



Revision Number: 003.1

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**1. PRODUCT AND COMPANY IDENTIFICATION**

<b>Product name:</b> MF300S 1 GALLON	<b>IDH number:</b> 511343
<b>Product type:</b> Liquid Flux	<b>Item number:</b> M00469
	<b>Region:</b> United States
<b>Company address:</b> Henkel Corporation 15350 Barranca Parkway Irvine, CA 92618	<b>Contact information:</b> Telephone: 1.888.9.HENKEL (1.888.943.6535) MEDICAL EMERGENCY Phone: Poison Control Center 1-877-671-4608 (toll free) or 1-303-592-1711 TRANSPORT EMERGENCY Phone: CHEMTREC 1-800-424-9300 (toll free) or 1-703-527-3887 Internet: www.henkelna.com

**2. HAZARDS IDENTIFICATION**

**EMERGENCY OVERVIEW**

<b>Physical state:</b> Liquid	<b>HEALTH:</b> 1
<b>Color:</b> Clear colorless	<b>FLAMMABILITY:</b> 0
<b>Odor:</b> None	<b>PHYSICAL HAZARD:</b> 0
	<b>Personal Protection:</b> See MSDS Section 8
<b>CAUTION:</b> CAUSES EYE, SKIN AND RESPIRATORY TRACT IRRITATION. MAY BE HARMFUL IF SWALLOWED.	

**Relevant routes of exposure:** Skin, Inhalation, Eyes, Ingestion

**Potential Health Effects**

<b>Inhalation:</b>	Inhalation of vapors or mists of the product may be irritating to the respiratory system.
<b>Skin contact:</b>	Prolonged or repeated contact may cause irritation.
<b>Eye contact:</b>	Contact with eyes can cause eye irritation.
<b>Ingestion:</b>	Not a likely route of entry. May be harmful if swallowed.

**Existing conditions aggravated by exposure:** Not available

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

See Section 11 for additional toxicological information.

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

Hazardous components	CAS NUMBER	%
Glutaric acid	110-94-1	1 - 5
Adipic acid	124-04-9	1 - 5

**Non hazardous components**

Water >90%

**4. FIRST AID MEASURES**

**Inhalation:** Move to fresh air. If adverse health effects develop seek medical attention.

**Skin contact:** Immediately wash skin thoroughly with soap and water. Obtain medical attention if irritation persists.

**Eye contact:** Rinse immediately with plenty of running water (for 10 minutes). Seek medical attention if necessary.

**Ingestion:** Do not induce vomiting. Seek medical advice.

## 5. FIRE FIGHTING MEASURES

**Flash point:** Does not flash.

**Autoignition temperature:** Not available

**Flammable/Explosive limits - lower:** Not available

**Flammable/Explosive limits - upper:** Not available

**Extinguishing media:** water, carbon dioxide, foam, powder

**Special firefighting procedures:** Wear self-contained breathing apparatus.

**Unusual fire or explosion hazards:** None

**Hazardous combustion products:** The flux medium will give rise to irritating fumes.

## 6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

**Environmental precautions:** Do not empty into drains / surface water / ground water.

**Clean-up methods:** Soak up with inert absorbent. Store in a closed container until ready for disposal.

## 7. HANDLING AND STORAGE

**Handling:** Use only in well-ventilated areas. Avoid skin and eye contact. When using do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.

**Storage:** Store in a cool, dry area.

**Shelf Life Statement: Not available**

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous components	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Glutaric acid	None	None	None	None
Adipic acid	5 mg/m <sup>3</sup> TWA	None	None	None

**Engineering controls:** General ventilation is acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA standards 1910.94, 1910.107, and 1910.108.

**Respiratory protection:** Do not inhale vapors and fumes. Ensure adequate ventilation. If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

**Eye/face protection:** Safety goggles or safety glasses with side shields.

**Skin protection:** Chemical resistant, impermeable gloves.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical state:** Liquid  
**Color:** Clear colorless  
**Odor:** None  
**Odor threshold:** Not available  
**pH:** Not available  
**Vapor pressure:** Not available  
**Boiling point/range:** Not available  
**Melting point/ range:** Not available  
**Vapor density:** Not available  
**Flash point:** Does not flash.  
**Flammable/Explosive limits - lower:** Not available  
**Flammable/Explosive limits - upper:** Not available  
**Autoignition temperature:** Not available  
**Evaporation rate:** Not available  
**Solubility in water:** Not available  
**Partition coefficient (n-octanol/water):** Not available  
**VOC content:** < 1.00 %

## 10. STABILITY AND REACTIVITY

**Stability:** Stable  
**Hazardous reactions:** Will not occur.  
**Hazardous decomposition products:** Thermal decomposition can lead to release of irritating gases and vapors.  
**Incompatible materials:** Strong oxidizing agents. Acids. Strong bases.  
**Conditions to avoid:** Stable under recommended storage conditions.

## 11. TOXICOLOGICAL INFORMATION

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Glutaric acid	No	No	No
Adipic acid	No	No	No

Hazardous components	Health Effects/Target Organs
Glutaric acid	Irritant, Nervous System
Adipic acid	Irritant, Kidney, Liver, Nervous System, Respiratory

## 12. ECOLOGICAL INFORMATION

**Ecological information:** No specific studies have been conducted by Henkel on the ecotoxicity or environmental fate of this material; however, commonly available data on the material indicate that uncontrolled releases to soil, ground water, or surface waters could entail acute and/or chronic ecological effects, depending on the quantity and concentration of such releases. Releases of volatile components to the atmosphere are not believed to entail significant ecological consequences provided such releases are within the exposure levels set forth in this document. Accordingly, all appropriate measures should be taken to avoid uncontrolled releases to the environment, and any spills or other uncontrolled releases which may occur should be contained and cleaned up immediately in accordance with Section 6.

### 13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

**Recommended method of disposal:** Dispose of according to Federal, State and local governmental regulations.  
**Hazardous waste number:** Not a RCRA hazardous waste.

### 14. TRANSPORT INFORMATION

#### U.S. Department of Transportation Ground (49 CFR)

**Proper shipping name:** Not regulated  
**Hazard class or division:** None  
**Identification number:** None  
**Packing group:** None

#### International Air Transportation (ICAO/IATA)

**Proper shipping name:** Not regulated  
**Hazard class or division:** None  
**Identification number:** None  
**Packing group:** None

#### Water Transportation (IMO/IMDG)

**Proper shipping name:** Not regulated  
**Hazard class or division:** None  
**Identification number:** None  
**Packing group:** None

### 15. REGULATORY INFORMATION

#### United States Regulatory Information

**TSCA 8 (b) Inventory Status:** All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.  
**TSCA 12(b) Export Notification:** None above reporting de minimus  
**CERCLA/SARA Section 302 EHS:** Formaldehyde (CAS# 50-00-0).  
**CERCLA/SARA Section 311/312:** Immediate Health  
**CERCLA/SARA 313:** None above reporting de minimus  
**California Proposition 65:** This product contains a chemical known in the State of California to cause cancer.

#### Canada Regulatory Information

**CEPA DSL/NDSL Status:** All components are listed on or are exempt from listing on the Canadian Domestic Substances List.  
**WHMIS hazard class:** D.2.B

### 16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: New Material Safety Data Sheet format.

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