

Dur-A-Solve SAFETY DATA SHEET

1. IDENTIFICATION

Product Identifier: Dur-A-Solve

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: November 6, 2014

2. HAZARD(S) IDENTIFICATION

Classification:

Physical	Health
Flammable Liquid Category 2	Skin Irritation Category 2 Specific Target Organ Toxicity Single Exposure Category 3 (Respiratory Irritation and Nervous System) Carcinogen Category 2

Labeling:

Danger!



Hazard statement(s)

Highly flammable liquid and vapor.
Causes skin irritation
May cause respiratory irritation.
May cause drowsiness or dizziness.
Suspected of causing cancer.

Precautionary statement(s)

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
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.

Avoid breathing dust, fume, gas, mist, vapors or spray.
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves protective clothing, and eye protection.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water
If skin irritation occurs: Get medical attention.
Take off contaminated clothing and wash it before reuse.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER or doctor if you feel unwell.
IF exposed or concerned: Get medical attention.
In case of fire: Use water spray, carbon dioxide 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
Xylene	1330-20-7	50-60%
Methyl Isobutyl Ketone	108-10-1	20-30%
1-Methoxy-2-Propanol	107-98-2	20-30%
Ethylbenzene	100-41-4	15-20%

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 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.

Most important symptoms/effects, acute and delayed: May cause eye irritation. Causes skin irritation. Inhalation of vapors or mists may cause respiratory irritation and central nervous system effects. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause cancer based on animal data.

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 spray, carbon dioxide or dry chemical. Cool fire exposed containers with water.

Specific hazards arising from the chemical: Highly flammable liquid and vapor. 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 carbon monoxide, carbon dioxide, hydrocarbons, aldehydes and formaldehyde.

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. 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. 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:

Xylene	100 ppm TWA OSHA PEL 100 ppm TWA ACGIH TLV, 150 ppm ACGIH STEL
Methyl Isobutyl Ketone	100 ppm TWA OSHA PEL 20 ppm TWA ACGIH TLV, 75 ppm ACGIH STEL
1-Methoxy-2-Propanol	50 ppm TWA ACGIH TLV, 100 ppm ACGIH STEL

Ethylbenzene	100 ppm TWA OSHA PEL 20 ppm TWA ACGIH TLV
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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 to prevent skin contact. .

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

Other: Impervious coveralls, apron and boots are required to prevent skin contact and contamination of personal clothing. A safety shower and eye wash should be available in the immediate work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

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

Odor: Sweet, aromatic odor

Odor threshold: 0.47 (Methyl Isobutyl Ketone)	pH: Not available
Melting Point/Freezing Point: Not available	Boiling Point: 240.4°F / 115.8°C
Flash point: 61 °F / 16°C (TCC)	Evaporation rate: Not available
Flammability (solid, gas): Not applicable	
Flammable limits: LEL: 1.0%	UEL: 12.0 %
Vapor pressure: 26.530 hPa @ 25°C	Vapor density (air =1): >1
Relative density: 0.868	Solubility(is): Negligible
Partition coefficient: n-Octanol/water: Not applicable	Auto-ignition temperature: 518°F (270°C) (1-Methoxy-2-Propanol)
Decomposition temperature: Not available	Viscosity: Not available

10. STABILITY AND REACTIVITY

Reactivity: Not expected to be reactive. .

Chemical stability: Stable under normal conditions of use.

Possibility of hazardous reactions: None known.

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

Incompatible materials: Avoid contact with oxidizing agents, aldehydes, aluminum, amines, copper, copper alloys, halogens, peroxides, strong acids, and strong reducing agents.

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

11. TOXICOLOGICAL INFORMATION

Inhalation: Vapors or mists may cause respiratory irritation, coughing, sore throat, headache, dizziness, drowsiness, nausea, vertigo, loss of appetite and unconsciousness.

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

Skin contact: Causes skin irritation with redness, drying and cracking of the skin.

