



MATERION

Product name: MEG-150 Epoxy

CHEMICAL PRODUCT SAFETY DATA SHEET

Prepared in accordance with GB/T 16483 and GB/T 17519.

Issue date: 05-27-2021

Version #: 01

SDS No: F01

SECTION 1 Chemical product and company identification

Chinese name of chemical	MEG-150 环氧
English name of chemical	MEG-150 Epoxy
Manufacturer/Supplier	Materion Advanced Materials
Address	6070 Parkland Boulevard Mayfield Heights, OH 44124 United States
Contact person	Theodore Knudson
Telephone	1.216.383.4019
e-mail	ehs@materion.com
Emergency telephone number	See Section 16.
Issue date	05-27-2021
SDS No	F01

SECTION 2 Hazards identification

Emergency overview Harmful in contact with skin. Causes skin irritation. Suspected of causing cancer. Suspected of causing genetic defects. May cause an allergic skin reaction. Causes damage to organs.

GHS hazard categories	
Physical hazards	Not classified.
Health hazards	Acute toxicity, dermal Category 3 Skin corrosion/irritation Category 2 Sensitization, skin Category 1B Germ cell mutagenicity Category 2 Carcinogenicity Category 2 Specific target organ toxicity, single exposure Category 1
Environmental hazards	Not classified.

Label elements

Pictograms



Signal word

Danger

Hazard statement

H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H341	Suspected of causing genetic defects.
H351	Suspected of causing cancer.
H370	Causes damage to organs.

Precautionary statement

Prevention

P201

Observe good industrial hygiene practices.
Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.
 P281 Use personal protective equipment as required.
 P272 Contaminated work clothing should not be allowed out of the workplace.

Response

P332 + P313 If skin irritation occurs: Get medical advice/attention.
 P363 Wash contaminated clothing before reuse.
 P308 + P313 If exposed or concerned: Get medical advice/attention.

Storage

P405 Store locked up.

Disposal

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Physical and chemical hazards

None known.

Health hazards

May cause an allergic skin reaction.

Environmental hazards

Not expected to be harmful to aquatic organisms.

Supplemental information

For further information, please contact the Product Stewardship Department at +1.216.383.4019.

SECTION 3 Composition/information on ingredients

Substance/mixture	Mixture		
Chemical name		Concentration (%)	CAS Number
聚酰胺 Polyamide		45 - 75	63428-84-2
NEEDED - CHINESE NAME OR TRADE NAME WITH CHINESE USER DESCRIPTOR. Diglycidyl Resorcinol Ether		20 - 22	101-90-6
专利成份 PROPRIETARY INGREDIENTS		7 - 13	N/A
甲醇 Methanol		0 - 2	67-56-1
氧化钛 (TiO2) Titanium Oxide (TiO2)		0 - 1.5	13463-67-7

SECTION 4 First aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.

Skin contact Wash off with soap and water. Wash contaminated clothing before reuse. Get medical attention if irritation develops and persists.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and persists.

Ingestion No adverse effects due to ingestion are expected.

Most important symptoms and health effects Not available.

Personal protection for first-aid responders If you feel unwell, seek medical advice (show the label where possible).

Notes to physician Keep victim warm. Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed. Treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital.

SECTION 5 Fire-fighting measures

Extinguishing media Water fog. Water spray. Dry chemical powder. Carbon dioxide (CO2).

Extinguishing media to avoid	Do not use a solid water stream as it may scatter and spread fire.
Specific hazards	None known.
Special fire fighting procedures	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. Use water spray to cool unopened containers.
Protection of fire-fighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
General fire hazards	None known.

SECTION 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. For personal protection, see section 8 of the SDS.

For emergency responders Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

Environmental precautions Avoid discharge into drains, water courses or onto the ground.

Clean-up methods and materials and containment measures Sweep up or vacuum up spillage and collect in suitable container for disposal. Collect and dispose of spillage as indicated in section 13 of the SDS. Flush area with water.

