated place.
Keep cool.
Store locked up.
Dispose of contents and container in accordance with local and national regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS
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Chemical name	CAS No.	Concentration
Dipropylene Glycol Ether Acetate (DPM Acetate)	88917-22-0	0-100%
1-Methoxy-2-propyl acetate (PGMEA)	108-65-6	40-60%
Titanium Dioxide	13463-67-7	0-70%
Carbon Black	1333-86-4	0-10%

* The titanium dioxide and carbon black in this product is 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 irritation occurs or breathing is difficult, get medical attention.

Skin contact: Remove contaminated clothing. Wash skin with soap and water for several minutes. If irritation persists, get medical attention. Launder clothing before re-use.

Eye contact: Flush with large quantities of water, 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 if symptoms develop.

Most important symptoms/effects, acute and delayed: May cause mild eye irritation. Prolonged skin contact may cause irritation. Inhalation of vapors or mists may cause upper respiratory tract irritation. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

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

5. FIRE-FIGHTING MEASURES

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

Specific hazards arising from the chemical: Combustible liquid. Vapors are heavier than air and will travel along surfaces to remote ignition sources and flash back. Closed containers may explode if exposed to extreme heat. Combustion may produce aldehydes and carbon and nitrogen oxides.

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: Avoid contact with skin, eyes or clothing. Avoid breathing vapors. Wear appropriate protective clothing as described in Section 8. Eliminate all ignition sources. Ventilate the area. Provide explosion-proof ventilation.

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. Use non-sparking tools and equipment. If spill has not ignited, use water spray to disperse the vapors and protect personnel attempting to stop leak.

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 SDS 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. Protect from physical damage. Keep away from oxidizers and other incompatible materials.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure guidelines:

Dipropylene Glycol Ether Acetate (DPM Acetate)	None Established
1-Methoxy-2-propyl acetate (PGMEA)	50 ppm AIHA WEEL
Titanium Dioxide	15 mg/m ³ TWA OSHA PEL (total dust) 10 mg/m ³ TWA ACGIH TLV
Carbon Black	3.5 mg/kg TWA OSHA PEL 3 mg/kg TWA ACGIH TLV (inhalable)

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: In operations where exposure limits are exceeded, an approved respirator with organic vapor cartridges or supplied air respirator should be used. Selection and use of respiratory equipment must be in accordance with appropriate regulations and good industrial hygiene practice.

Skin protection: Wear impervious gloves such as butyl rubber, nitrile or neoprene to prevent skin contact. .

Eye protection: Wear safety chemical goggles if contact is possible.

Other: Impervious clothing as needed to prevent contact and prevent contamination of personal clothing. Suitable washing facilities should be available in the work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.): Clear liquid

Odor: Fruity, aromatic odor

Odor threshold: Not available	pH: Not available
Melting Point/Freezing Point: Not available	Boiling Point: 392°F / 200°C
Flash point: 186 °F / 85.5°C	Evaporation rate: 0.015
Flammability (solid, gas): Not applicable	
Flammable limits: LEL: 1.5% (PGMEA)	UEL: 10.0 % (PGMEA)
Vapor pressure: 0.5 mmHg (PGMEA)	Vapor density (air =1): 6.6
Relative density: 1.11	Solubility(is): Insoluble
Partition coefficient: n-Octanol/water: Not applicable	Auto-ignition temperature: 518°F (270°C) (PGMEA)

Decomposition temperature: Not available	Viscosity: Not available
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10. STABILITY AND REACTIVITY

Reactivity: May react with oxygen.

Chemical stability: Stable under normal conditions of use.

Possibility of hazardous reactions: May react with oxygen to form peroxides.

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

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

Hazardous decomposition products: Thermal decomposition may produce aldehydes, carbon and nitrogen oxides.

11. TOXICOLOGICAL INFORMATION

Inhalation: Vapors or mists may cause irritation of the nose, throat and upper respiratory tract.

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

Skin contact: Prolonged skin contact may cause redness and drying of the skin.

Eye contact: May cause mild eye irritation with redness, tearing and swelling.

Chronic effects from short- and long-term exposure: None known.

Reproductive Toxicity: None of the components have been shown to cause reproductive or developmental effects.

Sensitization: None of the components have been shown to cause sensitization in animals or humans.

Mutagenicity: None of the components have been shown to cause mutagenic activity.

Carcinogenicity: Titanium dioxide is listed by IARC as a group 2B carcinogen (possible human carcinogen). Carbon black is listed by IARC as a group 2B carcinogen (possibly carcinogenic to humans), and by ACGIH as an A3 (confirmed animal carcinogen with unknown relevance to humans). These component is encapsulated in a polymer matrix so no inhalable exposure occurs during use or disposal. None of the other components greater than 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 14285 mg/kg, Dermal >2000 mg/kg

Dipropylene Glycol Ether Acetate: Oral rat LD50 >5000 mg/kg, Dermal rabbit LD50 >2000 mg/kg

1-Methoxy-2-propyl acetate: Oral rat LD50 8532 mg/kg, Dermal rat LD50 >2000 mg/kg, Inhalation rat LC0 >23.4 mg/L/6 hr

Titanium Dioxide: Oral rat LD50 > 5000 mg/kg, Inhalation rat LC50 6.82 mg/L/4 hr,

Carbon Black: Oral rat LD50 > 8000 mg/kg, Inhalation rat LC50 > 4.6 mg/m³/4 hr.

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Dipropylene Glycol Ether Acetate: 96 hr LC50 *Oncorhynchus mykiss* 111 mg/kg. 48 hr *daphnia magna* 2701 mg/L, 70 hr EC50 *Selenastrum capricornutum* >1000 mg/L

1-Methoxy-2-propyl acetate: 96 hr LC50 *Oncorhynchus mykiss* 100 mg/L, 48 hr EC50 *daphnia magna* > 500 mg/L, 72 hr EC50 *Pseudokirchnerella subcapitata* > 1000 mg/L

Titanium Dioxide: 72 hr EC50 Pseudokirchnerella subcapitata 61 mg/L
Carbon Black: 96 hr LC0 Danio rerio 1000 mg/L, 24 hr EC50 daphnia magna > 5600 mg/L, EC50

Persistence and degradability: 1-Methoxy-2-propyl acetate and dipropylene glycol ether acetate are readily biodegradable.

Bioaccumulative potential: -Methoxy-2-propyl acetate has a calculated BCF of 3.16. This suggests the potential for bioaccumulation is low.

Mobility in soil: -Methoxy-2-propyl acetate and dipropylene glycol ether acetate are highly mobility on 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	UN1866	Resin Solution	3	III	None
TDG	UN1866	Resin Solution	3	III	None
IMDG	UN1866	Resin Solution	3	III	None
IATA	UN1866	Resin Solution	3	III	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 is not subject to CERCLA reporting requirements as it is sold. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

SARA Hazard Category (311/312): Chronic Health, Fire 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): None

California Proposition 65

This product contains the following chemicals known to the State of California to cause cancer or reproductive toxicity (birth defects):

Ethylbenzene	100-41-4	<0.023	Cancer
Titanium Dioxide	13463-67-7	0-70%	Cancer
Carbon Black	1333-86-4	0-10%	Cancer

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

CANADA:

Canadian WHMIS Classification: Class B-3 (Combustible Liquid), Class D Division 2 Subdivision A (Very 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 = 2 Instability = 0
HMIS Rating: Health = 2* Flammability = 2 Physical Hazard = 0

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

Date of preparation: February 27, 2015

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.