

# **Dielectric Fluids DF45, DF45II**

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Revision Date: 09/22/2019 Date of issue: 09/22/2019

Version: 1.1

#### **SECTION 1: IDENTIFICATION**

1.1. **Product Identifier Product Form:** Mixture Product Name: DF45, DF45II

1.2. **Intended Use of the Product** 

No use is specified.

1.3. Name, Address, and Telephone of the Responsible Party

Company

Soltex Inc. (Synthetic Oils & Lubricants of Texas)

3707 FM 1960 W Ste. 560 Houston, TX 77068 (281)-587-0900

soltexinc.com

1.4. **Emergency Telephone Number** 

Emergency Number : (800)-424-9300 (CHEMTREC); (281)-587-0900 (Other Safety Information)

# **SECTION 2: HAZARDS IDENTIFICATION**

#### **Classification of the Substance or Mixture** 2.1.

### Classification (GHS-US)

ASPIRATION HAZARD - Category 1

Skin Irritation - Category 2 Eye Irritation - Category 2B

#### **Label Elements** 2.2.

**GHS-US Labeling** 

**Hazard Pictograms (GHS-US)** 





Signal Word (GHS-US) : Danger

**Hazard Statements (GHS-US)** : H304 - May be fatal if swallowed and enters airways.

H315 + H320 Causes skin and eye irritation.

Precautionary Statements (GHS-US) : P301+P310 - IF SWALLOWED: Immediately call a doctor, a POISON CENTER.

P331 - Do NOT induce vomiting.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P332 + P313 If skin irritation occurs: Get medical advice/ attention.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/ attention. P362 Take off contaminated clothing and wash before reuse.

P391 - Collect spillage. P405 - Store locked up.

P501 - Dispose of contents/container in accordance with local, regional, national,

territorial, provincial, and international regulations.

#### 2.3. Other Hazards

A significant portion of the mixture consists of a substance capable of producing an aspiration hazard. Aspiration may result in chemical pneumonia (fluid in the lungs), severe lung damage, respiratory failure, and even death.

2.4. Unknown Acute Toxicity (GHS-US) No data available

# SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### **Substances** 3.1.

Not applicable

09/22/2019 EN (English US) 1/7

# **DF45, DF45II**

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations

#### 3.2. Mixture

| Name                                | Product Identifier  | % (w/w)  | Classification (GHS-US)      |
|-------------------------------------|---------------------|----------|------------------------------|
|                                     |                     |          | Asp. Tox. 1, H304            |
| Benzene, C10-16-alkyl derivatives   | (CAS No) 68648-87-3 | 75 - 100 | Eye Irritation Cat. 2B, H320 |
|                                     |                     |          | Skin Irritation Cat. 2, H315 |
| Benzene, mono-C10-14-alkyl derivs., | (CAS No) 85117-41-5 | 0 - 25   | Asp. Tox. 1, H304            |
| fractionation bottoms               |                     |          |                              |

# **SECTION 4: FIRST AID MEASURES**

#### 4.1. Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).

**Inhalation:** Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

**Skin Contact:** Remove contaminated clothing. Drench affected area with water or soap and water for at least 15 minutes. Wash contaminated clothing before reuse. Obtain medical attention if irritation develops or persists.

**Eye Contact:** Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

Ingestion: Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor/physician.

# 4.2. Most Important Symptoms and Effects Both Acute and Delayed

**General:** May be fatal if swallowed and enters airways.

**Inhalation:** Overexposure may be irritating to the respiratory system. **Skin Contact:** Repeated or prolonged skin contact may cause irritation.

Eye Contact: Direct contact with the eyes is likely irritating.

Ingestion: May be fatal if swallowed and enters airways. Aspiration into the lungs can cause severe pulmonary edema/hemorrhage.

Chronic Symptoms: None expected under normal conditions of use.

#### 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

# **SECTION 5: FIRE-FIGHTING MEASURES**

#### 5.1. Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

**Unsuitable Extinguishing Media:** Do not use a heavy water stream. Use of heavy stream of water may spread fire.

# 5.2. Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Not flammable but will support combustion.

**Explosion Hazard:** Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

#### **5.3.** Advice for Firefighters

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire. Under fire conditions, hazardous fumes will be present.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection. **Hazardous Combustion Products:** Under fire conditions, may produce fumes, smoke, oxides of carbon and hydrocarbons.

**Reference to Other Sections** 

Refer to section 9 for flammability properties.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

#### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid all contact with skin, eyes, or clothing. Avoid breathing (vapor, mist, spray).

#### 6.1.1. For Non-Emergency Personnel

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel.

#### 6.1.2. For Emergency Personnel

**Protective Equipment:** Equip cleanup crew with proper protection.

Emergency Procedures: Stop leak if safe to do so. Eliminate ignition sources. Ventilate area.