Prevention of secondary hazards Not available.

SECTION 7 Handling and storage

Handling Wash hands thoroughly after handling. Wash contaminated clothing before reuse. Obtain special instructions before use. Wear appropriate personal protective equipment. Do not eat, drink or smoke when using the product. Observe good industrial hygiene practices.

Storage Store in accordance with local/regional/national/international regulation.

SECTION 8 Exposure controls/personal protection

Exposure limits

China OELs. Occupational Exposure Limits for Hazardous Agents in the Workplace, Chemical Hazardous Agents (GBZ 2.1-2007)

Components	Type	Value	Form
Methanol (CAS 67-56-1)	PC-STEL	50 mg/m ³	
	PC-TWA	25 mg/m ³	
Titanium Oxide (TiO ₂) (CAS 13463-67-7)	PC-TWA	8 mg/m ³	Total dust.

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Methanol (CAS 67-56-1)	15 mg/l	Methanol	Urine	*

* - For sampling details, please see the source document.

Exposure guidelines

China OELs. Occupational Exposure Limits for Hazardous Agents in the Workplace, Chemical Hazardous Agents (GBZ 2.1-2007): Skin designation

METHANOL (CAS 67-56-1) Can be absorbed through the skin.

Monitoring methods Follow standard monitoring procedures.

Engineering measures Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Personal protective equipment

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection Wear appropriate chemical resistant gloves.

Eye protection Wear safety glasses with side shields (or goggles).

Skin and body protection Avoid contact with the skin. Wear suitable protective clothing.

Hygiene measures	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Keep away from food and drink. Wash hands after handling and before eating. Observe any medical surveillance requirements. When using do not smoke. When using, do not eat, drink or smoke.
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SECTION 9 Physical and chemical properties

Appearance

Physical state	Solid.
Form	Film.
Color	White.
Odor	None.
Odor threshold	Not applicable.
pH	Not applicable.
Melting point/freezing point	-144.04 °F (-97.8 °C) estimated / Not applicable.
Boiling point, initial boiling point, and boiling range	Not applicable.
Flash point	Not applicable.
Flammability limit - lower (%)	Not applicable.
Flammability limit - lower (%) temperature	Not applicable.
Flammability limit - upper (%)	Not applicable.
Flammability limit - upper (%) temperature	Not applicable.
Explosive limit - lower (%)	Not applicable.
Explosive limit - lower (%) temperature	Not applicable.
Explosive limit - upper (%)	Not applicable.
Explosive limit - upper (%) temperature	Not applicable.
Vapor pressure	Not applicable.
Vapor density	Not applicable.
Relative density	Not applicable.
Density	1.36 g/cm ³ estimated
Solubility(ies)	
Solubility (water)	Negligible.
Partition coefficient (n-octanol/water)	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition temperature	Not applicable.
Flammability (solid, gas)	None known.
Other data	
Electrostatic properties	
Resistivity (low) temp.	Not applicable.
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
Viscosity	Not applicable.

SECTION 10 Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Stability	Material is stable under normal conditions.

Possibility of hazardous reactions	None.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	At thermal decomposition temperatures, carbon monoxide and carbon dioxide. Ammonia. Nitrogen oxides (NO _x).

SECTION 11 Toxicological information

Acute toxicity Harmful in contact with skin.

Components	Species	Test Results
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Diglycidyl Resorcinol Ether (CAS 101-90-6)

Acute

Oral

LD50	Rat	2.57 g/kg
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Routes of exposure Skin contact. Ingestion.

Skin corrosion/irritation Not available.

Serious eye damage/eye irritation Not available.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitizer Not available.

Germ cell mutagenicity Not available.

Carcinogenicity Suspected of causing cancer.

China OELs for hazardous agents in the workplace: Carcinogen Category

TITANIUM DIOXIDE DUST (TOTAL) (CAS 13463-67-7) Possible human carcinogen.

IARC Monographs. Overall Evaluation of Carcinogenicity

Diglycidyl Resorcinol Ether (CAS 101-90-6) 2B Possibly carcinogenic to humans.

