



# SAFETY DATA SHEET

Revision Date 17-April-2015

Version 1

## 1. PRODUCT AND COMPANY IDENTIFICATION

### Product Identifier

**Product Name** Foremost 584-ES Contact Degreaser

**UN/ID No** UN1710

**Product Code** 584-ES

### Recommended Use of the Chemical and Restrictions on Use

**Recommended Use** Industrial cleaner.

### Details of the Supplier of the Safety Data Sheet

#### Supplier Address

Delta Foremost Chemical Corporation  
3915 Air Park St.  
Memphis, Tennessee 38118

### Emergency Telephone Number

**Company Phone Number** (901) 363-4340

**Emergency Telephone** INFOTRAC 1-352-323-3500 (International)  
1-800-535-5053 (North America)

## 2. HAZARDS IDENTIFICATION

### Classification

Acute toxicity - Inhalation (Vapors)	Category 4
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Germ Cell Mutagenicity	Category 2
Carcinogenicity	Category 1A
Specific target organ toxicity (single exposure)	Category 3
Aspiration toxicity	Category 1

### Signal Word

**DANGER**

### Hazard Statements

Harmful if inhaled  
Causes skin irritation  
Causes serious eye irritation  
Suspected of causing genetic defects  
May cause cancer  
May cause respiratory irritation. May cause drowsiness or dizziness  
May be fatal if swallowed and enters airways



**Appearance** Water white liquid**Physical State** Liquid**Odor** Chlorinated**Precautionary Statements - Prevention**

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Use personal protective equipment as required  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area  
Wash face, hands and any exposed skin thoroughly after handling  
Wear eye/face protection

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
Get medical attention if irritation occurs  
IF ON SKIN: Wash with plenty of soap and water  
If skin irritation persists: Get medical advice/attention  
Take off contaminated clothing and wash it before reuse  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
Do NOT induce vomiting

**Precautionary Statements - Storage**

Store locked up  
Store in a well-ventilated place. Keep container tightly closed

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards Not Otherwise Classified (HNOC)**

May be harmful if swallowed

**Other Hazards**

Toxic to aquatic life with long lasting effects  
Toxic to aquatic life

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS No	Weight-%
Aliphatic Hydrocarbon Solvent	64742-88-7	Proprietary
Trichloroethylene	79-01-6	Proprietary
Tetrachloroethylene	127-18-4	Proprietary

Product contains a proprietary mixture of ingredients.

**4. FIRST AID MEASURES****First Aid Measures****General Advice**

If exposed or concerned: Get medical advice/attention. Provide this SDS to medical personnel for treatment.

**Eye Contact**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation occurs.

<b>Skin Contact</b>	Flush with water while removing contaminated clothing and shoes before reuse. If irritation persists, get medical attention.
<b>Inhalation</b>	Remove victim to fresh air and provide oxygen if breathing is difficult. Give artificial respiration if not breathing. If symptoms persist, call a physician.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Seek medical attention immediately.

**Most Important Symptoms and Effects, both Acute and Delayed**

<b>Symptoms</b>	Liquid in eyes can cause pain and irritation. Corneal injury likely. May cause skin and eye irritation. Ingestion may result in irritation of mouth and gastrointestinal tract. Vomiting may cause chemical pneumonia. Overexposure by inhalation can cause irritation of the respiratory tract and adverse effects on the central nervous system. High concentrations or prolonged exposure can cause unconsciousness and death.
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**Indication of any Immediate Medical Attention and Special Treatment Needed**

<b>Note to Physicians</b>	Alcoholism, acute and chronic kidney or liver disease, rhythmic disorders of the heart, neuritis and other disorders of the nervous system. Aspiration into the lungs may occur during ingestion or vomiting, causing lung damage or even death due to chemical pneumonia.
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**5. FIRE-FIGHTING MEASURES****Suitable Extinguishing Media**

Foam, carbon dioxide or dry chemical extinguisher, or water. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** Not determined.

**Specific Hazards Arising from the Chemical**

Vapor concentrated in a confined or poorly ventilated area can be ignited upon contact with a high energy spark, flame, or high intensity heat source.

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES****Personal Precautions, Protective Equipment and Emergency Procedures**

<b>Personal Precautions</b>	Wear protective clothing as described in Section 8 of this safety data sheet. Avoid contact with skin and eyes and inhalation of vapors.
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**Methods and Material for Containment and Cleaning Up**

<b>Methods for Containment</b>	Prevent further leakage or spillage if safe to do so. Absorb liquid with sawdust, sand or industrial absorbent.
<b>Methods for Cleaning Up</b>	Sweep up absorbed material and shovel into suitable containers for disposal. Discard any product, residue, disposable container or liner in full compliance with federal, state, and local regulations. For waste disposal, see section 13 of the SDS.

## 7. HANDLING AND STORAGE

### Precautions for Safe Handling

#### **Advice on Safe Handling**

Handle in accordance with good industrial hygiene and safety practice. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protection recommended in Section 8. Wear eye/face protection. Avoid contact with skin, eyes or clothing. Avoid breathing vapors. Avoid breathing mists. Use only in well-ventilated areas.

