

1. Identification

Product identifier	METAL REPAIR PASTE FAST CURE PART B
Other means of identification	None.
Recommended use	Not available.
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/Distributor information	
	RR&C
Address	P.O. Box 67000 Detroit, MI 48267-2791
Hours of Operation	8:00 a.m. - 5:00 p.m.
Telephone Number	1-216-515-7712
CHEMTREC	1-800-424-9300

2. Hazard(s) identification

Physical hazards	Not classified.	
Health hazards	Skin corrosion/irritation	Category 1
	Serious eye damage/eye irritation	Category 1
	Sensitization, skin	Category 1
	Germ cell mutagenicity	Category 2
	Specific target organ toxicity, repeated exposure	Category 2
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	

*Hazards not stated here are "Not classified", "Not applicable" or "Classification not possible".

Label elements



Signal word Danger

Hazard statement Causes severe skin burns and eye damage. May cause an allergic skin reaction. Causes serious eye damage. Suspected of causing genetic defects. May cause damage to organs through prolonged or repeated exposure.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.

Response IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Specific treatment see Section 4 of this SDS. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Storage Store locked up.

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

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL		90-72-2	1 - 10
3-AMINOPROPYLTRIETHOXSILANE		919-30-2	1 - 10
PHENOL		108-95-2	1 - 10
QUARTZ		14808-60-7	1 - 10
TRIETHYLENETETRAMINE		112-24-3	1 - 10
ETHANOL		64-17-5	0.1

4. First-aid measures

Inhalation	Move to fresh air. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Call a physician or poison control center immediately.
Skin contact	Immediately flush skin with plenty of water. Remove contaminated clothing. Get medical attention immediately. Wash clothing separately before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.
Ingestion	Rinse mouth. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Get medical attention.
Most important symptoms/effects, acute and delayed	Causes serious eye damage. Burning pain and severe corrosive skin damage. Contact may cause redness, burning, drying, and cracking of the skin, and skin damage. May cause allergic skin reaction. Dermatitis. Rash.
Indication of immediate medical attention and special treatment needed	In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General information	In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media	Water. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Do not use a solid water stream as it may scatter and spread fire.
Specific hazards arising from the chemical	Fire may produce irritating, corrosive and/or toxic gases.
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. Structural firefighters protective clothing will only provide limited protection.
Fire fighting equipment/instructions	Water runoff can cause environmental damage. Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.
Specific methods	Use water spray to cool unopened containers.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep people away from and upwind of spill/leak. Keep out of low areas. Ventilate closed spaces before entering them. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid breathing mist/vapors. Ensure adequate ventilation.
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Methods and materials for containment and cleaning up

Extinguish all flames in the vicinity.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Collect spillage. Following product recovery, flush area with water. Prevent product from entering drains. Do not allow material to contaminate ground water system.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills in original containers for re-use.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not contaminate water.

7. Handling and storage

Precautions for safe handling

Wear appropriate personal protective equipment. Avoid eating, drinking and smoking when using the product. Wash hands after handling. Observe good industrial hygiene practices. Avoid contact with eyes, skin, and clothing. Do not breathe mist or vapor. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site. Keep away from heat, sparks and open flame. Provide good ventilation. Use non-sparking tools and explosion-proof equipment. Remove and wash contaminated clothing promptly. Do not empty into drains. Wash hands thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Store locked up. Do not store this material in open or unlabeled containers. Store in a cool, dry place out of direct sunlight. Keep container in a well-ventilated place.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Permissible Exposure Limits (PEL) for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
ETHANOL (CAS 64-17-5)	PEL	1900 mg/m ³ 1000 ppm	
PHENOL (CAS 108-95-2)	PEL	19 mg/m ³ 5 ppm	
QUARTZ (CAS 14808-60-7)	PEL	0.05 mg/m ³	Respirable dust.

US. OSHA Table Z-3 Permissible Exposure Limits (PEL) for Mineral Dusts (29 CFR 1910.1000)

Components	Type	Value	Form
QUARTZ (CAS 14808-60-7)	TWA	0.1 mg/m ³ 2.4 mppcf	Respirable. Respirable.

US. ACGIH Threshold Limit Values (TLV)

Components	Type	Value	Form
ETHANOL (CAS 64-17-5)	STEL	1000 ppm	
PHENOL (CAS 108-95-2)	TWA	5 ppm	
QUARTZ (CAS 14808-60-7)	TWA	0.025 mg/m ³	Respirable fraction.

NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended

Components	Type	Value
PHENOL (CAS 108-95-2)	IDLH	1.8 % 250 ppm
QUARTZ (CAS 14808-60-7)	IDLH	50 mg/m ³

US. NIOSH: Pocket Guide to Chemical Hazards Recommended Exposure Limits (REL)

Components	Type	Value	Form
ETHANOL (CAS 64-17-5)	TWA	1900 mg/m ³ 1000 ppm	
PHENOL (CAS 108-95-2)	Ceiling	60 mg/m ³ 15.6 ppm	
	TWA	19 mg/m ³	

US. NIOSH: Pocket Guide to Chemical Hazards Recommended Exposure Limits (REL)

Components	Type	Value	Form
QUARTZ (CAS 14808-60-7)	TWA	5 ppm 0.05 mg/m3	Respirable dust.

