



# Safety Data Sheet

This SDS conforms to the GHS, ISO 11014-1, and ANSI Z400.1

This SDS complies with 29 CFR 1910.1200

Prepared according to EU Directive 1907/2006/EC

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## SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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**Product Name:** DuroFlush DE Compressor Flush Fluid

**Product Code:** DF-05, DF-55

**Product Type:** Ester Compressor Flush Fluid

**Recommended use:** Compressor Flush

**Manufacturer/Supplier: Emergency Spill Information:**

Ultrachem Inc.

900 Centerpoint Blvd. New Castle, DE 19720

Office: 302-325-9880 Fax: 302-325-0335

Technical Information:

Fluid Metrics: 770-393-8636

Emergency Spill Information

Reference: DuroFlush DE

DF-05, DF-55

CHEMTREC (USA) 1-800-424-9300

24 HOURS/DAY, 7 DAYS/WEEK

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## SECTION 2 – HAZARDS IDENTIFICATION

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**GHS Product Classification:** None

**Emergency Overview:** This product has been evaluated and does not require any hazard warning on the label under OSHA criteria. The product does not require a hazard warning label in accordance with GHS criteria according to REGULATION (EC) No 1272/2008.

**Risk Phrases:** None

**Safety Phrases:** S3/14, S14, S26, S27/28, S29/35, S36/37, S36/39, S40, S43, S57, S62, S63

**HMIS Code:** (Health: 1) (Flammability: 1) (Physical Hazard: 0) (Protection: B)

**NFPA Code:** (Health: 1) (Flammability: 1) (Reactivity: 0)

**WHMIS Code:** None

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## SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

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| Component                                          | CAS# EC#     | Range % by Wt. |
|----------------------------------------------------|--------------|----------------|
| Fatty acids, C5-10, esters with pentaerythritol    | 0068424-31-7 | 25 – 75%       |
| Heptanoic acid, mixed esters with and valeric acid | 0068441-94-1 | 25 – 75%       |

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## SECTION 4 – FIRST AID MEASURES

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**Eye:** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**Skin:** After contact with skin, take off immediately all contaminated clothing, wash immediately with plenty of soap and water.

**Inhalation:** In case of accident by inhalation, remove casualty to fresh air and keep at rest.

**Ingestion:** If swallowed, do not induce vomiting: seek medical advice immediately.

**Symptoms/effects:** Mild irritation may occur with overexposure.

**Special treatment:** Treat symptomatically.

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## SECTION 5 – FIRE FIGHTING MEASURES

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**Suitable Extinguishing Media:** In case of fire use dry chemical, carbon dioxide, foam, steam, or water fog.

**Unsuitable Extinguishing Media:** Never use water.

**Specific Hazards:** Keep away from extreme heat and open flames.

**Hazardous Combustion Products:** Incomplete combustion results in oxides of carbon.

**Fire Fighting Equipment:** Fire fighters should wear an approved self-contained breathing apparatus.

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## SECTION 6 – ACCIDENTAL RELEASE MEASURES

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**Personal precautions:** Wear suitable protective clothing and gloves. Evacuate to safe area.

**Environmental precautions:** Use appropriate containment to avoid environmental contamination. Do not empty into drains; dispose of this material and its container in a safe way.

**Methods and materials for cleanup:** To clean the floor and all objects contaminated by this material use an inert absorbent material.

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## SECTION 7 – HANDLING AND STORAGE

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**Handling:** No special requirements if handled with reasonable care.

**Storage:** Keep in a cool place away from open flames. Store inside away from extreme temperatures.

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## SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

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**Exposure limits:** None established.

**Engineering Controls:** In case of insufficient ventilation wear suitable respiratory equipment.

**Protective Equipment:** Wear suitable protective clothing, gloves and eye/face protection.

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## SECTION 9 – CHEMICAL AND PHYSICAL PROPERTIES

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|                                |                   |                    |
|--------------------------------|-------------------|--------------------|
| Appearance                     | : Clear liquid    |                    |
| Odor                           | : Mild            |                    |
| Odor Threshold                 | : Not determined  |                    |
| pH                             | : Not determined  |                    |
| Melting Point / Freezing Point | : Not determined  |                    |
| Pour Point                     | : -45°C (-49°F)   |                    |
| Flash Point                    | : 204°C (400°F)   | Method: ASTM D92   |
| Evaporation Rate               | : Not determined  |                    |
| Flammability (solid, gas)      | : Not Applicable  |                    |
| Upper/Lower Explosive Limits   | : Not Determined  |                    |
| Vapor Pressure                 | : Not Determined  |                    |
| Vapor Density                  | : Not Determined  |                    |
| Specific Gravity               | : 0.94 @ 25°C     | Method: ASTM D1475 |
| Solubility in Water            | : Not Determined  |                    |
| Partition Coefficient          | : Not Determined  | Method: ASTM E1147 |
| Autoignition Temperature       | : Not Determined  | Method: ASTM E659  |
| Decomposition Temperature      | : Not Determined  | Method: ASTM E2550 |
| Viscosity                      | : 37.0 cSt @ 40°C | Method: ASTM D445  |

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## SECTION 10 – STABILITY AND REACTIVITY

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**Chemical Stability:** Stable under normal circumstances

**Hazardous Reactions:** None

**Conditions to Avoid:** Keep away from extreme heat

**Materials to Avoid:** Keep away from chlorine, fluorine, and other strong oxidizers.

**Hazardous Decomposition Products:** None identified.

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**SECTION 11 – TOXICOLOGICAL INFORMATION**

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**Eye Contact:** Prolonged or repeated contact may cause eye irritation.