Titanium Oxide (TiO₂) (CAS 13463-67-7) 2B Possibly carcinogenic to humans.

Toxic to reproduction Not classified.

Specific target organ toxicity following single exposure Causes damage to organs.

Specific target organ toxicity following repeated exposure Not classified.

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged exposure may cause chronic effects.

SECTION 12 Ecological information

Ecotoxicological data

Product	Species	Test Results
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MEG-150 Epoxy

Aquatic

Acute

Crustacea	EC50	Daphnia	61866.1875 mg/l, 48 hours estimated
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Fish	LC50	Fish	62590.7539 mg/l, 96 hours estimated
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Components	Species	Test Results
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Methanol (CAS 67-56-1)

Aquatic

Acute

Crustacea	EC50	Water flea (Daphnia magna)	> 10000 mg/l, 48 hours
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Fish	LC50	Fathead minnow (Pimephales promelas)	> 100 mg/l, 96 hours
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Components	Species	Test Results
Titanium Oxide (TiO ₂) (CAS 13463-67-7)		
Aquatic		
<i>Acute</i>		
Crustacea	EC50	Water flea (Daphnia magna) > 1000 mg/l, 48 hours
Fish	LC50	Mummichog (Fundulus heteroclitus) > 1000 mg/l, 96 hours
Ecotoxicity	Not available.	
Persistence and degradability	Not available.	
Bioaccumulation		
Bioaccumulative potential		
Octanol/water partition coefficient log Kow		
Methanol		-0.77
Mobility in soil	Not available.	
Other hazardous effects	Not available.	

SECTION 13 Disposal considerations

Residual waste	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.
Local disposal regulations	Dispose of contents/container in accordance with local/regional/national/international regulations. Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

SECTION 14 Transport information

CNDG

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not available.

SECTION 15 Regulatory information

Law of the People's Republic of China on Prevention and Control of Occupational Diseases

Classification of occupational disease hazards

METHANOL (CAS 67-56-1)

TITANIUM DIOXIDE DUST (CAS 13463-67-7)

Regulations on the Control over Safety of Dangerous Chemicals

Catalog of Hazardous Chemicals

METHANOL (CAS 67-56-1)

List of Priority Management of Hazardous Chemicals

Methanol (CAS 67-56-1)

Interim Provisions on the Supervision and Management of Major Hazards of Dangerous Chemicals GB 18218-2008

Identification of major hazard installations for dangerous chemicals

Chemical name	CAS number	Threshold quantity (Tons)
Methanol	67-56-1	500

Provision on the Environmental Administration of New Chemical Substances**China Inventory of Existing Chemical Substances**

Country(s) or region	Inventory name	On inventory (yes/no)*
China	Inventory of Existing Chemical Substances in China (IECSC)	No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
 A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

Other regulations

This safety data sheet conforms to the following laws, regulations and standards:
 Regulations on the Control over Safety of Dangerous Chemicals
 Regulations on Labor Protection in Workplaces Where Toxic Products Are Used
 Measures for the Safe Use of Chemicals in Workplaces
 Safety Data Sheet for Chemical Products - Content and Order of Sections (GB/T 16483-2008)
 General Rules for Preparation of Precautionary Labels for Chemicals (GB15258-2009)
 Packing Symbol of Dangerous Goods(GB190-2009)
 Packing - Pictorial Marking for Handling of Goods (GB/T191-2009)

International regulations**Stockholm Convention**

Not applicable.

Rotterdam Convention

Not applicable.

Montreal Protocol

Not applicable.

Kyoto protocol

Not applicable.

Basel Convention

Not applicable.

SECTION 16 Other information**References**

NLM: Hazardous Substances Data Base
 EPA: AQUIRE database
 US. IARC Monographs on Occupational Exposures to Chemical Agents
 GB12268-2012: List of Dangerous Goods.
 GB6944-2012: Classification and Code of Dangerous Goods.

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