

**Revision Date:** 04/27/2005

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## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<b>Product name:</b> SYNSPAND X9899 CF 100 MIL <b>Product type:</b> Adhesive for the Aerospace Industry <b>Company address:</b> Henkel Corporation 2850 Willow Pass Road Bay Point, California 94565	<b>Item No. :</b> SC9092502 / IDH No. 549958 <b>Region:</b> United States <b>Contact Information:</b> Telephone: 925.458.8000 Fax : 925.458.8030. Emergency Telephone: 860.571.5100. Internet www.aerospace.henkel.us
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## 2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous components</u>	<u>%</u>	<u>ACGIH TLV</u>	<u>OSHA PEL</u>	<u>OTHER</u>
Phenol, polymer with formaldehyde, glycidyl ether 28064-14-4	30-60	None	None	None
Soda lime borosilicate glass 65997-17-3	10-30	1 f/cc TWA respirable fibers: length > 5 µm, aspect ratio equal to or greater than 3:1, as determined by the membrane filter method at 400-450X magnification (4-mm objective), using phase-contrast illumination. 5 mg/m³ TWA inhalable fraction	None	None
Epoxy resin Proprietary	10-30	None	None	None
Epichlorohydrin-4,4'-isopropylidene diphenol resin 25068-38-6	10-30	None	None	None
Aromatic polyamine Proprietary	1-5	None	None	None
2-Methyl butane 78-78-4	1-5	600 ppm TWA listed under pentane, all isomers	None	None

**Non hazardous components**  
Polyethylene and paper

## 3. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

<b>Physical state:</b> Solid Film	<b>HEALTH:</b>	2*
<b>Color:</b> Green	<b>FLAMMABILITY:</b>	1
<b>Odor:</b> Slight	<b>PHYSICAL HAZARD:</b>	1
	<b>Personal Protection:</b>	See Section 8

**WARNING:** MAY CAUSE EYE AND SKIN IRRITATION.  
MAY CAUSE ALLERGIC SKIN REACTION.  
MAY BE HARMFUL IF SWALLOWED.

**Relevant routes of exposure:** Skin

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## Potential Health Effects

<b>Inhalation:</b>	May cause respiratory tract irritation. This product contains an ingredient that may be carcinogenic in its respirable form. However, since the ingredient is completely encapsulated by the epoxy resin, only if the cured product is dry sanded, ground, or abraded, might the carcinogenic material be released. In that case, wear a NIOSH approved respirator to protect against the potential release.
<b>Skin contact:</b>	May cause skin irritation. May cause allergic skin reaction.
<b>Eye contact:</b>	May cause irritation.
<b>Ingestion:</b>	Not expected under normal conditions of use.

**Existing conditions aggravated by exposure:** Eye, skin, and respiratory disorders.

**See Section 11 for additional toxicological information.**

## **4. FIRST AID MEASURES**

<b>Inhalation:</b>	Remove to fresh air. If discomfort persists seek medical attention.
<b>Skin contact:</b>	Wash with soap and water. If a person feels unwell or symptoms of skin irritation appear, consult a physician.
<b>Eye contact:</b>	In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
<b>Ingestion:</b>	Drink water as a precaution. Get medical attention if symptoms develop and persist.

## **5. FIRE-FIGHTING MEASURES**

<b>Flash point:</b>	Greater than 93°C (200°F) (estimated)
<b>Autoignition temperature:</b>	Not determined
<b>Flammable/Explosive limits-lower %:</b>	Not determined
<b>Flammable/Explosive limits-upper %:</b>	Not available
<b>Extinguishing media:</b>	Water spray (fog), foam, dry chemical or carbon dioxide.
<b>Special fire fighting procedures:</b>	Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear. Cartridge respirators do not provide adequate protection for fire fighters or exotherm mitigation.
<b>Unusual fire or explosion hazards:</b>	May liberate large quantities of dense, foul-smelling smoke which may contain unidentified toxic gasses.
<b>Hazardous combustion products:</b>	Oxides of carbon and nitrogen, aldehydes, acids and undetermined organics.

## **6. ACCIDENTAL RELEASE MEASURES**

<b>Environmental precautions:</b>	No information available
<b>Clean-up methods:</b>	Scrape up as much material as possible. Store in a closed container until ready for disposal.