**Skin Contact:** Prolonged or repeated contact may cause skin irritation.

**Inhalation:** No significant health hazards identified

**Ingestion:** No significant health hazards identified.

**Primary Routes of Entry:** None identified.

**- ACUTE EXPOSURE --**

Toxicological testing has not been conducted on this product.

**Dermal Toxicity** No data available to indicate product or components may be a dermal toxicity hazard.

**Inhalation Toxicity** No data available to indicate product or components may be a toxic inhalation hazard.

**Oral Toxicity** No data available to indicate product or components may be an oral toxicity.

**Dermal Sensitization** No data available to indicate product or components may be a skin sensitizer.

**Inhalation Sensitization** No data available to indicate product or components may be respiratory sensitizers.

**-- CHRONIC EXPOSURE --**

Toxicological testing has not been conducted on this product.

**Chronic Toxicity** No data available to indicate product or components present at greater than 1% are chronic health hazards.

**Carcinogenicity** No data available to indicate any components present at greater than 0.1% may present a carcinogenic hazard.

**Mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Reproductive Toxicity** No data available to indicate either product or components present at greater than 0.1% that may cause reproductive toxicity.

**Teratogenicity** No data available to indicate product or any components contained at greater than 0.1% may cause birth defects.

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**SECTION 12 – ECOLOGICAL INFORMATION**


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**-- ENVIRONMENTAL TOXICITY --**

**Ecotoxicity:** Not determined.

**-- ENVIRONMENTAL FATE --**

**Persistence and Degradability:** No data available.

**Bioaccumulative Potential:** Not measured.

**Mobility in Soil:** No data available.

**Other Adverse Effects:** No data available.

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**SECTION 13 – DISPOSAL INFORMATION**


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Do not empty into drains; dispose of this material and its container as non-hazardous waste. Observe all federal, state and local regulations when disposing of this substance. This material, if discarded, is not a hazardous waste under RCRA Regulation 40 CFR 261. This material, if discarded, should be considered a European non-hazardous waste in accordance with Directive 91/689/EC.

European Waste Catalog Code (EWC-code): 13 01 12

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**SECTION 14 – TRANSPORTATION INFORMATION**


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|                                 |                |
|---------------------------------|----------------|
| <b>UN Number:</b>               | Not regulated. |
| <b>UN Proper Shipping Name:</b> | Not regulated. |
| <b>Transport Hazard Class:</b>  | Not regulated. |
| <b>Package Group:</b>           | Not regulated. |
| <b>Marine Pollutant:</b>        | No             |
| <b>Special Precautions:</b>     | None           |

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**SECTION 15 – REGULATORY INFORMATION**


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**-- Global Chemical Inventories --**

**USA** All components of this material are on the US TSCA Inventory or are exempt.

**EEC** All components are in compliance with the EC 7th Amendment Directive 92/32/EEC.

**Canada** All components of this material are DSL listed or are exempt.

**-- Other U.S. Federal Regulations --**

**EPA 550-B-01-003** This product does not contain greater than 1.0% of any chemical substances (0.1% for carcinogens) listed on the Consolidated List of Chemicals Subject to the Emergency Planning and Community Right-To-Know Act (EPCRA) and Clean Air Act Section 112(r): EPCRA Section 302 Extremely Hazardous Substances, CERCLA Hazardous Substances, EPCRA Section 313 Toxic Chemicals, CAA 112(r) Regulated Chemicals For Accidental Release Prevention.

**SARA 311 Classifications**

|                                   |    |
|-----------------------------------|----|
| Fire Hazard                       | No |
| Sudden Release of Pressure Hazard | No |
| Reactive Hazard                   | No |
| Immediate (Acute) Hazard          | No |
| Delayed (Chronic) Hazard          | No |

**-- State Regulations --**

**Cal. Prop. 65** This product does not intentionally contain any chemicals known by the State of California to cause cancer and/or birth defects. Moreover, Fluid Metrics does not routinely analyze its products for impurities which may be such chemicals.

**-- Other / International --**

**Harmonized Tariff Schedule Number** 3403.99.0000

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**SECTION 16 – OTHER INFORMATION**


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**Label text:**

**Handling:** No special requirements if handled with reasonable care.

**First Aid:**

**Eye:** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**Skin:** After contact with skin, take off immediately all contaminated clothing, wash immediately with plenty of soap and water.

**Inhalation:** In case of accident by inhalation: remove casualty to fresh air and keep at rest.

**Ingestion:** If swallowed, do not induce vomiting: seek medical advice immediately.

**Fire:** In case of fire use dry chemical, carbon dioxide, foam, steam, or water fog.

**Spill or Leak:** To clean the floor and all objects contaminated by this material use an inert absorbent material.

The information in this document is supplied in good faith and understood to be accurate as of the date given above. No warranty, express or implied is given, as legal requirements may change over time. The user is ultimately responsible for compliance with all usage and disposal regulations. Information in this document, unless noted otherwise, pertains to the product as shipped, not after use. Normal and customary industrial practices may dictate safety and usage precautions not anticipated or covered in this document.

**Date Translated:** N/A

This SDS originated in English. Context errors associated with the translation to other languages are avoided to the best of our ability. If the translation is unclear, please reference the English version.