M5-82 RED

Safety Data Sheet

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2024



SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Product name : M5-82 Red
Product code : Not available

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Epoxy system

1.4. Supplier's details

Manufacturer

Multi-Seals, Inc. 540 North Main St. Manchester, CT, 06042 USA

T 860-643-7188

1.5. Emergency phone number

Emergency number : 860-643-7188 (8:30am - 5:00pm EST)

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

Skin corrosion/irritation, Category 2 Serious eye damage/eye irritation, Category 2A

Skin sensitization, Category 1 Reproductive toxicity, Category 1B : Causes skin irritation.

: Causes serious eye irritation.: May cause an allergic skin reaction.

: May damage fertility or the unborn child.

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US)





Signal word (GHS US) : Danger

Hazard statements (GHS US) : Causes skin irritation

May cause an allergic skin reaction Causes serious eye irritation

May damage fertility or the unborn child

Precautionary statements (GHS US) : 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 hands, forearms and face thoroughly after handling.

Contaminated work clothing must not be allowed out of the workplace.

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Wear protective gloves, protective clothing, eye protection, face protection

If exposed or concerned: Get medical advice/attention.

If on skin: Wash with plenty of water.

Take off contaminated clothing and wash it before reuse.

If skin irritation or rash occurs: Get medical advice or attention.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice or attention.

Store locked up.

Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

Not applicable

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Bisphenol A-epichlorohydrin polymer	CAS-No.: 25068-38-6	30 – 60
Bisphenol A diglycidyl ether-bisphenol A copolymer	CAS-No.: 25036-25-3	10 – 30
Bisphenol A	CAS-No.: 80-05-7	5 - 13
2-Methylimidazole	CAS-No.: 693-98-1	0.1 < 1

^{*}Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures after inhalation : If

: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

First-aid measures after skin contact : IF ON SKIN: Wash with plenty of Water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention.

: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation

First-aid measures after eye contact

First-aid measures after ingestion

: May cause irritation to the respiratory tract.

Symptoms/effects after skin contact

: Causes skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. May cause an allergic skin reaction.

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Symptoms/effects after eye contact : Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and

tear production, with marked redness and swelling of the conjunctiva.

Symptoms/effects after ingestion : May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and

diarrhea

Symptoms/effects after inhalation : May cause irritation to the respiratory tract.

Chronic symptoms : May damage fertility or the unborn child

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment : Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice

immediately (show the label where possible).

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water fog, carbon dioxide, dry chemical or alcohol foam.

Unsuitable extinguishing media : Do not use water jet.

5.2. Specific hazards arising from the chemical

Fire hazard : Products of combustion may include, and are not limited to: oxides of carbon. Oxides of sulfur.

Oxides of nitrogen. Hydrogen chloride. Aldehydes. Silicon dioxide. Other unidentified organic

compounds. Irritating vapors.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory

protection (SCBA).

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to

unnecessary and unprotected personnel.

For non-emergency personnel

No additional information available

For emergency responders

Environmental precautions : Prevent entry to sewers and public waters.

6.2. Methods and materials for containment and cleaning up

For containment : Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable

container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal

Protective Equipment (PPE).

Methods for cleaning up : Vacuum or sweep material and place in a disposal container. Minimize generation of dust.

Provide ventilation.

For further information refer to section 8: "Exposure controls/personal protection"

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SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Obtain special instructions before use. Do not handle until all safety precautions have been read

and understood. Do not swallow. Avoid breathing vapor or mist. Avoid contact with skin, eyes and clothing. Handle and open container with care. When using do not eat, drink or smoke. Use personal protective equipment as required. Good housekeeping is important to prevent

accumulation of dust.

Hygiene measures : Take off contaminated clothing and wash it before reuse. Contaminated work clothing should not

be allowed out of the workplace. Wash hands, forearms and face thoroughly after handling.

7.2. Conditions for safe storage, including incompatibilities

Storage conditions : Keep out of the reach of children. Keep container tightly closed. Store in a dry, cool and well-

ventilated place.

Specific end uses : Epoxy system.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

Bisphenol A (80-05-7)

USA - NIOSH - Occupational Exposure Limits

US-NIOSH chemical category SK: SEN Apr 2011

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station. Provide readily accessible eye wash stations and

safety showers.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

Hand protection:

Wear suitable gloves resistant to chemical penetration. Consult glove manufacturer's product information on material suitability and material thickness.