## **7. HANDLING AND STORAGE**

<b>Handling:</b>	Avoid contact with eyes, skin and clothing. Keep cool in accordance with information on label and in Technical Data Sheets.
<b>Storage:</b>	Refrigerated storage is recommended to maintain product quality. This product may be stored at -18°C (0°F) for up to 12 months.
<b>Incompatible products:</b>	Keep away from strong oxidizing agents, strong Lewis or mineral acids.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>Engineering controls:</b>	Local exhaust ventilation is recommended when general ventilation is not sufficient to control airborne contamination below occupational exposure limits.
<b>Respiratory protection:</b>	When workplace hazards warrant the use of a respirator, appropriate respirators must be used, and a program that follows 29 CFR 1910.134 must be followed.
<b>Skin protection:</b>	Use chemical resistant, impermeable clothing including gloves and either an apron or body suit to prevent skin contact.
<b>Eye/face protection:</b>	Wear appropriate goggles, face shields or other PPE which will be effective under the circumstances if the possibility of contact exists. A program meeting 29 CFR 1910.133 requirements must be followed when PPE is necessary.

See Section 2 for exposure limits.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Solid Film
<b>Color:</b>	Green
<b>Odor:</b>	Slight
<b>Vapor pressure:</b>	Nil
<b>pH:</b>	Not available
<b>Boiling point/range:</b>	Not available
<b>Melting point/range:</b>	Not available
<b>Specific gravity:</b>	0.78
<b>Vapor density:</b>	Greater than 1
<b>Evaporation rate:</b>	Not available
<b>Solubility in water:</b>	Negligible.
<b>Partition coefficient (n-octanol/water):</b>	Not available
<b>VOC content:</b>	<10 g/l (estimate) per SCAQMD Rule 1124 [EPA Test Method 24/304-91]

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable.
<b>Hazardous polymerization:</b>	May occur.
<b>Hazardous decomposition products:</b>	Oxides of carbon and nitrogen, aldehydes, acids and undetermined organics.
<b>Incompatibility:</b>	Keep away from strong oxidizing agents, strong Lewis or mineral acids.
<b>Conditions to avoid:</b>	Avoid heating unless curing surfaces to be bonded. Failure to observe these precautions may result in excessive heat build-up causing an exotherm. The exotherm has the potential for release of toxic gasses.

## 11. TOXICOLOGICAL INFORMATION

### Carcinogen Status

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen
Phenol, polymer with formaldehyde, glycidyl ether 28064-14-4	No	No	No
Soda lime borosilicate glass 65997-17-3	Suspect Carcinogen	No	Yes
Epoxy resin Proprietary	No	No	No
Epichlorohydrin-4,4'-isopropylidene diphenol resin 25068-38-6	No	No	No
Aromatic polyamine Proprietary	No	No	No
2-Methyl butane 78-78-4	No	No	No

### Literature Referenced Target Organ & Other Health Effects

Hazardous components	Health Effects/Target Organs
Phenol, polymer with formaldehyde, glycidyl ether 28064-14-4	Allergen, Irritant
Soda lime borosilicate glass 65997-17-3	Allergen, Respiratory
Epoxy resin Proprietary	Allergen, Irritant
Epichlorohydrin-4,4'-isopropylidene diphenol resin 25068-38-6	Allergen, Irritant
Aromatic polyamine Proprietary	Blood, Nervous System, Eyes, Skin, Kidney, Irritant, Allergen
2-Methyl butane 78-78-4	Cardiac, Central nervous system, Irritant, Lung

## 12. ECOLOGICAL INFORMATION

Ecological information: Not available

## 13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Dispose of in accordance with Federal, State and local regulations.

EPA hazardous waste number: Not a RCRA hazardous waste.

## 14. TRANSPORT INFORMATION

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

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

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

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

### Water Transportation (IMO/IMDG):

Proper shipping name: Not restricted  
Hazard class or division: None  
Identification number: None  
Packing group: None  
Marine pollutant: None

## 15. REGULATORY INFORMATION

### United States Regulatory Information

<b>TSCA 8 (b) Inventory Status:</b>	All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.
<b>TSCA 12 (b) Export Notification:</b>	None.
<b>CERCLA/SARA Section 302 EHS:</b>	None.
<b>CERCLA/SARA Section 311/312:</b>	Immediate Health Hazard, Delayed Health Hazard
<b>CERCLA/SARA 313:</b>	None.
<b>California Proposition 65:</b>	This product contains a chemical known to the State of California to cause cancer.

### Canada Regulatory Information

<b>CEPA DSL/NDSL Status:</b>	Not fully investigated.
<b>WHMIS hazard class:</b>	D.2.B, If the cured material is to be dry sanded, ground, or abraded, then the material becomes a D2A.

## 16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: 3,15

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