



Safety Data Sheet

RF 1778 Part A

Section 1. Identification

Product Identifier RF 1778 Part A
Synonyms N/A
Manufacturer Stock
Numbers N/A

Recommended use N/A
Uses advised against N/A

Manufacturer Contact

Address Resin Formulators
18027 Bishop Avenue
Carson, CA, 90746
USA

Phone	Emergency Phone	Fax
(310) 204-6159	(800) 424-9300 CHEMTREC	(310) 202-7247

Email	Website
sales@evroberts.com	http://www.evroberts.com

Section 2. Hazards Identification

Classification ACUTE TOXICITY - INHALATION - Category 4
CARCINOGENICITY - Category 1
EYE DAMAGE/IRRITATION - Category 2B
SENSITIZATION - RESPIRATORY - Category 1
SENSITIZATION - SKIN - Category 1
SKIN CORROSION/IRRITATION - Category 2
SPECIFIC TARGET ORGAN TOXICITY (Repeated Exposure) - Category 2
SPECIFIC TARGET ORGAN TOXICITY (Single Exposure) - Category 3

Signal Word Danger

Pictogram



Hazard Statements

Can cause severe irritation or burns on the skin
Causes eye irritation
Harmful if inhaled
May cause allergy or asthma symptoms or breathing difficulties if inhaled
May cause an allergic skin reaction
May cause cancer (state route of exposure if no other routes of exposure cause the hazard)
May cause damage to organs (state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if no other routes of exposure cause the hazard)
May cause respiratory irritation; or May cause drowsiness or dizziness

Precautionary Statements

Response

Call a poison center/doctor/ ... /if you feel unwell.
Get medical advice/attention if you feel unwell.
If experiencing respiratory symptoms: Call a poison center/doctor/ ...
If exposed or concerned: Get medical advice/attention.
If eye irritation persists: 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 inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
If on clothing: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.
If on skin: Wash with plenty of water/ ...
If skin irritation or rash occurs: Get medical advice/attention.
Remove victim to fresh air and keep at rest in a position comfortable for breathing
Specific treatment (see ... on this label)
Wash contaminated clothing before reuse.

Prevention

Avoid breathing dust/fume/gas/mist/ vapors/spray.
Contaminated work clothing must not be allowed out of the workplace.
Do not breathe dust/fume/gas/mist/ vapors/spray.
Do not handle until all safety precautions have been read and understood.
In case of inadequate ventilation wear respiratory protection.
Obtain special instructions before use.
Use only outdoors or in a well-ventilated area.
Wash ...thoroughly after handling.
Wear protective Butyl Gloves, Face Shield, Eye Bath and Safety Shower.
Wear protective gloves.
Wear protective gloves/protective clothing/eye protection/face protection.

Storage

Store in a well-ventilated place. Keep container tightly closed.
Store locked up.

Disposal

Dispose of contents/container to ...

Ingredients of unknown toxicity 0%

Hazards not Otherwise Classified

No Data Available

Section 3. Ingredients

CAS	Ingredient Name	Weight %
	Polyisocyanate prepolymer based on MDI	70-90 %
101-68-8	Benzene, 1,1'-methylenebis[4-isocyanato-	5-15 %
26447-40-5	Benzene, 1,1'-methylenebis[isocyanato-	10-20 %

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First-Aid Measures

Inhalation Remove patient from exposure, keep warm and at rest

Skin Remove contaminated clothing. Wash affected areas thoroughly with soap and water. If irritation, redness, or a burning sensation develops and persists, obtain medical advice. Contaminated clothing should be thoroughly cleaned before reuse. Contaminated leather articles can not be decontaminated and should be destroyed.

Ingestion DO NOT INDUCE VOMITING! Rinse mouth with water. Get medical attention immediately. Contact Poisen Control Center

Section 5. Fire Fighting Measures

Suitable Extinguishing Media Extinguishing media: Water spray (fog), foam, dry chemical or carbon dioxide.

Special firefighting procedures: Wear full protective clothing. Wear self-contained breathing apparatus.

Unusual fire or explosion hazards: May liberate large quantities of dense, foul-smelling smoke which may contain unidentified toxic gasses.

Hazardous combustion products: Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Oxides of nitrogen.

Unsuitable Extinguishing Media N/A

Section 6. Accidental Release Measures

Clean-up Observe precautions from other sections. Call 3M-HELPS line

(1-800-364-3577) for more information on handling and managing the spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Collect as much of the spilled material as possible. Clean up residue. Minimize airborne dust and eliminate all fire/ignition sources. Do not use air hoses for cleaning. Minimize dry sweeping to avoid generation of dust clouds. Vacuum dust-accumulation surfaces and remove to a chemical disposal area. Vacuums with explosion-proof motor should be used.