US. OARS. Workplace Environmental Exposure Level (WEEL) Guide

Components	Type	Value
TRIETHYLENETETRAMINE (CAS 112-24-3)	TWA	6 mg/m3 1 ppm

Biological limit values**ACGIH Biological Exposure Indices (BEI)**

Components	Value	Determinant	Specimen	Sampling Time
PHENOL (CAS 108-95-2)	250 mg/g	Phenol with hydrolysis	Creatinine in urine	*

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

Exposure guidelines No exposure standards allocated.

US - California OELs: Skin designation

PHENOL (CAS 108-95-2) Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

PHENOL (CAS 108-95-2) Skin designation applies.

US - Tennessee OELs: Skin designation

PHENOL (CAS 108-95-2) Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

PHENOL (CAS 108-95-2) Danger of cutaneous absorption

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

PHENOL (CAS 108-95-2) Can be absorbed through the skin.

US WEEL Guides: Skin designation

TRIETHYLENETETRAMINE (CAS 112-24-3) Can be absorbed through the skin.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

PHENOL (CAS 108-95-2) Can be absorbed through the skin.

Appropriate engineering controls Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

Individual protection measures, such as personal protective equipment

Eye/face protection Goggles/face shield are recommended.

Skin protection

Hand protection Chemical resistant gloves are recommended. If contact with forearms is likely wear gauntlet style gloves.

Other Use protective gloves, goggles and suitable protective clothing.

Respiratory protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations Do not get in eyes. Do not get this material in contact with skin. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product. Wash hands after handling and before eating. Keep away from food and drink. Contaminated work clothing should not be allowed out of the workplace. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Appearance	Liquid.
Physical state	Liquid.
Form	Liquid.
Color	Light yellow.
Odor	Sulphurous.
Odor threshold	Not available.
pH	Basic

Melting point/freezing point	53.6 °F (12 °C) estimated
Initial boiling point and boiling range	359.15 °F (181.75 °C) estimated
Flash point	>200.0 °F (>93.3 °C)
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	3 % estimated
Explosive limit - upper (%)	10 % estimated
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	640 °F (337.78 °C) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	12.66 lb/gal estimated
Specific gravity	1.5204 estimated

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Stable under normal temperature conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Heat, flames and sparks.
Incompatible materials	Strong oxidizing agents. Acids. Moist air.
Hazardous decomposition products	At thermal decomposition temperatures, carbon monoxide and carbon dioxide.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	Causes severe skin burns and eye damage. May cause an allergic skin reaction.
Eye contact	Causes serious eye damage.
Ingestion	May be harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Contact may cause redness, burning, drying, and cracking of the skin, and skin damage. Rash. Dermatitis. May cause an allergic skin reaction. Causes serious eye damage. Burning pain and severe corrosive skin damage.

Information on toxicological effects

Acute toxicity

Components	Species	Test Results
2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL (CAS 90-72-2)		
Acute		
Dermal		
LD50	Rat	1280 mg/kg
Oral		
LD50	Rat	1200 mg/kg

Components	Species	Test Results
3-AMINOPROPYLTRIETHOXYSILANE (CAS 919-30-2)		
Acute		
Inhalation		
LC50	-	> 7.35 mg/l, 4 Hours
ETHANOL (CAS 64-17-5)		
Acute		
Oral		
LD50	Rat	6.2 g/kg
PHENOL (CAS 108-95-2)		
Acute		
Dermal		
LD50	Rat	669 mg/kg

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

Skin corrosion/irritation	Causes severe skin burns and eye damage.
Serious eye damage/eye irritation	Causes severe eye burns.
Respiratory or skin sensitization	
Respiratory sensitization	Not available.
Skin sensitization	May cause an allergic skin reaction.
Germ cell mutagenicity	Suspected of causing genetic defects.
Carcinogenicity	This product contains crystalline silica. Silica is a known carcinogen; however in this encapsulated form the normal routes of exposure are unavailable.

IARC Monographs. Overall Evaluation of Carcinogenicity

PHENOL (CAS 108-95-2)	3 Not classifiable as to carcinogenicity to humans.
QUARTZ (CAS 14808-60-7)	1 Carcinogenic to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

QUARTZ (CAS 14808-60-7)	Cancer
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US. National Toxicology Program (NTP) Report on Carcinogens

QUARTZ (CAS 14808-60-7)	Known To Be Human Carcinogen.
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Reproductive toxicity	Contains no ingredient listed as toxic to reproduction.
Specific target organ toxicity - single exposure	Not available.
Specific target organ toxicity - repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	Not available.
Chronic effects	Not expected to be hazardous by WHMIS criteria.
Further information	Symptoms may be delayed.