09/22/2019 EN (English US) 2/7

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations

#### 6.2. Environmental Precautions

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

#### 6.3. Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

**Methods for Cleaning Up:** Clear up spills immediately and dispose of waste safely. Spills should be contained with mechanical barriers. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

#### 6.4. Reference to Other Sections

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

#### **SECTION 7: HANDLING AND STORAGE**

### 7.1. Precautions for Safe Handling

**Additional Hazards When Processed:** Any proposed use of this product in elevated-temperature processes should be thoroughly evaluated to assure that safe operating conditions are established and maintained.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

#### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

**Technical Measures:** Comply with applicable regulations.

**Storage Conditions:** Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

Incompatible Materials: Strong acids, strong bases, strong oxidizers.

#### 7.3. Specific End Use(s)

No use is specified.

# **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### 8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

#### 8.2. Exposure Controls

**Appropriate Engineering Controls:** Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

Personal Protective Equipment: Protective goggles. Gloves. Protective clothing. Insufficient ventilation: wear respiratory protection.









Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical goggles or safety glasses.

Skin and Body Protection: Wear suitable protective clothing.

**Respiratory Protection:** Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

**Environmental Exposure Controls:** Do not allow the product to be released into the environment.

Consumer Exposure Controls: Do not eat, drink or smoke during use.

### **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

## 9.1. Information on Basic Physical and Chemical Properties

Physical State : Liquid Color, D-1500 : 1

Odor: Not availableOdor Threshold: Not availablepH: Not available

09/22/2019 EN (English US) 3/7

#### Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations

Evaporation Rate: Not availableMelting Point: Not availableFreezing Point: Not availableBoiling Point: Not available

Flash Point, min : 130 °C (266 °F) (COC)

**Auto-ignition Temperature** Not available **Decomposition Temperature** Not available Flammability (solid, gas) Not available **Lower Flammable Limit** Not available **Upper Flammable Limit** Not available **Vapor Pressure** Not available Relative Vapor Density at 20 °C Not available **Relative Density** Not available

**Specific Gravity, 15.6°/15.6°C** : 0.85

Solubility: Not availablePartition Coefficient: N-Octanol/Water: Not availableViscosity: Not availableViscosity, Kinematic: 4 - 7.3 cSt @ 40 °CExplosive Properties: Product is not explosive

Explosion Data – Sensitivity to Mechanical Impact : Not expected to present an explosion hazard due to mechanical impact : Not expected to present an explosion hazard due to static discharge

### **SECTION 10: STABILITY AND REACTIVITY**

- **10.1. Reactivity:** Hazardous reactions will not occur under normal conditions.
- **10.2.** Chemical Stability: Stable under recommended handling and storage conditions (see section 7).
- **10.3.** Possibility of Hazardous Reactions: Hazardous polymerization will not occur.
- **10.4. Conditions to Avoid:** Direct sunlight, extremely high or low temperatures, heat, hot surfaces, sparks, open flames, incompatible materials, and other ignition sources.
- **10.5. Incompatible Materials:** Strong acids, strong bases, strong oxidizers.
- 10.6. Hazardous Decomposition Products: Thermal decomposition generates: Carbon oxides (CO, CO<sub>2</sub>).

#### **SECTION 11: TOXICOLOGICAL INFORMATION**

# 11.1. Information on Toxicological Effects - Product

Acute Toxicity: Not classified
LD50 and LC50 Data: Not available
Skin Corrosion/Irritation: Not classified
Serious Eye Damage/Irritation: Not classified
Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

**Teratogenicity:** Not classified **Carcinogenicity:** Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

**Specific Target Organ Toxicity (Single Exposure):** Not classified **Aspiration Hazard:** May be fatal if swallowed and enters airways.

**Symptoms/Injuries After Inhalation:** Overexposure may be irritating to the respiratory system. **Symptoms/Injuries After Skin Contact:** Repeated or prolonged skin contact may cause irritation.

Symptoms/Injuries After Eye Contact: Direct contact with the eyes is likely irritating.

Symptoms/Injuries After Ingestion: May be fatal if swallowed and enters airways. Aspiration into the lungs can cause severe

pulmonary edema/hemorrhage.

Chronic Symptoms: None expected under normal conditions of use.

09/22/2019 EN (English US) 4/7

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations

# 11.2. Information on Toxicological Effects - Ingredient(s)

#### LD50 and LC50 Data:

| Benzene, C10-16-alkyl derivatives (68648-87-3)                         |               |  |
|--|---------------|--|
| LD50 Oral Rat  | > 5000 mg/kg  |  |
| LD50 Dermal Rabbit   | > 10200 mg/kg |  |
| Benzene, mono-C10-14-alkyl derivs., fractionation bottoms (85117-41-5) |               |  |
| LD50 Oral Rat - Male   | > 2000 mg/kg  |  |
| LD50 Dermal Rat - Male   | > 4300 mg/kg  |  |

