



Revision Number: 003.2

Issue date: 02/20/2025

1. IDENTIFICATION

Product name:	LOCTITE ECCOBOND FP4545FC known as 10CC FP4545FC -40CD	IDH number:	945398
Product type/	Encapsulant	Item number:	FP4545-V20
Recommended use:		Region:	United States
Restriction of Use:	None identified	Contact information:	
Company address:	Henkel Corporation One Henkel Way Rocky Hill, Connecticut 06067	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
		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

This product contains an epoxy resin CAS # 27610-48-6 that is covered by a USEPA Significant New Use Requirement (SNUR) (40CFR 721.5192) that limits its use to binding fibers in aerospace composites or for encapsulating electronic devices. It is a violation of the SNUR to use this product for any other application.

This product contains one or more components regulated under a Significant New Use Rule (SNUR) by the US EPA. See Section 15 for more information.

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

DANGER:

- H315 - CAUSES SKIN IRRITATION.
- H317 - MAY CAUSE AN ALLERGIC SKIN REACTION.
- H318 - CAUSES SERIOUS EYE DAMAGE.
- H334 - MAY CAUSE ALLERGY OR ASTHMA SYMPTOMS OR BREATHING DIFFICULTIES IF INHALED.
- H341 - SUSPECTED OF CAUSING GENETIC DEFECTS.
- H351 - SUSPECTED OF CAUSING CANCER.
- H361 - SUSPECTED OF DAMAGING FERTILITY OR THE UNBORN CHILD.
- H373 - MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE.

HAZARD CLASS	HAZARD CATEGORY
SKIN IRRITATION	2
SERIOUS EYE DAMAGE	1
RESPIRATORY SENSITIZATION	1
SKIN SENSITIZATION	1
GERM CELL MUTAGENICITY	2
CARCINOGENICITY	2
REPRODUCTIVE TOXICITY	2
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	2

PICTOGRAM(S)



Precautionary Statements

IDH number: 945398

Product name: LOCTITE ECCOBOND FP4545FC known as 10CC FP4545FC -40CD

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Prevention:	P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P260 - Do not breathe vapors, mist, or spray. P264 - Wash affected area thoroughly after handling. P272 - Contaminated work clothing should not be allowed out of the workplace. P280 - Wear protective gloves, clothing, eye and face protection. P284 - [In case of inadequate ventilation] wear respiratory protection.
Response:	P302+P352 - IF ON SKIN: Wash with plenty of water. P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308+P313 - IF exposed or concerned: Get medical attention. P333+P313 - If skin irritation or rash occurs: Get medical attention. P342+P311 - If experiencing respiratory symptoms: Call a poison center or physician. P362+P364 - Take off contaminated clothing and wash it before reuse.
Storage:	P405 - Store locked up.
Disposal:	P501 - Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

Other hazards Not available.

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	Weight %*
hexahydromethylphthalic anhydride	25550-51-0	10 - 30
6-glycidyloxynapht-1-yl oxymethyloxirane	27610-48-6	10 - 30
2-Propenenitrile, polymer with 1,3-butadiene, carboxy-terminated, polymer with 2,2'-[(2,2-dimethyl-1,3-propanediyl)bis(oxymethylene)]	68909-14-8	1 - 5
Neopentyl glycol diglycidyl ether	17557-23-2	1 - 5
7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate	2386-87-0	1 - 5

Hazardous Component(s)	CAS Number	Weight %*
Si-oxide amorphous (fumed)	7631-86-9	30 - 60
hexahydromethylphthalic anhydride	25550-51-0	10 - 30
6-glycidyloxynapht-1-yl oxymethyloxirane	27610-48-6	10 - 30
2-Propenenitrile, polymer with 1,3-butadiene, carboxy-terminated, polymer with 2,2'-[(2,2-dimethyl-1,3-propanediyl)bis(oxymethylene)]	68909-14-8	1 - 5
Neopentyl glycol diglycidyl ether	17557-23-2	1 - 5
7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate	2386-87-0	1 - 5

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

4. FIRST AID MEASURES

First Aid Measures by likely routes of exposure

Inhalation:	If not breathing, give artificial respiration. If breathing is difficult, oxygen should be administered by qualified personnel. Move to fresh air. If symptoms persist, seek medical advice.
Skin contact:	Rinse with running water and soap. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse. Thoroughly clean shoes before reuse. Discard any shoes or clothing items that cannot be decontaminated. If symptoms develop and persist, get medical attention.

Eye contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek medical attention immediately.
Ingestion:	Never give anything by mouth to an unconscious person. DO NOT induce vomiting unless directed to do so by medical personnel.
Most important symptoms and effects (acute and delayed):	The most important known symptoms and effects, both acute and delayed, are described in Section 11: Toxicological Information.
Indication of any immediate medical attention / special treatment needed:	Not available.

