



**Revision Date:** 05/20/2008 Issue date: 05/20/2008

## CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Hysol UF3800(77B)(-20DC)50ml M/ Product name: Item No.: 43479 / IDH No. 1178633

Product type: Underfill Region: **United States** Contact Information:

Company address: Henkel Corporation

15051 East Don Julian Road Industry, California 91746

Telephone: 626.968.6511 Emergency Telephone: 860.571.5100 Internet: www.electronics.henkel.us

# 2. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components Epoxy resin Proprietary	<u>%</u> 30-60	ACGIH TLV None	OSHA PEL None	OTHER None
Epoxy resin Proprietary	10-30	None	None	None
Acrylated epoxy Proprietary	10-30	None	None	None
Epoxy resin Proprietary	5-10	None	None	None
Substituted acrylate Proprietary	5-10	None	None	None
Glycidyl methacrylate 106-91-2	5-10	None	None	0.5 ppm, skin, dermal sensitizer TWA, (WEEL)
Acrylate monomer Proprietary	1-5	None	None	None
Carbon black 1333-86-4	0.1-1	3.5 mg/m³ TWA	3.5 mg/m³ TWA	None

# 3. HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW** 

HMIS:

Physical state: Liquid HEALTH: 2\* Color: Black FLAMMABILITY: 1 PHYSICAL HAZARD: Odor: Mild O

**Personal Protection:** See Section 8

MAY CAUSE ALLERGIC SKIN REACTION. **WARNING:** 

MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.

MAY BE HARMFUL IF SWALLOWED, ABSORBED THROUGH SKIN OR INHALED.

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

**Potential Health Effects** 

Item No.: 43479 / IDH No. 1178633 Product name: Hysol UF3800(77B)(-20DC)50ml M/ Inhalation: May be harmful if inhaled. May cause respiratory tract irritation. May cause irritation to nose and throat.

Coughing. May cause central nervous system effects with nausea, dizziness and headache.

Skin contact: May be harmful if absorbed through skin. May cause allergic skin reaction. Moderate skin irritation.

Rash. Itching. Redness. Prolonged contact with skin may cause dermatitis.

Eye contact: Moderate eye irritation. May cause transient (temporary) corneal injury. Pain and discomfort. Swelling.

Stinging. Excess tearing. Redness.

Ingestion: May be harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and

diarrhea.

Existing conditions aggravated by

exposure:

Eye, skin, and respiratory disorders. Skin allergies.

See Section 11 for additional toxicological information.

#### 4. FIRST AID MEASURES

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If

symptoms develop and persist, get medical attention.

Skin contact: Remove contaminated clothing and shoes. Immediately flush skin with plenty of water (using soap, if

available). Get medical attention if symptoms develop and persist. Wash clothing before reuse.

Thoroughly clean shoes before reuse.

Eye contact: Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15

minutes. Get medical attention.

**Ingestion:** DO NOT induce vomiting unless directed to do so by medical personnel. Give a conscious person

several glasses of water. Never give anything by mouth to an unconscious person. Get medical

attention if symptoms develop and persist.

### 5. FIRE-FIGHTING MEASURES

Flash point: Greater than 86°C (186.8°F)

Autoignition temperature: Not available

Flammable/Explosive limits-lower %: Not available

Flammable/Explosive limits-upper %: Not available

**Extinguishing media:** Water spray (fog), foam, dry chemical or carbon dioxide.

Special fire fighting procedures: Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear. Use water

spray to keep fire exposed containers cool.

Unusual fire or explosion hazards: None

Hazardous combustion products: Oxides of carbon. Oxides of nitrogen. Aldehydes. Phenolics. Acids. tert-Butanol. Heptanes

#### 6. ACCIDENTAL RELEASE MEASURES

**Environmental precautions:** Prevent product from entering drains or open waters.

Clean-up methods: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

Remove the absorbed material, and place in an appropriate chemical waste container for disposal.

#### 7. HANDLING AND STORAGE

Handling: Use only with adequate ventilation. Avoid contact with eyes, skin and clothing. Do not taste or swallow.

Do not breathe mist or vapors. Keep container closed. Wash thoroughly after handling.

Storage: Keep in a cool, well ventilated area away from heat, sparks and open flame. Keep container tightly

closed until ready for use.

Incompatible products: Refer to Section 10.

