



CHEMICAL PRODUCT SAFETY DATA SHEET

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

Company name: CRC Industries Trading (Shanghai) Co., Ltd. Product name: Minute Mend™ Epoxy Putty

Issue date: 08-12-2016

Version #: 01

SDS No: -

1. Chemical product and company identification

Product name	Minute Mend™ Epoxy Putty
Product code	PR14070
Company name	CRC Industries Trading (Shanghai) Co., Ltd.
Address	Room 2408, No. 488 South Wuning Road Jingan District - 200042 Shanghai, PR China
General Information	+86 (0) 21 6236 6035
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Website	www.crcindustries.cn

Recommended use and Limitations on use

Recommended use	Permanent repair of holes and gouges
Limitations on use	None known.
Issue date	08-12-2016

2. Hazards identification

Emergency overview Causes mild skin irritation. May cause an allergic skin reaction. Prolonged exposure may cause chronic effects. Dangerous for the environment if discharged into watercourses.

GHS-classification

Physical hazards	Not classified.	
Health hazards	Acute toxicity, oral	Category 5
	Acute toxicity, dermal	Category 5
	Skin corrosion/irritation	Category 3
	Sensitization, skin	Category 1
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 1
	Hazardous to the aquatic environment, long-term hazard	Category 3 (2 % of the mixture consists of component(s) of unknown hazards to the aquatic environment.)
Other hazards which do not result in classification	Not classified.	

Label elements

Pictograms



GHS-labeling

Signal word	Warning
Hazard statement	Causes mild skin irritation. May cause an allergic skin reaction. Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.
Precautionary statement	
Prevention	Avoid breathing vapors. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves. Avoid release to the environment.
Response	IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. Collect spillage.
Storage	Store away from incompatible materials.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.

Physical and chemical hazards	The product is stable and non-reactive under normal conditions of use, storage and transport. No unusual fire or explosion hazards noted.
Health hazards	Prolonged inhalation may be harmful. Causes mild skin irritation. May cause an allergic skin reaction. Direct contact with eyes may cause temporary irritation.
Environmental hazards	Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.
Supplemental information	2% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

Substance/mixture	Mixture	CAS Number	Concentration (%)
Chemical name			
talc (not containing asbestos fibers)		14807-96-6	40 - 50
Bisphenol A, Epichlorohydrin Polymer		25068-38-6	5 - 10
titanium dioxide		13463-67-7	5 - 10
3,6-diazaoctanethylenediamin		112-24-3	< 1
quartz		14808-60-7	< 1

4. First aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Do not use mouth-to-mouth method if victim inhaled the substance. If breathing is difficult, trained personnel should give oxygen. Call a physician if symptoms develop or persist.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms and health effects	Mild skin irritation. May cause an allergic skin reaction. Dermatitis. Rash.
Expected acute symptoms and delayed symptoms	Mild skin irritation. May cause an allergic skin reaction. Dermatitis. Rash.
Personal protection for first-aid responders	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.
Notes to physician	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

5. Fire-fighting measures

Extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Extinguishing media to avoid	None known.
Specific hazards	During fire, gases hazardous to health may be formed.
Special fire fighting procedures	Use water spray to cool unopened containers.
Protection of fire-fighters	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
General fire hazards	No unusual fire or explosion hazards noted.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.

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. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. 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 release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.

Clean-up methods and materials and containment measures

The product is immiscible with water and will sediment in water systems. Prevent product from entering drains. Sweep up or vacuum up spillage and collect in suitable container for disposal. Clean surface thoroughly to remove residual contamination.

Prevention of secondary hazards

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Not available.

7. Handling and storage**Handling**

Wash hands after handling and before eating. Do not breathe vapor. Do not get in eyes, on skin, or on clothing. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid prolonged exposure. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices. For product usage instructions, please see the product label.

Storage

Store in a cool, dry place out of direct sunlight. Keep container tightly closed. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Do not store container above 95 °F/35 °C.

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
quartz (CAS 14808-60-7)	PC-TWA	0.5 mg/m ³	Total dust.
		0.2 mg/m ³	Respirable dust.
talc (not containing asbestos fibers) (CAS 14807-96-6)	PC-TWA	3 mg/m ³	Total dust.
		1 mg/m ³	Respirable dust.
titanium dioxide (CAS 13463-67-7)	PC-TWA	8 mg/m ³	Total dust.