Section 7. Handling and Storage

Storage Keep container tightly closed when not in use.

Section 8. Exposure Controls/Personal Protection

Occupational Exposure Limits	Ingredient Name	ACGIH TLV	OSHA PEL	STEL
	Polyisocyanate prepolymer based on MDI	N/A	N/A	N/A
	Benzene, 1,1'-methylenebis[4-isocyanato-	0.005 PPM TWA/0.02 PPM (CEILING)	0.02 PPM	N/A
	Benzene, 1,1'-methylenebis[isocyanato-	N/A	N/A	N/A
Personal Protective Equipment	Goggles, Gloves			
Engineering controls	Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.			

Section 9. Physical and Chemical Properties

Physical State	Liquid
Color	Clear yellow
Odor	Musty
Odor Threshold	N/A
Solubility	N/A
Partition coefficient Water/n-octanol	N/A
VOC%	N/A
Viscosity	N/A
Specific Gravity	1
Density lbs/Gal	N/A
Pounds per Cubic Foot	N/A
Flash Point	N/A
FP Method	N/A
pH	N/A
Melting Point	N/A
Boiling Point	N/A

Boiling Range	N/A
LEL	N/A
UEL	N/A
Evaporation Rate	N/A
Flammability	N/A
Decomposition Temperature	N/A
Auto-ignition Temperature	N/A
Vapor Pressure	N/A
Vapor Density	N/A

Section 10. Stability and Reactivity

STABILITY AND REACTIVITY

Stability: Stable at normal conditions.

Hazardous reactions: May occur.

Hazardous decomposition products:

Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Oxides of nitrogen.

Incompatible materials: Keep away from strong oxidizing agents, strong Lewis or mineral acids.

Reactivity: Not available.

Conditions to avoid: Avoid mixing resin (Part A) and curing agent (Part B) unless you plan to use immediately. Do not heat mixed adhesive unless curing surfaces to be bonded. Failure to observe these precautions may result in excessive heat build-up causing an exotherm.

Section 11. Toxicological Information

Skin Contact

Severe irritant. Repeated and/or prolonged contact may cause skin sensitization. Causes severe burns.

Harmful in contact with skin.

May cause allergic skin reactions.

Route of Entry

Eye Contact, Skin Contact, Inhalation, Ingestion

Additional Information

Section 12. Ecological Information

Not Available

Section 13. Disposal

WASTE DISPOSAL

Dispose of in accord with local, state and federal regulations

METHOD:

Section 14. Transport Information

UN Number N/A
UN Proper Shipping Name N/A
DOT Classification N/A
Packing Group N/A

Section 15. Regulatory Information

Additional Information

United States Federal Regulations:

US EPA CERCLA Hazardous Substances (40 CFR 302):

Not Evaluated

SARA Section 311/312 Hazard Categories:

Reactivity Hazard Acute Health Hazard Chronic Health Hazard

US EPA Emergency Planning and Community Right-To-Know Act (EPCRA)

SARA Title III

Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A): Not Evaluated

US EPA Emergency Planning and Community Right-To-Know Act (EPCRA)

SARA Title III

Section 313 Toxic Chemicals (40 CFR 372.65) – Supplier Notification Required:
4,4' -Methylenediphenyl diisocyanate 101-68-8

State Right-To-Know Information:

For details of your regulatory requirements you should contact the appropriate agency in your state.

Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists:

4,4' -Methylenediphenyl diisocyanate 101-68-8 (MA, NJ, PA) Methylenediphenyl diisocyanate (MDI) 26447-40-5 (MA)

California Prop. 65: This product contains the chemicals listed below, which the State of California has found to cause cancer, birth defects or reproductive harm.

None

United States Federal Regulations:

US EPA CERCLA Hazardous Substances (40 CFR 302):

Not Evaluated

SARA Section 311/312 Hazard Categories:

Reactivity Hazard Acute Health Hazard Chronic Health Hazard

US EPA Emergency Planning and Community Right-To-Know Act (EPCRA)

SARA Title III

Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A): Not Evaluated

US EPA Emergency Planning and Community Right-To-Know Act (EPCRA)

SARA Title III

Section 313 Toxic Chemicals (40 CRF 372.65) – Supplier Notification Required:
4,4' -Methylenediphenyl diisocyanate 101-68-8

State Right-To-Know Information:

For details of your regulatory requirements you should contact the appropriate agency in your state.

Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists:

4,4' -Methylenediphenyl diisocyanate 101-68-8 (MA, NJ, PA) Methylenediphenyl diisocyanate (MDI) 26447-40-5 (MA)

California Prop. 65: This product contains the chemicals listed below, which the State of California has found to cause cancer, birth defects or reproductive harm.