Eye protection:

Wear eye/face protection

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. SDSs cannot provide detailed and complete respiratory protection guidelines. Selection of respiratory protection must be done by a qualified person who has assessed the work environment.

Other information:

Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state : Solid (Solid geometric or granular form)

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Color : Red

Odor : Slight phenolic
Odor threshold : No data available
pH : No data available

Melting point : 85 – 100 °C (185 F-212 F)

Freezing point : No data available
Boiling point : No data available
Flash point : > 93 °C > 200 F
Flammability (solid, gas) : Non flammable.
Vapor pressure : No data available
Relative vapor density at 20°C : No data available

Relative density : 1.1 – 1.7 @ 20 C (H2O = 1)

Solubility : No data available
Partition coefficient n-octanol/water : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Viscosity, kinematic : No data available
Explosion limits : No data available
Particle characteristics : No data available

Bisphenol A-epichlorohydrin polymer (25068-38-6)	
Flash point	264 – 268 °C Atm. press.: 102,89 kPa
Vapor pressure	< 0.000000046 Pa Temp.: 25 °C

Bisphenol A (80-05-7)	
Boiling point	360 °C (at 1013 hPa)
Flash point	227 °C (closed cup)
Auto-ignition temperature	570 °C
Vapor pressure	0.27 hPa (at 170 °C)

2-Methylimidazole (693-98-1)	
Vapor pressure	0 hPa (at 20 °C)

9.2. Data relevant with regard to physical hazard classes (supplemental)

VOC content : 0 - 0.8 % by weight

SECTION 10 Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Heat. Incompatible materials.

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10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon. Oxides of nitrogen. Hydrogen chloride. Aldehydes. Silicon dioxide. Other unidentified organic compounds. Irritating vapors.

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Bisphenol A-epichlorohydrin polymer (25068-38-6)		
LD50 oral rat	11400 mg/kg (Source: NLM_CIP)	
LD50 dermal rat	> 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))	
LD50 dermal rabbit	20 ml/kg (Toxnet)	
Bisphenol A (80-05-7)		
LD50 oral rat	3300 mg/kg (Source: JAPAN_GHS)	
LD50 dermal rabbit	3000 mg/kg (Source: ECHA_API)	
LC50 inhalation rat	> 170 mg/m³ (Exposure time: 6 h Source: EU_RAR)	
2-Methylimidazole (693-98-1)		
LD50 dermal rabbit	> 2000 mg/kg (Source: ECHA_API)	

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitization : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

isphenol A-epichlorohydrin polymer (25068-38-6)	
NOAEL (chronic,oral,animal/male,2 years)	15 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies), Guideline: EPA OPPTS 870.4300 (Combined Chronic Toxicity / Carcinogenicity), Guideline: other:MITI, Japanese ministry of international trade and industry, February 1998, Remarks on results: other:Effect type: toxicity (migrated information)
NOAEL (chronic,oral,animal/female,2 years)	100 mg/kg body weight Animal: rat, Animal sex: female, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies), Guideline: EPA OPPTS 870.4300 (Combined Chronic Toxicity / Carcinogenicity), Guideline: other:MITI, Japanese ministry of international trade and industry, February 1998, Remarks on results: other:Effect type: toxicity (migrated information)
2-Methylimidazole (693-98-1)	
NOAEL (chronic,oral,animal/male,2 years)	13 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies), Remarks on results: other:

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2-Methylimidazole (693-98-1)		
IARC group	2B - Possibly carcinogenic to humans	
National Toxicology Program (NTP) Status	Evidence of Carcinogenicity	
In OSHA Hazard Communication Carcinogen lis	st Yes	
Reproductive toxicity STOT-single exposure	: May damage fertility or the unborn child.: Not classified	
Bisphenol A (80-05-7)		
STOT-single exposure	May cause respiratory irritation.	
STOT-repeated exposure	: Not classified	
Bisphenol A (80-05-7)		
LOAEL (oral,rat,90 days)	600 mg/kg body weight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents)	
Aspiration hazard	: Not classified	
M5-82 Red		
Viscosity, kinematic	No data available	
Bisphenol A-epichlorohydrin polymer (25068-38-6)		
Viscosity, kinematic	No data available	
Bisphenol A diglycidyl ether-bisphenol	A copolymer (25036-25-3)	
Viscosity, kinematic	No data available	
Bisphenol A (80-05-7)		
Viscosity, kinematic	No data available	
2-Methylimidazole (693-98-1)		
Viscosity, kinematic	No data available	
Symptoms/effects after inhalation	: May cause irritation to the respiratory tract.	
Symptoms/effects after skin contact	 Causes skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin May cause an allergic skin reaction. 	
Symptoms/effects after eye contact	: Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.	
Symptoms/effects after ingestion	: May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.	
Chronic symptoms	: May damage fertility or the unborn child.	