### Conditions for Safe Storage, Including any Incompatibilities

#### **Storage Conditions**

Keep container tightly closed and store in a cool, dry and well-ventilated place. Keep in properly labeled containers. Store locked up.

#### **Incompatible Materials**

Caustic soda, caustic potash, liquid oxygen or other oxidizing materials, alkali metals.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Trichloroethylene 79-01-6	STEL: 25 ppm TWA: 10 ppm	TWA: 100 ppm (vacated) TWA: 50 ppm (vacated) TWA: 270 mg/m <sup>3</sup> (vacated) STEL: 200 ppm (vacated) STEL: 1080 mg/m <sup>3</sup> Ceiling: 200 ppm	IDLH: 1000 ppm
Tetrachloroethylene 127-18-4	STEL: 100 ppm TWA: 25 ppm	TWA: 100 ppm (vacated) TWA: 25 ppm (vacated) TWA: 170 mg/m <sup>3</sup> Ceiling: 200 ppm	IDLH: 150 ppm

### Appropriate Engineering Controls

#### **Engineering Controls**

Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the SDS.

### Individual Protection Measures, such as Personal Protective Equipment

#### **Eye/Face Protection**

Goggles or face shield.

#### **Skin and Body Protection**

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. Wear protective Neoprene™ gloves, Rubber gloves.

#### **Respiratory Protection**

Use self-contained breathing apparatus if there is a heavy vapor about 300 ppm.

#### **General Hygiene Considerations**

Handle in accordance with good industrial hygiene and safety practice. Wash hands after use and wash contaminated clothes before reuse.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on Basic Physical and Chemical Properties

**Physical State**  
**Appearance**  
**Color**

Liquid  
Water white liquid  
Not determined

**Odor**  
**Odor Threshold**

Chlorinated  
Not determined

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Not determined	
Melting Point/Freezing Point	Not determined	
Boiling Point/Boiling Range	86.66 °C / 188 °F	
Flash Point	Not determined	
Evaporation Rate	Not established	
Flammability (Solid, Gas)	Not determined	
Upper Flammability Limits	Not applicable	
Lower Flammability Limit	Not determined	
Vapor Pressure	Not established	
Vapor Density	Not established	
Specific Gravity	1.065	(1=Water)
Water Solubility	Insoluble in water	
Solubility in Other Solvents	Not determined	
Partition Coefficient	Not determined	
Autoignition Temperature	Not determined	
Decomposition Temperature	Not determined	
Kinematic Viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Not determined	
Oxidizing Properties	Not determined	

## 10. STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions.

### Chemical Stability

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

None under normal processing.

#### **Hazardous Polymerization**

Hazardous polymerization does not occur.

### Conditions to Avoid

Avoid heat, sparks, open flames and other ignition sources.

### Incompatible Materials

Caustic soda, caustic potash, liquid oxygen or other oxidizing materials, alkali metals.

### Hazardous Decomposition Products

Hydrogen chloride, and traces of chlorine or phosgene gases.

## 11. TOXICOLOGICAL INFORMATION

### Information on Likely Routes of Exposure

#### **Product Information**

#### **Eye Contact**

Causes serious eye irritation.

#### **Skin Contact**

Causes skin irritation.

#### **Inhalation**

Harmful if inhaled.

#### **Ingestion**

May be harmful if swallowed.

**Component Information**

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Aliphatic Hydrocarbon Solvent 64742-88-7	> 5000 mg/kg ( Rat )	= 3000 mg/kg ( Rabbit )	> 5.28 mg/L ( Rat ) 4 h
Trichloroethylene 79-01-6	= 4290 mg/kg ( Rat )	> 20 g/kg ( Rabbit )	= 8000 ppm ( Rat ) 4 h = 26300 ppm ( Rat ) 1 h
Tetrachloroethylene 127-18-4	= 2629 mg/kg ( Rat )	-	= 4000 ppm ( Rat ) 4 h

**Information on Physical, Chemical and Toxicological Effects****Symptoms**

Please see section 4 of this SDS for symptoms.

**Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure****Germ Cell Mutagenicity**

Suspected of causing genetic defects.

**Carcinogenicity**

May cause cancer; The table below indicates whether each agency has listed any ingredient as a carcinogen. However, the product as a whole has not been tested. Large doses caused malignant tumors in mice.

Chemical Name	ACGIH	IARC	NTP	OSHA
Trichloroethylene 79-01-6	A2	Group 1	Reasonably Anticipated	X
Tetrachloroethylene 127-18-4	A3	Group 2A	Reasonably Anticipated	X

**ACGIH (American Conference of Governmental Industrial Hygienists)**

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

**IARC (International Agency for Research on Cancer)**

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans

**STOT - Single Exposure**

May cause respiratory irritation. May cause drowsiness or dizziness.

**Chronic Toxicity**

Prolonged exposure above the OSHA permissible limits may result in liver and/or kidney damage.

**Aspiration Hazard**

May be fatal if swallowed and enters airways.

**Numerical Measures of Toxicity**

Not determined

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

Toxic to aquatic organisms. Toxic to aquatic life with long lasting effects.

