SAFETY DATA SHEET

1. Identification

Product identifier **Minute Mend™ Epoxy Putty**

Other means of identification

Product code 74070

Recommended use Permanent repair of holes and gouges

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufactured or sold by:

Company name CRC Canada Co.

Address 2-1246 Lorimar Dr.
Mississauga, Ontario L5S 1R2
Canada

Telephone 905-670-2291

Website www.crc-canada.ca

E-mail Support.CA@crcindustries.com

Emergency phone number 24-Hour Emergency (CHEMTREC) 800-424-9300 (Canada) 703-527-3887 (International)

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Sensitization, skin Category 1

Environmental hazards Hazardous to the aquatic environment, acute hazard Category 3

Hazardous to the aquatic environment, long-term hazard Category 3

Label elements

Signal word Warning

Hazard statement May cause an allergic skin reaction. Harmful to aquatic life with long lasting effects.

Precautionary statement

Prevention Avoid breathing dust/fume/gas/mist/vapors/spray. 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 water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

Storage Store away from incompatible materials.

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

Other hazards None known.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
talc (not containing asbestos fibers)		14807-96-6	30 - 60
glass, oxide, chemicals		65997-17-3	15 - 40
bisphenol A, epichlorohydrin polymer		25068-38-6	5 - 10
titanium dioxide		13463-67-7	3 - 7

Chemical name	Common name and synonyms	CAS number	%
3,6-diazaoctanethylenediamin		112-24-3	0.5 - 1.5
quartz		14808-60-7	0.1 - 1

The exact percentage (concentration) of composition has been withheld as a trade secret.
All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

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/effects, acute and delayed
May cause an allergic skin reaction. Dermatitis. Rash.

Indication of immediate medical attention and special treatment needed
Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General information
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media
Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media
None known.

Specific hazards arising from the chemical
During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters
Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

Fire fighting equipment/instructions
Use water spray to cool unopened containers.

Specific methods
Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards
No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. 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. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up
The product is immiscible with water and will sediment in water systems. Prevent product from entering drains. Stop the flow of material, if this is without risk. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.

Environmental precautions
Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling
Wash hands after handling and before eating. Do not breathe vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

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

8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
quartz (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.
talc (not containing asbestos fibers) (CAS 14807-96-6)	TWA	2 mg/m3	Respirable fraction.
titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m3	

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value	Form
glass, oxide, chemicals (CAS 65997-17-3)	TWA	0.2 fibers/cm3	Fiber.
		5 mg/m3	Total particulate.
		5 mg/m3	Fiber, total
quartz (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable particles.
talc (not containing asbestos fibers) (CAS 14807-96-6)	TWA	2 mg/m3	Respirable particles.
titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m3	

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value	Form
glass, oxide, chemicals (CAS 65997-17-3)	TWA	0.2 fibers/cm3	Fiber.
		5 mg/m3	Inhalable fibers.
quartz (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.
talc (not containing asbestos fibers) (CAS 14807-96-6)	TWA	2 mg/m3	Respirable.
titanium dioxide (CAS 13463-67-7)	TWA	3 mg/m3	Respirable fraction.
		10 mg/m3	Total dust.

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

Components	Type	Value	Form
glass, oxide, chemicals (CAS 65997-17-3)	TWA	5 mg/m3	Inhalable fraction.
quartz (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.
talc (not containing asbestos fibers) (CAS 14807-96-6)	TWA	2 mg/m3	Respirable fraction.
titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m3	

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components	Type	Value	Form
3,6-diazaoctanethylenediamin (CAS 112-24-3)	TWA	3 mg/m3	
		0.5 ppm	
glass, oxide, chemicals (CAS 65997-17-3)	TWA	0.5 fibers/ml	Respirable fibers.
		5 mg/m3	Inhalable fraction.
quartz (CAS 14808-60-7)	TWA	0.1 mg/m3	Respirable fraction.
talc (not containing asbestos fibers) (CAS 14807-96-6)	TWA	2 fibers/ml	
		2 mg/m3	Respirable fraction.
titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m3	

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

Components	Type	Value	Form
glass, oxide, chemicals (CAS 65997-17-3)	TWA	1 fibers/cm3n	Fiber.
		10 mg/m3	Total dust.
quartz (CAS 14808-60-7)	TWA	0.1 mg/m3	Respirable dust.
talc (not containing asbestos fibers) (CAS 14807-96-6)	TWA	3 mg/m3	Respirable dust.
titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m3	Total dust.