SECTION 12 Ecological information

12.1. Ecotoxicity

Other information

Ecology - general : May cause long-term adverse effects in the aquatic environment.

Hazardous to the aquatic environment, short-term : Not classified

: Not classified Hazardous to the aquatic environment, long-term

(chronic)

: Likely routes of exposure: ingestion, inhalation, skin and eye.

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Bisphenol A-epichlorohydrin polymer (25068-38-6)		
LC50 - Fish [1]	1.2 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)	
EC50 - Crustacea [1]	≈ 2 mg/l Test organisms (species): Daphnia magna	
EC50 72h - Algae [1]	9.4 mg/l Test organisms (species): Scenedesmus capricornutum	
EC50 72h - Algae [2]	> 11 mg/l Test organisms (species): Scenedesmus capricornutum	
LOEC (chronic)	1 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	
NOEC (chronic)	0.3 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	
Bisphenol A (80-05-7)		
LC50 - Fish [1]	3.6 – 5.4 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through] Source: EPA)	
EC50 - Crustacea [1]	10.2 mg/l (Exposure time: 48 h - Species: Daphnia magna)	
LC50 - Fish [2]	4 – 5.5 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static] Source: EPA)	
EC50 - Crustacea [2]	3.9 mg/l (Exposure time: 48 h - Species: Daphnia magna)	
EC50 96h - Algae [1]	2.5 mg/l (Species: Pseudokirchneriella subcapitata)	
EC50 96h - Algae [2]	1.4 mg/l Test organisms (species): Skeletonema costatum	
LOEC (chronic)	3.6 mg/l Test organisms (species): other:Rotifer (Brachionus calyciflorus) Duration: '48 h'	
2-Methylimidazole (693-98-1)		
LC50 - Fish [1]	267 – 307 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through] Source: EPA)	
EC50 - Crustacea [1]	200 mg/l Test organisms (species): Daphnia magna	
EC50 72h - Algae [1]	256.3 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)	
EC50 72h - Algae [2]	189 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)	

12.2. Persistence and degradability

M5-82 Red	
Persistence and degradability	Not established.
Bisphenol A-epichlorohydrin polymer (25068-38-6)	
Persistence and degradability	Rapidly degradable
Bisphenol A diglycidyl ether-bisphenol A copolymer (25036-25-3)	
Persistence and degradability	Rapidly degradable
Bisphenol A (80-05-7)	
Persistence and degradability	Rapidly degradable
2-Methylimidazole (693-98-1)	
Persistence and degradability	Rapidly degradable

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12.3. Bioaccumulative potential

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Bioaccumulative potential	Not established.
Bisphenol A (80-05-7)	
BCF - Fish [1]	5.1 – 13.8
Partition coefficient n-octanol/water	3.4 (at 21.5 °C (at pH 6.4)
2-Methylimidazole (693-98-1)	
Partition coefficient n-octanol/water	0.22 (at 25 °C)

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Ozone : Not classified

Fluorinated greenhouse gases : No

Other information : No other effects known.

SECTION 13 Disposal considerations

Product/Packaging disposal recommendations

Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

SECTION 14 Transport information

In accordance with DOT

14.1. UN number

UN-No. (DOT) : Not regulated

14.2. UN Proper Shipping Name

Proper Shipping Name (DOT) : Not regulated

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : Not regulated

14.4. Packing group

Packing group (DOT) : Not regulated

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

Not applicable

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SECTION 15 Regulatory information

15.1. Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

15.2. International regulations

No additional information available

15.3. State regulations



This product can expose you to chemicals including 2-Methylimidazole, which is known to the State of California to cause cancer, and Bisphenol A, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

SECTION 16 Other information

Date of issue : 12/18/2015
Revision date : 04/23/2025
Other information : None.

Prepared by: Tyler Brush, 04/23/25

Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. 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. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

Disclosure: Any ingredient claimed as a trade secret will be disclosed in accordance with CFR 29 1910.1200 (i). Known to be present only as a trace impurity in the finished product: NONE See Section 8 of this SDS for any noted exposure limits for these compounds. This Safety Data Sheet (SDS) has been prepared in compliance with the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200 The listed components are considered to be hazardous under that standard.