Biological limit values

No biological exposure limits noted for the ingredient(s).

Exposure guidelines

Occupational Exposure Limits are not relevant to the current physical form of the product.

Control parameters

Follow standard monitoring procedures.

Engineering measures

Good general ventilation (typically 10 air changes per hour) 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**

If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with an organic vapor cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies. Air monitoring is needed to determine actual employee exposure levels.

Hand protection

Wear protective gloves such as: Rubber.

Eye protection

Wear safety glasses with side shields (or goggles).

Skin and body protection

Wear appropriate chemical resistant 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. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties**Appearance****Physical state**

Solid.

Form

Semi-solid paste.

Color

Green. White.

Odor

Pungent. Sulphurous.

pH

Not available.

Melting point/freezing point

Not available.

Boiling point, initial boiling point, and boiling range

> 392 °F (> 200 °C)

Flash point

> 200 °F (> 93.3 °C) Setflash

Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	406.9 hPa estimated
Vapor density	Not available.
Relative density	1.97
Density	Not available.
Solubility(ies)	
Solubility (water)	Insoluble.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	> 392 °F (> 200 °C)
Flammability (solid, gas)	Not available.
Other data	
Percent volatile	0 %

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	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Temperatures above 35 °C. Avoid temperatures exceeding the decomposition temperature. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Carbon oxides. Nitrogen oxides (NOx). Sulfur oxides. Metal oxides. Halogenated materials.

11. Toxicological information

Acute toxicity	May cause an allergic skin reaction.	
Product	Species	Test Results
Minute Mend™ Epoxy Putty		
<u>Acute</u>		
Dermal		
LD50	Rabbit	62816 mg/kg estimated
Inhalation		
LC50	Rabbit	128 mg/l, 4 hours estimated
Oral		
LD50	Rat	19841 mg/kg estimated

* Estimates for product may be based on additional component data not shown.

Routes of exposure	Inhalation. Skin contact. Eye contact.
Symptoms	Mild skin irritation. May cause an allergic skin reaction. Dermatitis. Rash.
Skin corrosion/irritation	Causes mild skin irritation.
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.
Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	May cause an allergic skin reaction.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
Toxic to reproduction	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity following single exposure	Not classified.

Specific target organ toxicity following repeated exposure	Not classified.
Aspiration hazard	Not likely, due to the form of the product.
Chronic effects	Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

12. Ecological information

Ecotoxicological data

Components	Species	Test Results
Bisphenol A, Epichlorohydrin Polymer (CAS 25068-38-6)		
Aquatic		
<i>Acute</i>		
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss) 3.6 mg/l, 96 hours
titanium dioxide (CAS 13463-67-7)		
Aquatic		
Crustacea	EC50	Water flea (Daphnia magna) > 1000 mg/l, 48 hours
<i>Acute</i>		
Fish	LC50	Fathead minnow (Pimephales promelas) 1000 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

Ecotoxicity Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulation

Bioaccumulative potential
Bioconcentration factor
titanium dioxide

352

Mobility in soil The product is immiscible with water and will sediment in water systems.

Other hazardous effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Residual waste	Dispose of in accordance with local regulations.
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 regulations. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container.

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 applicable.

15. Regulatory information

Inventory of Existing Chemical Substances in China

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

*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).

Applicable 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)

General Rule For Classification and Hazard Communication of Chemicals (GB 13690-2009) and Catalog of Hazardous Chemicals

3,6-diazaoctanethylenediamin (CAS 112-24-3)

Occupational exposure limits for hazardous agents in the workplace (GBZ 2.1-2007)

quartz (CAS 14808-60-7)

talc (not containing asbestos fibers) (CAS 14807-96-6)

titanium dioxide (CAS 13463-67-7)

Restricted Import/Export Toxic Chemical List (MEP and GCA Announcement No. 2008-66, Dec. 1, 2008, amended through MEP and Customs Notice No. 2013-85, December 30, 2013)

Not regulated.

Classification and code of dangerous goods (GB 6944-2012)

Not regulated.

UN Recommendations on the Transport of Dangerous Goods (UN RTDG)

Not regulated.

16. Other information**References**

EPA: AQUIRE database
NLM: Hazardous Substances Data Base
US. IARC Monographs on Occupational Exposures to Chemical Agents

Disclaimer

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