



Revision Number: 011.1

Issue date: 05/12/2023

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: LOCTITE ECCOBOND 3593 US Label
30CC SY
Product type/use: Underfill
Restriction of Use: None identified
Company address:
Henkel Corporation
One Henkel Way
Rocky Hill, Connecticut 06067

IDH number: 2892041
Item number: 47381
Region: United States
Contact information:
Telephone: +1 (860) 571-5100
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**

WARNING: CAUSES SKIN IRRITATION.
MAY CAUSE AN ALLERGIC SKIN REACTION.

HAZARD CLASS	HAZARD CATEGORY
SKIN IRRITATION	2
SKIN SENSITIZATION	1

PICTOGRAM(S)**Precautionary Statements**

Prevention: Avoid breathing vapors, mist, or spray. Wash affected area thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves.

Response: IF ON SKIN: Wash with plenty of water/... If skin irritation or rash occurs: Get medical attention. Take off contaminated clothing.

Storage: Not prescribed

Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
Bisphenol-F Epichlorhydrin resin	9003-36-5	80 - 100
Formaldehyde polymer with phenol	9003-35-4	1 - 5
Carbon black - Nano	1333-86-4	0.1 - 1

* Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Inhalation:	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Skin contact:	Remove contaminated clothing and footwear. Immediately flush skin with plenty of water (using soap, if available). If symptoms develop and persist, get medical attention. Wash clothing before reuse.
Eye contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
Ingestion:	Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention.
Symptoms:	See Section 11.

5. FIRE FIGHTING MEASURES

Extinguishing media:	Water spray (fog), foam, dry chemical or carbon dioxide.
Special firefighting procedures:	Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear. In case of fire, keep containers cool with water spray.
Unusual fire or explosion hazards:	None
Hazardous combustion products:	Oxides of carbon. Oxides of nitrogen. Ammonia. Aldehydes. Toxic and irritating vapors.

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 allow product to enter sewer or waterways.
Clean-up methods:	Ensure adequate ventilation. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Store in a partly filled, closed container until disposal. Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up.

7. HANDLING AND STORAGE

Handling:	Use only with adequate ventilation. Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Do not taste or swallow. Keep container closed. Refer to Section 8.
Storage:	Keep in a cool, well ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready for use.

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

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 Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Bisphenol-F Epichlorhydrin resin	None	None	None	None
Formaldehyde polymer with phenol	None	None	None	None
Carbon black - Nano	3 mg/m3 TWA Inhalable fraction.	3.5 mg/m3 PEL 5 mg/m3 TWA Respirable fraction. 50 MPPCF TWA Total dust. 15 MPPCF TWA Respirable fraction. 15 mg/m3 TWA Total dust.	None	None

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).
Eye/face protection:	Safety goggles or safety glasses with side shields. Safety showers and eye wash stations should be available.
Skin protection:	Use impermeable gloves and protective clothing as necessary to prevent skin contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid, Paste
Color:	Black
Odor:	None
Odor threshold:	Not available.
pH:	Not applicable, Product is non-soluble (in water).
Vapor pressure:	5.0 mm hg (20 °C (68°F))
Boiling point/range:	Not available.
Melting point/ range:	Not applicable, Product is a liquid
Specific gravity:	1.18
Vapor density:	Not available.
Flash point:	> 93 °C (> 199.4 °F) Tagliabue closed cup
Flammable/Explosive limits - lower:	Not available.
Flammable/Explosive limits - upper:	Not available.
Autoignition temperature:	Not available.
Flammability:	Not flammable.
Evaporation rate:	Not available.
Solubility in water:	Not miscible
Partition coefficient (n-octanol/water):	Not available.
VOC content:	< 0.09 %; < 1.00 g/l
Viscosity:	Not available.
Decomposition temperature:	Not available.

10. STABILITY AND REACTIVITY

Stability:	Stable at normal conditions.
Hazardous reactions:	None under normal processing.
Hazardous decomposition products:	Oxides of carbon. Oxides of nitrogen. Nitric acid. Ammonia. Aldehydes. Hydrocarbons. Amide. Cyanic acids. Isocyanates. Carbamates. Toxic cyanates. Cyanogen.
Incompatible materials:	Oxidizing agents. Acids. Alkalis. Amines. Acid anhydrides. Reactive metals. Materials reactive with hydroxyl compounds. Sodium hypochlorite.
Reactivity:	Not available.
Conditions to avoid:	Store away from incompatible materials. Heat, flames, sparks and other sources of ignition.

11. TOXICOLOGICAL INFORMATION

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

Potential Health Effects/Symptoms

Inhalation: May cause respiratory tract irritation.
Skin contact: Causes skin irritation. May cause allergic skin reaction.
Eye contact: May cause irritation.
Ingestion: May cause gastrointestinal tract irritation if swallowed. Aspiration may occur during swallowing or vomiting, resulting in lung damage.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Bisphenol-F Epichlorhydrin resin	None	Allergen, Irritant
Formaldehyde polymer with phenol	None	Allergen, Corrosive, Irritant, Kidney, Respiratory, Skin
Carbon black - Nano	Oral LD50 (Rat) = > 8,000 mg/kg	No Data

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Bisphenol-F Epichlorhydrin resin	No	No	No
Formaldehyde polymer with phenol	No	No	No
Carbon black - Nano	No	Group 2B	No

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any packaging.

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

Proper shipping name: Not regulated (Up to 20 oz. max per inner/primary package when shipped as originally packaged only)
Hazard class or division: None
Identification number: None
Packing group: None

International Air Transportation (ICAO/IATA)

Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (Bisphenol-F Epichlorhydrin resin) (Up to 20 oz. max per inner/primary package when shipped as originally packaged only)
Hazard class or division: 9
Identification number: UN 3082
Packing group: III

Water Transportation (IMO/IMDG)

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol-F Epichlorhydrin resin) (Up to 20 oz. max per inner/primary package when shipped as originally packaged only)
Hazard class or division: 9
Identification number: UN 3082
Packing group: III
Marine pollutant: Bisphenol-F Epichlorhydrin resin

15. REGULATORY INFORMATION

United States Regulatory Information

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

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. Components listed on the NDSL must be tracked by all Canadian Importers of Record as required by Environment Canada. They may be imported into Canada in limited quantities. Please contact Regulatory Affairs for additional details.
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16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: Reviewed SDS. Reissued with new date.

Prepared by: Product Safety and Regulatory Affairs

Issue date: 05/12/2023

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