For information on product shelf life contact Henkel Customer Service at (626) 968-6511

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering controls: Local exhaust ventilation is recommended when general ventilation is not sufficient to control airborne

contamination below occupational exposure limits.

**Respiratory protection:** Use NIOSH approved respirator if there is potential to exceed exposure limit(s).

**Skin protection:** Use impermeable gloves and protective clothing as necessary to prevent skin contact.

Eye/face protection: Chemical splash goggles or safety glasses with side shields. Full face protection should be used if the

potential for splashing or spraying of product exists.

See Section 2 for exposure limits.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid Color: Black Odor: Mild

Vapor pressure:Not availablepH:Not applicableBoiling point/range:Not availableMelting point/range:Not availableSpecific gravity:1.13

Vapor density:

Evaporation rate:

Solubility in water:

Partition coefficient (n-octanol/water):

VOC content:

Not available
Insoluble.

Not available
Not available

# 10. STABILITY AND REACTIVITY

Stability: Stable at normal conditions

**Hazardous polymerization:** None under normal processing.

Hazardous decomposition products: Oxides of carbon. Oxides of nitrogen. Aldehydes. Phenolics.

Incompatability: Oxidizing agents. Acids and bases. Amines. Alkalis. Water.

Conditions to avoid: Storage with incompatible materials. Heat, flames, sparks and other sources of ignition. Exposure to

sunlight. Exposure to moisture.

### 11. TOXICOLOGICAL INFORMATION

#### Carcinogen Status

Item No.: 43479 / IDH No. 1178633 Product name: Hysol UF3800(77B)(-20DC)50ml M/

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen
Epoxy resin Proprietary	No	No	No
Epoxy resin Proprietary	No	No	No
Acrylated epoxy Proprietary	No	No	No
Epoxy resin Proprietary	No	No	No
Substituted acrylate Proprietary	No	No	No
Glycidyl methacrylate 106-91-2	No	No	No
Acrylate monomer Proprietary	No	No	No
Carbon black 1333-86-4	No	Group 2B	Yes

## **Literature Referenced Target Organ & Other Health Effects**

Hazardous components	Health Effects/Target Organs	
Epoxy resin Proprietary	Allergen, Irritant	
Epoxy resin Proprietary	Allergen, Irritant	
Acrylated epoxy Proprietary	Allergen, Irritant	
Epoxy resin Proprietary	Allergen, Irritant	
Substituted acrylate Proprietary	No Records	
Glycidyl methacrylate 106-91-2	Allergen, Central nervous system, Irritant	
Acrylate monomer Proprietary	Allergen, Irritant	
Carbon black 1333-86-4	Respiratory, Some evidence of carcinogenicity	

# 12. ECOLOGICAL INFORMATION

Ecological information: Not available

# 13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

**Recommended method of disposal:** Dispose of according to Federal, State and local governmental regulations.

**EPA hazardous waste number:** Not a RCRA hazardous waste.

# **14. TRANSPORT INFORMATION**

The shipping classifications in this section are for non-bulk packaging only (unless otherwise specified). Shipping classification may be different for bulk packaging.

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

Proper shipping name: Not regulated (Up to 250 ml when shipped as originally packaged by Henkel only)

Item No.: 43479 / IDH No. 1178633 Product name: Hysol UF3800(77B)(-20DC)50ml M/

Hazard class or division: None Identification number: None Packing group: None

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

Proper shipping name: Not regulated (Up to 250 ml when shipped as originally packaged by Henkel only)

Hazard class or division:
Identification number:
Packing group:
None

WaterTransportation (IMO/IMDG):

Proper shipping name: Not regulated (Up to 250 ml when shipped as originally packaged by Henkel only)

Hazard class or division:
Identification number:
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: None above reporting de minimus.

CERCLA/SARA Section 311/312: Immediate Health Hazard, Delayed Health Hazard

CERCLA/SARA 313: None above reporting de minimus.

California Proposition 65: This product contains a chemical known to the State of California to cause cancer and birth defects or

other reproductive harm.

#### **Canada Regulatory Information**

CEPA DSL/NDSL Status: Contains one or more components listed on the Non-Domestic Substances list. All other components

are listed on or are exempt from listing on the Domestic Substances List.

WHMIS hazard class: D.2.A, D.2.B

### **16. OTHER INFORMATION**

This material safety data sheet contains changes from the previous version in sections: First issue.

Prepared by: Gary Pierson, Sr. Product Safety and Regulatory Affairs Specialist

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