Section 16. Other Information

Revision Date

9/26/2018

Disclaimer

The information contained herein is believed to be accurate. It is provided independently of any sale of the product for purpose of hazard communication as part of E.V. Roberts' product safety program. It is not intended to constitute performance information concerning the product. No warranty, expressed or implied, or merchantability or fitness for a particular purpose is made with respect to the product or the information contained herein.

To determine applicability or effects of any law or regulation with respect to the product, user should consult his legal advisor or the appropriate government agency. E.V. Roberts does not undertake to furnish advice on such matters.

HMIS Rating (Not Regulated)

The HMIS Rating for this product is:
Health: 2 Flammability: 1 Reactivity: 0

0=Minimal; 1=Slight; 2=Moderate; 3=Serious; 4=Severe

For Information Purposes Only - No Longer Regulated



Safety Data Sheet

RF 1778 Part B

Section 1. Identification

Product Identifier RF 1778 Part B
Synonyms N/A
Manufacturer Stock
Numbers N/A

Recommended use N/A
Uses advised against N/A

Manufacturer Contact

Address Resin Formulators
18027 Bishop Avenue
Carson, CA, 90746
USA

Phone	Emergency Phone	Fax
(310) 204-6159	(800) 424-9300 CHEMTREC	(310) 202-7247

Email	Website
sales@evroberts.com	http://www.evroberts.com

Section 2. Hazards Identification

Classification ACUTE TOXICITY - INHALATION - Category 4
CARCINOGENICITY - Category 1
EYE DAMAGE/IRRITATION - Category 1
EYE DAMAGE/IRRITATION - Category 2B
SENSITIZATION - RESPIRATORY - Category 1
SENSITIZATION - SKIN - Category 1
SKIN CORROSION/IRRITATION - Category 2
SPECIFIC TARGET ORGAN TOXICITY (Repeated Exposure) - Category 2
SPECIFIC TARGET ORGAN TOXICITY (Single Exposure) - Category 3

Signal Word Danger

Pictogram



Hazard Statements

Can cause severe irritation or burns on the skin
Causes eye irritation
Causes serious eye damage
Harmful if inhaled
May cause allergy or asthma symptoms or breathing difficulties if inhaled
May cause an allergic skin reaction
May cause cancer (state route of exposure if no other routes of exposure cause the hazard)
May cause damage to organs (state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if no other routes of exposure cause the hazard)
May cause respiratory irritation; or May cause drowsiness or dizziness

Precautionary Statements

Response

Call a poison center/doctor/ ... /if you feel unwell.
Get medical advice/attention if you feel unwell.
If experiencing respiratory symptoms: Call a poison center/doctor/ ...
If exposed or concerned: Get medical advice/attention.
If eye irritation persists: 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 inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
If on clothing: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.
If on skin: Wash with plenty of water/ ...
If skin irritation or rash occurs: Get medical advice/attention.
Immediately call a poison center/doctor/ ...
Remove victim to fresh air and keep at rest in a position comfortable for breathing
Specific treatment (see ... on this label)
Wash contaminated clothing before reuse.

Prevention

Avoid breathing dust/fume/gas/mist/ vapors/spray.
Contaminated work clothing must not be allowed out of the workplace.
Do not breathe dust/fume/gas/mist/ vapors/spray.
Do not handle until all safety precautions have been read and understood.
In case of inadequate ventilation wear respiratory protection.
Obtain special instructions before use.
Use only outdoors or in a well-ventilated area.
Wash ...thoroughly after handling.
Wear eye protection/face protection.
Wear protective Butyl Gloves, Face Shield, Eye Bath and Safety Shower.
Wear protective gloves.
Wear protective gloves/protective clothing/eye protection/face protection.

Storage

Store in a well-ventilated place. Keep container tightly closed.
Store locked up.

Disposal

Dispose of contents/container to ...

Ingredients of unknown toxicity 0%

Hazards not Otherwise Classified

No Data Available

Section 3. Ingredients

CAS	Ingredient Name	Weight %
106264-79-3	Dimethylthiotoluenediamine	Unknown
1761-71-3	Methylenebiscyclohexanamine, 4, 4	1-5 %
68479-98-1	Diethylenetoluenediamine (DETDA)	1-5 %

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First-Aid Measures

Inhalation Remove patient from exposure, keep warm and at rest

Skin Remove contaminated clothing. Wash affected areas thoroughly with soap and water. If irritation, redness, or a burning sensation develops and persists, obtain medical advice. Contaminated clothing should be thoroughly cleaned before reuse. Contaminated leather articles can not be decontaminated and should be destroyed.

Ingestion DO NOT INDUCE VOMITING! Rinse mouth with water. Get medical attention immediately. Contact Poisen Control Center

Section 5. Fire Fighting Measures

Suitable Extinguishing Media Extinguishing media: Water spray (fog), foam, dry chemical or carbon dioxide.