# SECTION 12: ECOLOGICAL INFORMATION

#### 12.1. Toxicity

#### **Ecotoxicity**

| Benzene, C10-16-alkyl derivatives (68648-87-3)                         |  |  |
|--|--|--|
| LC50 Fish 1  | >10 ugl (Exposure time: 336 h - Species: Brachydanio rerio) - semi-static test (OECD Test Guideline 204        |  |
| EC50 Daphnia magna   | >0.041 mg/l (Exposure time: 48 h - Species: Daphnia magna) - Fresh water (Directive 67/548/EEC, Annex V, C.2.) |  |
| ErC50 Algea  | >100 ugl (Exposure time: 72 h - Species: Desmodesmus subspicatus) - Fresh water (OECD Test Guideline 201)      |  |
| NOEC Daphnia magna   | 0.0075 mg/l (Exposure time: 21 d - Species: Daphnia magna) - flow-through test (Fresh water)                   |  |
| Benzene, mono-C10-14-alkyl derivs., fractionation bottoms (85117-41-5) |  |  |
| Acute LC50 Fish  | >100 mg/l (Exposure time: 96 h - Species: Pimephales promelas) - Fresh water                                   |  |
| Acute NOEC Daphnia   | >100 ppb (Exposure time: 144 h - Species: Daphnia magna)   |  |
| Acute NOEC Daphnia   | 1.4 mg/l (Exposure time: 44 h - Species: Daphnia magna straus)   |  |
| Acute NOEC Algea   | 2.08 mg/l (Exposure time: 72 h - Species: Desmodesmus subspicatus) - Fresh water                               |  |
| Acute NOEC Fish  | >10 ppb (Exposure time: 14 d - Species: Brachydanio rerio) - Fresh water                                       |  |
| Chronic LOAEL Daphnia  | 0.015 mg/l (Exposure time: 21 d - Species: Daphnia)  |  |
| Chronic NOEC Daphnia   | 0.0075 mg/l (Exposure time: 21 d - Species: Daphnia magna) - Fresh water                                       |  |

# 12.2. Persistence and Degradability

| Product/ingredient name                                   | Test                        | Result        | Dose |
|---|-----------------------------|---------------|------|
| Beneane, C10-16-alkyl derivatives                         | OECD Test<br>Guideline 301F | 64% - 28 days |      |
| Benzene, mono-C10-14-alkyl derivs., fractionation bottoms | EU BODIS                    | 28% - 28 days | 6 ml |

### 12.3. Bioaccumulative Potential

| Benzene, C10-16-alkyl derivatives (68648-87-3) |  |
|--|--|
| BCF Fish 1 35                                  |  |

#### 12.4. Mobility in Soil

Not available

# 12.5. Other Adverse Effects

Other Information: Avoid release to the environment.

#### **SECTION 13: DISPOSAL CONSIDERATIONS**

# 13.1. Waste treatment methods

**Sewage Disposal Recommendations:** Do not empty into drains; dispose of this material and its container in a safe way. Do not empty into drains. Do not dispose of waste into sewer.

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

# SECTION 14: TRANSPORT INFORMATION

# **DOT Classification**

Not regulated as dangerous goods

09/22/2019 EN (English US) 5/7

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations

#### IATA

Not regulated as dangerous goods

**IMDG** 

Not regulated as dangerous goods

**TDG** 

DEAE

Not regulated as dangerous goods

## **SECTION 15: REGULATORY INFORMATION**

#### 15.1. US Federal Regulations

| DF45  |                                 |  |
|---|---------------------------------|--|
| SARA Section 311/312 Hazard Classes                                       | Immediate (acute) health hazard |  |
| Benzene, C10-16-alkyl derivatives (68648-87-3)                            |                                 |  |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory |                                 |  |

Benzene, mono-C10-14-alkyl derivs., fractionation bottoms (85117-41-5)

# Listed on the United States TSCA (Toxic Substances Control Act) inventory

# 15.2. US State Regulations

Neither this product nor its chemical components appear on any US state lists.

#### 15.3. Canadian Regulations

| DF45                      |   |  |
|---------------------------|---|--|
| WHMIS Classification      | Uncontrolled product according to WHMIS classification criteria |  |
| 20040 11 11               |   |  |
| Benzene, C10-16-alkyl de  | rivatives (68648-87-3)  |  |
| Listed on the Canadian DS | SL (Domestic Substances List)                                   |  |
| WHMIS Classification      | Uncontrolled product according to WHMIS classification criteria |  |
| Benzene, mono-C10-14-al   | lkyl derivs., fractionation bottoms (85117-41-5)                |  |
| Listed on the Canadian DS | L (Domestic Substances List)                                    |  |

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

### **International Regulations**

### Benzene, C10-16-alkyl derivatives (68648-87-3)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on the TCSI (Taiwan Chemical Substance Inventory)

Listed on the Canadian DSL (Domestic Substances List)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Listed on the Korean ECL (Existing Chemicals List)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

# Benzene, mono-C10-14-alkyl derivs., fractionation bottoms (85117-41-5)

Listed on the TCSI (Taiwan Chemical Substance Inventory)

Listed on the Canadian NDSL (Non-Domestic Substances List)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

09/22/2019 EN (English US) 6/7

# **DF45, DF45II**

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations

# SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

**Revision Date** : 09/22/2019

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA

Hazard Communication Standard 29 CFR 1910.1200.

## Party Responsible for the Preparation of This Document

Soltex Inc. (Synthetic Oils & Lubricants of Texas) 3707 FM 1960 W Ste. 560 Houston, TX 77068 (281)-587-0900 soltexinc.com

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

GHS US 2012

09/22/2019 EN (English US) 7/7