12. Ecological information

Ecotoxicity	Accumulation in aquatic organisms is expected. Contains a substance which causes risk of hazardous effects to the environment. Expected to be harmful to aquatic organisms. The product contains a substance which may cause long-term adverse effects in the environment.
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Product	Species	Test Results
METAL REPAIR PASTE FAST CURE PART B		
Aquatic		
Crustacea	EC50	Daphnia
		1344.3275 mg/l, 48 hours
Fish	LC50	Fish
		974.0854 mg/l, 96 hours
<i>Acute</i>		
Crustacea	EC50	Daphnia
		142.005 mg/l, 48 hours estimated
Fish	LC50	Fish
		229.3543 mg/l, 96 hours estimated

Components	Species	Test Results
ETHANOL (CAS 64-17-5)		
Aquatic		
<i>Acute</i>		
Crustacea	EC50	Water flea (Daphnia magna) >= 7.7 - <= 11.2 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss) 42 mg/l, 4 days
PHENOL (CAS 108-95-2)		
Aquatic		
<i>Acute</i>		
Crustacea	EC50	Water flea (Daphnia magna) 4.24 - 10.7 mg/l, 48 hours
Fish	LC50	Asiatic knifefish (Notopterus notopterus) 6.85 mg/l, 96 hours

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

Persistence and degradability Not available.

Bioaccumulative potential Not available.

Partition coefficient n-octanol / water (log Kow)

ETHANOL	-0.31
PHENOL	1.46

Mobility in soil Not available.

Other adverse effects Not available.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products 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 Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

Not regulated as dangerous goods.

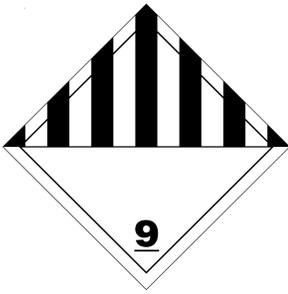
IATA

UN number	UN3334
UN proper shipping name	Aviation regulated liquid, n.o.s. (mercaptan terminated polymer)
Transport hazard class(es)	
Class	9
Subsidiary hazard	-
Packing group	III
Environmental hazards	No.
ERG Code	9A
Special precautions for user	Not assigned.
Other information	
Passenger and cargo aircraft	Allowed with restrictions.
Cargo aircraft only	Allowed with restrictions.

IMDG

Not regulated as dangerous goods.

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



15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

CERCLA/SARA Hazardous Substances - Not applicable.

Toxic Substances Control Act (TSCA)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

ETHANOL (CAS 64-17-5) Listed.

PHENOL (CAS 108-95-2) Listed.

SARA 304 Emergency release notification

Phenol (CAS 108-95-2) 1000 LBS

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

QUARTZ (CAS 14808-60-7) Cancer
lung effects
immune system effects
kidney effects

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Chemical name	CAS number	Reportable quantity (pounds)	Threshold planning quantity (pounds)	Threshold planning quantity, lower value (pounds)	Threshold planning quantity, upper value (pounds)
PHENOL	108-95-2	1000		500	10000

SARA 311/312 Hazardous chemical

Yes

Classified hazard categories
Skin corrosion or irritation
Serious eye damage or eye irritation
Respiratory or skin sensitization
Germ cell mutagenicity
Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
PHENOL	108-95-2	1 - 10

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

PHENOL (CAS 108-95-2)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)

Not regulated.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

ETHANOL (CAS 64-17-5) Low priority

PHENOL (CAS 108-95-2) Low priority

US state regulations

WARNING: This product contains a chemical known to the State of California to cause cancer.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

PHENOL (CAS 108-95-2)
QUARTZ (CAS 14808-60-7)

California Proposition 65

California Proposition 65 - CRT: Listed date/Carcinogenic substance

ETHANOL (CAS 64-17-5) Listed: April 29, 2011
Listed: July 1, 1988
QUARTZ (CAS 14808-60-7) Listed: October 1, 1988

California Proposition 65 - CRT: Listed date/Developmental toxin

ETHANOL (CAS 64-17-5) Listed: October 1, 1987

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	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)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	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, including date of preparation or last revision

Issue date 07-31-2017

Revision date 04-15-2024

Version # 11

Further information HMIS® is a registered trade and service mark of the NPCA.

NFPA ratings Health: 3
Flammability: 1
Instability: 0

References ACGIH
EPA: AQUIRE database
NLM: Hazardous Substances Data Base
US. IARC Monographs on Occupational Exposures to Chemical Agents
HSDB® - Hazardous Substances Data Bank
IARC Monographs. Overall Evaluation of Carcinogenicity
National Toxicology Program (NTP) Report on Carcinogens
ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices

Disclaimer The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Revision information This document has undergone significant changes and should be reviewed in its entirety.