Special firefighting procedures: Wear full protective clothing. Wear self-contained breathing apparatus.

Unusual fire or explosion hazards: May liberate large quantities of dense, foul-smelling smoke which may contain unidentified toxic gasses.

Hazardous combustion products: Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Oxides of nitrogen.

Unsuitable Extinguishing Media N/A

Section 6. Accidental Release Measures

Clean-up

Observe precautions from other sections. Call 3M-HELPS line (1-800-364-3577) for more information on handling and managing the spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Collect as much of the spilled material as possible. Clean up residue. Minimize airborne dust and eliminate all fire/ignition sources. Do not use air hoses for cleaning. Minimize dry sweeping to avoid generation of dust clouds. Vacuum dust-accumulation surfaces and remove to a chemical disposal area. Vacuums with explosion-proof motor should be used.

Section 7. Handling and Storage

Storage

Keep container tightly closed when not in use.

Section 8. Exposure Controls/Personal Protection

Occupational Exposure Limits	Ingredient Name	ACGIH TLV	OSHA PEL	STEL
	Dimethylthiotoluenediamine	N/A	N/A	N/A
	Methylenebiscyclohexanamine, 4, 4	N/A	N/A	N/A
	Diethylenetoluenediamine (DETDA)	N/A	N/A	N/A
Personal Protective Equipment	Goggles, Gloves			
Engineering controls	Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.			

Section 9. Physical and Chemical Properties

Physical State	Liquid
Color	Black
Odor	
Odor Threshold	N/A
Solubility	N/A
Partition coefficient Water/n-octanol	N/A
VOC%	N/A
Viscosity	N/A
Specific Gravity	1
Density lbs/Gal	N/A
Pounds per Cubic Foot	N/A
Flash Point	N/A
FP Method	N/A
pH	N/A
Melting Point	N/A
Boiling Point	N/A
Boiling Range	N/A
LEL	N/A

UEL	N/A
Evaporation Rate	N/A
Flammability	N/A
Decomposition Temperature	N/A
Auto-ignition Temperature	N/A
Vapor Pressure	N/A
Vapor Density	N/A

Section 10. Stability and Reactivity

STABILITY AND REACTIVITY

Stability: Stable at normal conditions.

Hazardous reactions: May occur.

Hazardous decomposition products:

Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Oxides of nitrogen.

Incompatible materials: Keep away from strong oxidizing agents, strong Lewis or mineral acids.

Reactivity: Not available.

Conditions to avoid: Avoid mixing resin (Part A) and curing agent (Part B) unless you plan to use immediately. Do not heat mixed adhesive unless curing surfaces to be bonded. Failure to observe these precautions may result in excessive heat build-up causing an exotherm.

Section 11. Toxicological Information

Skin Contact

Severe irritant. Repeated and/or prolonged contact may cause skin sensitization. Causes severe burns.

Harmful in contact with skin.

May cause allergic skin reactions.

Route of Entry

Eye Contact, Skin Contact, Inhalation, Ingestion

Additional Information

Section 12. Ecological Information

Not Available

Section 13. Disposal

WASTE DISPOSAL METHOD:

Dispose of in accord with local, state and federal regulations

Section 14. Transport Information

UN Number N/A
UN Proper Shipping Name N/A
DOT Classification N/A
Packing Group N/A

Section 15. Regulatory Information

Additional Information Safety, health and environmental regulations specific for the product in question. This regulatory information is not intended to be comprehensive. Other regulations may apply to this material. To determine applicability or effects of any law or regulation with respect to the product, user should seek legal advice or consult with the appropriate government agency. GS Polymers, Inc. does not undertake to furnish advice on regulatory matters.

United States Federal Regulations: US EPA CERCLA Hazardous Substances (40 CFR 302): Not Evaluated

SARA Section 311/312 Hazard Categories: Not Evaluated

US EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A): Not Evaluated

US EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) – Supplier Notification Required: None

State Right-To-Know Information: For details of your regulatory requirements you should contact the appropriate agency in your state.

Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists: Not Evaluated

California Prop. 65: This product contains the chemicals listed below, which the State of California has found to cause cancer, birth defects or reproductive harm. None

Section 16. Other Information

Revision Date 9/26/2018

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HMIS Rating (Not
Regulated)

To determine applicability or effects of any law or regulation with respect to the product, user should consult his legal advisor or the appropriate government agency. E.V. Roberts does not undertake to furnish advice on such matters.

The HMIS Rating for this product is:
Health: 2 Flammability: 1 Reactivity: 0

The NFPA Rating for this product is:
Health Hazard: 2 Fire Hazard: 1 Reactivity Hazard: 0

For Information Purposes Only - No Longer Regulated