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

Exposure guidelines Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.

Canada - Ontario OELs: Skin designation

3,6-diazaoctanethylenediamin (CAS 112-24-3) Can be absorbed through the skin.

Appropriate engineering controls 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.

Individual protection measures, such as personal protective equipment

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

Skin protection

Hand protection Wear protective gloves such as: Rubber gloves.

Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

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.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations 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.

Odor threshold Not available.

pH Not available.

Melting point/freezing point Not available.

Initial boiling point and boiling range > 392 °F (> 200 °C)

Flash point > 200 °F (> 93.3 °C) Setaflash

Evaporation rate Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Vapor pressure 406.9 hPa estimated

Vapor density Not available.

Relative density	1.97
Solubility(ies)	
Solubility (water)	Insoluble.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	> 392 °F (> 200 °C)
Viscosity	Not available.
Other information	
Percent volatile	0 %

10. Stability and reactivity

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

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	May cause an allergic skin reaction.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	Health injuries are not known or expected under normal use.
Symptoms related to the physical, chemical and toxicological characteristics	May cause an allergic skin reaction. Dermatitis. Rash.

Information on toxicological effects

Acute toxicity Not known.

Product	Species	Test Results
Minute Mend™ Epoxy Putty		
Acute		
Dermal		
ATEmix		3006.0251 mg/kg
Oral		
ATEmix		2161.7647 mg/kg

Components	Species	Test Results
bisphenol A, epichlorohydrin polymer (CAS 25068-38-6)		
Acute		
Oral		
LD50	Rat	11400 mg/kg
quartz (CAS 14808-60-7)		
Acute		
Oral		
LD50	Rat	500 mg/kg
titanium dioxide (CAS 13463-67-7)		
Acute		
Dermal		
LD50	Rabbit	> 10000 mg/kg

Components	Species	Test Results
Oral		
LD50	Rat	> 10000 mg/kg

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

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye irritation Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

Canada - Alberta OELs: Irritant

glass, oxide, chemicals (CAS 65997-17-3)	Irritant
titanium dioxide (CAS 13463-67-7)	Irritant

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.

ACGIH Carcinogens

talc (not containing asbestos fibers) (CAS 14807-96-6)	A4 Not classifiable as a human carcinogen.
titanium dioxide (CAS 13463-67-7)	A4 Not classifiable as a human carcinogen.

Canada - Manitoba OELs: carcinogenicity

talc (not containing asbestos fibers) (CAS 14807-96-6)	Not classifiable as a human carcinogen.
titanium dioxide (CAS 13463-67-7)	Not classifiable as a human carcinogen.

IARC Monographs. Overall Evaluation of Carcinogenicity

phenol (CAS 108-95-2)	3 Not classifiable as to carcinogenicity to humans.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

12. Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects.

Components		Species	Test Results
bisphenol A, epichlorohydrin polymer (CAS 25068-38-6)			
Aquatic			
Acute			
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
Acute			
Fish	LC50	Fathead minnow (Pimephales promelas)	1000 mg/l, 96 hours

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

Persistence and degradability

Bioaccumulative potential

Bioconcentration factor (BCF)

titanium dioxide	352

Mobility in soil No data available.

Other adverse 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

Disposal of waste from residues / unused products	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. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	Not regulated.
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

TDG

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

Canadian regulations

This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Controlled Drugs and Substances Act

Not regulated.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

International regulations

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto protocol

Not applicable.

Montreal Protocol

Not applicable.

Basel Convention

glass, oxide, chemicals (CAS 65997-17-3)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes

Country(s) or region	Inventory name	On inventory (yes/no)*
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	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).

16. Other information

Issue date 07-10-2017

Version # 01

Disclaimer The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC Canada Co.'s knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this (M)SDS consult your supervisor, a health & safety professional, or CRC Canada Co.