

# SAFETY DATA SHEET

#### Revision Date 26-March-2015

Version 1

### **1. PRODUCT AND COMPANY IDENTIFICATION**

Product Identifier Product Name

Foremost 586 Super Solv II

UN/ID No Product Code UN1710 586

Recommended Use of the Chemical and Restrictions on UseRecommended UseIndustrial 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 Emergency Telephone (901) 363-4340 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-%
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.
Skin Contact	Flush with water while removing contaminated clothing and shoes before reuse. If irritation persists, get medical attention.

Inhalation	Remove victim to fresh air and provide oxygen if breathing is difficult. Give artificial
	respiration if not breathing. If symptoms persist, call a physician.

Ingestion 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

SymptomsLiquid in eyes can cause pain and irritation. Corneal injury likely. May cause skin and eye<br/>irritation. Ingestion may result in irritation of mouth and gastrointestinal tract. Vomiting may<br/>cause chemical pneumonia. Overexposure by inhalation can cause irritation of the<br/>respiratory tract and adverse effects on the central nervous system. High concentrations or<br/>prolonged exposure can cause unconsciousness and death.

#### Indication of any Immediate Medical Attention and Special Treatment Needed

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Note to Physicians 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

**Personal Precautions** Wear protective clothing as described in Section 8 of this safety data sheet. Avoid contact with skin and eyes and inhalation of vapors.

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

Methods for Containment	Prevent further leakage or spillage if safe to do so. Absorb liquid with sawdust, sand or industrial absorbent.
Methods for Cleaning Up	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, In	cluding 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	STEL: 25 ppm	TWA: 100 ppm	IDLH: 1000 ppm
79-01-6	TWA: 10 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	
Tetrachloroethylene	STEL: 100 ppm	TWA: 100 ppm	IDLH: 150 ppm
127-18-4	TWA: 25 ppm	(vacated) TWA: 25 ppm	
		(vacated) TWA: 170 mg/m <sup>3</sup>	
		Ceiling: 200 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, su	ch 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.
<b>Respiratory Protection</b>	Use self-contained breathing apparatus if there is a heavy vapor about 300 ppm.
General Hygiene Consideration	s 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

Property pH Melting Point/Freezing Point Boiling Point/Boiling Range Flash Point Evaporation Rate Liquid Water white liquid Colorless

Values Not determined Not determined 86.66 °C / 188 °F Not determined 0.28 Odor Odor Threshold Chlorinated Not determined

Remarks • Method

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	1.465
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

(1=Water)

## **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
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.
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#### 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	Х
Tetrachloroethylene 127-18-4	A3	Group 2A	Reasonably Anticipated	Х

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
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 = 112 mg/L 24 h EC50 = 120.0 mg/L 30 min	6.1 - 9.0: 48 h Daphnia magna mg/L EC50 Static

#### Persistence and Degradability

Not determined

#### **Bioaccumulation** Not determined

### **Mobility**

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

#### **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	Category I - Volatiles		Toxic waste	
79-01-6			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.	

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Tetrachloroethylene	Category I - Volatiles	Toxic waste
127-18-4		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	Тохіс
Tetrachloroethylene 127-18-4	Тохіс

### **14. TRANSPORT INFORMATION**

<u>Note</u>	Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.
<u>DOT</u> UN/ID No Proper Shipping Name Hazard Class Packing Group	UN1710 Trichloroethylene Solution 6.1 III
<u>IATA</u> UN/ID No Proper Shipping Name Hazard Class Packing Group	UN1710 Trichloroethylene Solution 6.1 III
IMDG UN/ID No Proper Shipping Name Hazard Class Packing Group	UN1710 Trichloroethylene Solution 6.1 III

### **15. REGULATORY INFORMATION**

### International Inventories

Not Determined

#### Legend:

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

DSL/NDSL - 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	100 lb 1 lb		RQ 100 lb final RQ
79-01-6			RQ 45.4 kg final RQ RQ 1 lb final
			RQ
			RQ 0.454 kg final RQ
Tetrachloroethylene	100 lb 1 lb		RQ 100 lb final RQ
127-18-4			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	Х	Х	Х
Tetrachloroethylene 127-18-4		Х	Х	

### **US State Regulations**

<u>California Proposition 65</u> 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
Trichloroethylene 79-01-6	Х	X	Х
Tetrachloroethylene 127-18-4	Х	X	Х

### **16. OTHER INFORMATION**

<u>NFPA</u> HMIS	Health Hazards 3 Health Hazards 3	Flammability 1 Flammability 1	Instability 0 Physical Hazards 0	Special Hazards Not determined Personal Protection Not determined
Revision Date Revision Note	26-March-2015 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