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

Chronic effects from short- and long-term exposure: Overexposure to methyl isobutyl ketone may cause kidney and liver damage. In a 13-week oral study with methyl isobutyl ketone with rats, the NOAEL was determined to be 250 mg/kg, and in a 14-week inhalation study in mice and rats, the NOAEL was 1000 ppm. Over exposure to xylenes may cause liver damage. In repeated dose studies, the principle effects of xylenes were adaptive changes in the liver, body weight changes, organ weight changes and altered motor coordination.

Reproductive Toxicity: None of the components have been shown to cause adverse 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: Ethylbenzene is listed by IARC as “Possibly Carcinogenic to Humans” Group 2B and by ACGIH as a “Confirmed Animals Carcinogen with Unknown Relevance to Humans”, A3. None of the other components are listed as a carcinogen by IARC, NTP, OSHA or ACGIH.

Acute Toxicity Values: No toxicity data for the product. Acute Toxicity Estimate: Oral rat LD50 3588.8 mg/kg, Dermal 3626 mg/kg

Xylene: Oral rat LD50 5251 mg/kg, Inhalation rabbit LD50, Inhalation rat LC50 29091 mg/m³, Dermal rabbit LD50 >4200 mg/kg.

Methyl Isobutyl Ketone: Oral rat LD50 2.08 g/kg, Inhalation rat LC50 2000 – 4000 ppm /4 hr, Dermal rat LD0 >2000 mg/kg

1-Methoxy-2-Propanol: Oral rat LD50 4277 mg/kg, Inhalation rat LD0 >7000 ppm/6 hr, Dermal rat LD50 >2000 mg/kg

Ethylbenzene: Oral rat LD50 3500 mg/kg, Dermal rabbit LD50 15.4 g/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Xylene: 96 hr LC50 *Oncorhynchus mykiss* 2.6 mg/L, 24 hr IC50 *daphnia magna* 3.6 mg/L, 72 hr EC50

Pseudokirchnerella subcapitata 4.36 mg/L

Methyl Isobutyl Ketone: 96 hr LC50 *Danio rerio* > 179 mg/L, 48 hr EC50 *daphnia magna* > 200 mg/

1-Methoxy-2-Propanol: 96 hr LC50 *Pimephales promelas* 20800 mg/L, 48 hr EC50 *daphnia magna* 21100 mg/L, 7 day EC50 *Pseudokirchnerella subcapitata* > 1000 mg/L

Ethylbenzene: 96 hr EC50 *Oncorhynchus mykiss* 4.2 mg/L, 48 hr EC50 *daphnia magna* 1.8 mg/L, 72 hr EC50 *Skeletonema costatum* 4.9 mg/L.

Persistence and degradability: Xylene, ethylbenzene, 1-methoxy-2-propanol and methyl isobutyl ketone are readily biodegradable.

Bioaccumulative potential: Calculated BCF – Xylene: <25, Methyl Isobutyl Ketone: 2 1-Methoxy-2-Propanol: 3.2 Ethylbenzene: 15

Mobility in soil: Xylene has a moderate to high mobility on soil. 1-Methoxy-2-Propanol and methyl isobutyl ketone are expected to be highly mobile in soil. Ethylbenzene is expected to have low 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	UN1263	Paint Related Material	3	II	None
TDG	UN1263	Paint Related Material	3	II	None
IMDG	UN1263	Paint Related Material	3	II	None
IATA	UN1263	Paint Related Material	3	II	None

*This product qualifies for “Limited Quantity” for any package less than 1.3 gallons.

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 166 lbs. (based on the RQ for Xylene of 100 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

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

Xylene	1330-20-7	50-60%
Methyl Isobutyl Ketone	108-10-1	20-30%
Ethylbenzene	100-41-4	15-20%

California Proposition 65

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

Methyl Isobutyl Ketone	108-10-1	20-30%	Cancer, developmental
Ethylbenzene	100-41-4	15-20%	Cancer
Toluene	10888-3	Trace	Developmental
Benzene	71-43-2	trace	Cancer, developmental, male reproductive toxicity

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

CANADA:

Canadian CEPA: All of the ingredients in this product are listed on the Canadian DSL.

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

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

16. OTHER INFORMATION

NFPA Rating: Health = 2 Flammability = 3 Instability = 0
HMIS Rating: Health = 2* Flammability = 3 Physical Hazard = 0

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

Date of preparation: July 17, 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.