5. FIRE FIGHTING MEASURES

Extinguishing media:	Water spray (fog), foam, dry chemical or carbon dioxide.
Improper extinguishing agents:	Not available.
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:	Water or foam may cause frothing. Closed containers may rupture (due to build up of pressure) when exposed to extreme heat.
Hazardous combustion products:	Oxides of carbon. Oxides of nitrogen. Phenolics. Aldehydes. Hydrocarbons.

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:	Remove all sources of ignition. Ensure adequate ventilation. Isolate area. Keep unnecessary personnel away. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Store in a closed container until ready for 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. Keep container closed. See Section 8 of the SDS for Personal Protective Equipment.
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
Si-oxide amorphous (fumed)	3 mg/m3 TWA Respirable particles. 10 mg/m3 TWA Inhalable particles. 6 mg/m3 TWA	15 MPPCF TWA Respirable fraction. 50 MPPCF TWA Total dust. 15 mg/m3 TWA Total dust. 5 mg/m3 TWA Respirable fraction. 20 MPPCF TWA 0.8 mg/m3 TWA	None	3 mg/m3 TWA Respirable fraction.
6-glycidyloxynapht-1-yl oxymethyloxirane	None	None	None	0.1 ppm TWA

Engineering controls:	Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.
Respiratory protection:	Use NIOSH approved respirator if there is potential to exceed exposure limit(s).
Eye/face protection:	Full face protection should be used if the potential for splashing or spraying of product exists. Safety goggles or safety glasses with side shields. Safety showers and eye wash stations should be available.
Skin protection:	Use chemical resistant, impermeable clothing including gloves and either an apron or body suit to prevent skin contact. 4H gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Color:	Black
Odor:	Odorless
Odor threshold:	Not available.
pH:	Not applicable, Product is non-soluble (in water).
Vapor pressure:	< 3 hPa (20 °C (68°F))
Boiling point/range:	Not applicable, Decomposes before boiling point is reached
Melting point/ range:	Not applicable, Product is a liquid
Density/Relative density:	1.8
Relative vapor density:	3.8 20 °C
Flash point:	> 100 °C (> 212°F)
Flammable/Explosive limits - lower:	Not available.
Flammable/Explosive limits - upper:	Not available.
Autoignition temperature:	Not available.
Flammability:	non flammable
Evaporation rate:	Not available.
Solubility:	Insoluble Water
Partition coefficient n-octanol/water (logarithmic value):	Not available.
VOC content:	0.02 %; 0.32 g/l (calculated)
Dynamic viscosity:	Not available.
Kinematic viscosity:	> 30 mm ² /s
Particle characteristics:	Not applicable, Product is a liquid
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. Phenolics. Aldehydes. Hydrocarbons.
Incompatible materials:	Alcohols. Water. Strong acids and strong bases. Amines. Strong oxidizing agents.
Reactivity:	Not available.
Conditions to avoid:	Exposure to moisture. Heat, flames, sparks and other sources of ignition. Store away from incompatible materials.

11. TOXICOLOGICAL INFORMATION

Product toxicity data:	The U.S. Environmental Protection Agency (EPA) has identified certain substances that are structurally similar to the epoxy resin component with CAS # 27610-48-6. These analogues are phenylglycidylether and diglycidylether of resorcinol. Based on the results of animal bioassays on these analogues, the EPA finds that the epoxy resin component (CAS # 27610-48-6) may be carcinogenic and may cause reproductive effects. The epoxy resin is expected to be absorbed via all routes.
Likely routes of exposure:	Skin, Inhalation, Eyes, Ingestion

Potential Health Effects/Symptoms

Inhalation:	May cause respiratory tract irritation. May cause allergic respiratory reaction.
Skin contact:	Causes skin irritation. May cause allergic skin reaction.
Eye contact:	Causes serious eye irritation.
Ingestion:	May cause gastrointestinal tract irritation if swallowed.

Hazardous Component(s)	LD50s and LC50s
hexahydromethylphthalic anhydride	None
6-glycidyloxynapht-1-yl oxymethyloxirane	None
2-Propenenitrile, polymer with 1,3-butadiene, carboxy-terminated, polymer with 2,2'-[(2,2-dimethyl-1,3-propanediyl)bis(oxymethylene)]	None
Neopentyl glycol diglycidyl ether	None
7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate	None

Hazardous Component(s)	LD50s and LC50s
Si-oxide amorphous (fumed)	Oral LD50 (Rat) = > 22,500 mg/kg Oral LD50 (Mouse) = > 15,000 mg/kg Inhalation LC50 (Rat, 4 h) = > 2.08 mg/l Inhalation LC50 (Rat, 4 h) = > 0.69 mg/l
hexahydromethylphthalic anhydride	None
6-glycidyloxynapht-1-yl oxymethyloxirane	None
2-Propenenitrile, polymer with 1,3-butadiene, carboxy-terminated, polymer with 2,2'-[(2,2-dimethyl-1,3-propanediyl)bis(oxymethylene)]	None
Neopentyl glycol diglycidyl ether	None
7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate	None