**Component Information**

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Aliphatic Hydrocarbon Solvent 64742-88-7	450: 96 h Pseudokirchneriella subcapitata mg/L EC50	800: 96 h Pimephales promelas mg/L LC50 static		100: 48 h Daphnia magna mg/L EC50
Trichloroethylene 79-01-6	450: 96 h Desmodesmus subspicatus mg/L EC50 175: 96 h Pseudokirchneriella subcapitata mg/L EC50	31.4 - 71.8: 96 h Pimephales promelas mg/L LC50 flow-through 39 - 54: 96 h Lepomis macrochirus mg/L LC50 static	EC50 = 0.81 mg/L 24 h EC50 = 115 mg/L 10 min EC50 = 190 mg/L 15 min EC50 = 235 mg/L 24 h EC50 = 410 mg/L 24 h EC50 = 975 mg/L 5 min	2.2: 48 h Daphnia magna mg/L EC50

Tetrachloroethylene 127-18-4	500: 96 h Pseudokirchneriella subcapitata mg/L EC50	12.4 - 14.4: 96 h Pimephales promelas mg/L LC50 flow- through 8.6 - 13.5: 96 h Pimephales promelas mg/L LC50 static 11.0 - 15.0: 96 h Lepomis macrochirus mg/L LC50 static 4.73 - 5.27: 96 h Oncorhynchus mykiss mg/L LC50 flow-through	EC50 = 100 mg/L 24 h EC50 = 112 mg/L 24 h EC50 = 120.0 mg/L 30 min	6.1 - 9.0: 48 h Daphnia magna mg/L EC50 Static
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**Persistence and Degradability**

Not determined

**Bioaccumulation**

Not determined

**Mobility**

Chemical Name	Partition Coefficient
Trichloroethylene 79-01-6	2.29
Tetrachloroethylene 127-18-4	2.53 - 2.88

**Other Adverse Effects**

Not determined

### 13. DISPOSAL CONSIDERATIONS

**Waste Treatment Methods****Disposal of Wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated Packaging**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Trichloroethylene 79-01-6	U228	Included in waste streams: F001, F002, F024, F025, F039, K018, K019, K020	0.5 mg/L regulatory level	U228
Tetrachloroethylene 127-18-4	U210	Included in waste streams: F001, F002, F024, F025, F039, K016, K019, K020, K073, K116, K150, K151	0.7 mg/L regulatory level	U210

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Trichloroethylene 79-01-6	Category I - Volatiles		Toxic waste waste number F025 Waste description: Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.	
Tetrachloroethylene 127-18-4	Category I - Volatiles		Toxic waste waste number F025 Waste description: Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.	

Chemical Name	California Hazardous Waste Status
Trichloroethylene 79-01-6	Toxic
Tetrachloroethylene 127-18-4	Toxic

#### 14. TRANSPORT INFORMATION

##### Note

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

##### DOT

UN/ID No UN1710  
 Proper Shipping Name Trichloroethylene Solution  
 Hazard Class 6.1  
 Packing Group III

##### IATA

UN/ID No UN1710  
 Proper Shipping Name Trichloroethylene Solution  
 Hazard Class 6.1  
 Packing Group III

##### IMDG

UN/ID No UN1710  
 Proper Shipping Name Trichloroethylene Solution



Hazard Class 6.1  
Packing Group III

## 15. REGULATORY INFORMATION

### International Inventories

Not Determined

### Legend:

*TSCA* - United States Toxic Substances Control Act Section 8(b) Inventory

*DSL/NDL* - Canadian Domestic Substances List/Non-Domestic Substances List

*EINECS/ELINCS* - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

*ENCS* - Japan Existing and New Chemical Substances

*IECSC* - China Inventory of Existing Chemical Substances

*KECL* - Korean Existing and Evaluated Chemical Substances

*PICCS* - Philippines Inventory of Chemicals and Chemical Substances

### US Federal Regulations

#### CERCLA

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Trichloroethylene 79-01-6	100 lb 1 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ RQ 1 lb final RQ RQ 0.454 kg final RQ
Tetrachloroethylene 127-18-4	100 lb 1 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ RQ 1 lb final RQ RQ 0.454 kg final RQ

#### SARA 313

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Trichloroethylene	79-01-6	Proprietary	0.1
Tetrachloroethylene	127-18-4	Proprietary	0.1

#### CWA (Clean Water Act)

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Trichloroethylene 79-01-6	100 lb	X	X	X
Tetrachloroethylene 127-18-4		X	X	

### US State Regulations

#### California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
Trichloroethylene 79-01-6	Carcinogen
Tetrachloroethylene 127-18-4	Carcinogen

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Aliphatic Hydrocarbon Solvent 64742-88-7	X		
Trichloroethylene 79-01-6	X	X	X
Tetrachloroethylene 127-18-4	X	X	X

**16. OTHER INFORMATION****NFPA****Health Hazards**

3

**Flammability**

1

**Instability**

0

**Special Hazards**

Not determined

**HMIS****Health Hazards**

3

**Flammability**

1

**Physical Hazards**

0

**Personal Protection**

Not determined

**Revision Date**

17-April-2015

**Revision Note**

New format

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**