Hazardous Component(s)	Immediate Health Effects	Delayed Health Effects	Chronic Health Effects
hexahydromethylphthalic anhydride	Irritant	Allergen	Respiratory
6-glycidyloxynapht-1-yl oxymethyloxirane	Irritant	Allergen	Blood Reproductive
2-Propenenitrile, polymer with 1,3-butadiene, carboxy-terminated, polymer with 2,2'-[(2,2-dimethyl-1,3-propanediyl)bis(oxymethylene)]	Irritant	Allergen	Blood Bone Marrow Immune system Reproductive
Neopentyl glycol diglycidyl ether	Irritant	Allergen	Blood Bone Marrow Immune system Reproductive
7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate	Irritant	Allergen	

Hazardous Component(s)	Immediate Health Effects	Delayed Health Effects	Chronic Health Effects
Si-oxide amorphous (fumed)	Nuisance dust		
hexahydromethylphthalic anhydride	Irritant	Allergen	Respiratory
6-glycidyloxynapht-1-yl oxymethyloxirane	Irritant	Allergen	Blood Reproductive
2-Propenenitrile, polymer with 1,3-butadiene, carboxy-terminated, polymer with 2,2'-[(2,2-dimethyl-1,3-propanediyl)bis(oxymethylene)]	Irritant	Allergen	Blood Bone Marrow Immune system Reproductive
Neopentyl glycol diglycidyl ether	Irritant	Allergen	Blood Bone Marrow Immune system Reproductive
7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate	Irritant	Allergen	

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
hexahydromethylphthalic anhydride	No	No	No
6-glycidyloxynapht-1-yl oxymethyloxirane	No	No	No
2-Propenenitrile, polymer with 1,3-butadiene, carboxy-terminated, polymer	No	No	No

with 2,2'-[(2,2-dimethyl-1,3-propanediyl)bis(oxymethylene)]			
Neopentyl glycol diglycidyl ether	No	No	No
7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate	No	No	No

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Si-oxide amorphous (fumed)	No	No	No
hexahydromethylphthalic anhydride	No	No	No
6-glycidyloxynapht-1-yl oxymethyloxirane	No	No	No
2-Propenenitrile, polymer with 1,3-butadiene, carboxy-terminated, polymer with 2,2'-[(2,2-dimethyl-1,3-propanediyl)bis(oxymethylene)]	No	No	No
Neopentyl glycol diglycidyl ether	No	No	No
7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate	No	No	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. Any process stream associated with the use of this product must be disposed of by incineration or in a landfill. This provision, however, does not supersede any applicable federal, state or local laws and regulations.

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 30 ml 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: Not regulated (Up to 30 ml max per inner/primary package when shipped as originally packaged only)
Hazard class or division: None
Identification number: None
Packing group: None

Water Transportation (IMO/IMDG)

Proper shipping name: Not regulated (Up to 30 ml max per inner/primary package when shipped as originally packaged only)
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 as active or are exempt from listing on the Toxic Substances Control Act (TSCA) inventory.

TSCA 5(a) SNUR:

This product contains the following component(s) subject to a Significant New Use Rule (SNUR) by the US EPA:

6-glycidyloxynapht-1-yl oxymethyloxirane (CAS # 27610-48-6). The SNUR is codified at Section number: 40 CFR 721.5192

TSCA 5(a) SNUR Additional Details:

This product contains an ingredient for which a Significant New Use Rule (SNUR) has been promulgated by the USEPA under the Toxic Substances Control Act (TSCA) section 5(a)(2). This SNUR (40CFR 721.5192) limits its use to binding fibers in aerospace composites or for encapsulating electronic devices. It is in violation of the SNUR to use this product for any other application. Manufacture, import, distribution, use and disposition of this product is restricted to the requirements listed in 40 CFR.

TSCA 12 (b) Export Notification:

Substituted 1,6-dihydroxy naphthalene (CAS# 27610-48-6).

CERCLA/SARA Section 302 EHS:

Acrylonitrile (CAS# 107-13-1). Aniline (CAS# 62-53-3). Epichlorohydrin (CAS# 106-89-8). Formaldehyde (CAS# 50-00-0).

CERCLA/SARA Section 311/312:

Please refer to the GHS classification in Section 2

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. This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Canada Regulatory Information

CEPA DSL/NDSL Status:

One or more components are not listed on, and are not exempt from listing on either the Domestic Substances List or the Non-Domestic Substances List.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: First issue. First issue. 2, 3

Prepared by:

Product Safety and Regulatory Affairs

Issue date:

02/20/2025

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