METZGER/McGUIRE

SAFETY DATA SHEET

Date issued : 03/26/2015 **Date revised :** 11/20/2024 **Revision number :** 3

1. Identification

Product identifier: SRG Part A Polyol

Manufacturer

Metzger/McGuire
Mailing Address: PO Box 2217, Concord, NH 03302
Shipping Address: 8 Integra Dr., Concord, NH 03301
Toll Free: 800-223-6680
Phone: 603-224-6122 Fax: 603-224-6020
www.metzgermcguire.com

Emergency telephone number: ChemTel, Inc. 800-255-3924 (North America) +1 813-248-0585 (International)

2. Hazard identification

Classification of the substance or mixture

Health hazards:

Eye Irritation, Category 2A
Carcinogenicity
Reproductive Toxicity, Category 1B

Physical hazards:

Flammable Liquids, Category 4

Label elements

Health hazard Exclamation mark

Signal word: DANGER

Hazard statement(s)

H227: Combustible liquid.
H319: Causes serious eye irritation.
H351: Suspected of causing cancer.
H360: May damage fertility or the unborn child.

Precautionary statement(s)

Prevention:

P202: Do not handle until all safety precautions have been read and understood.
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P264: Wash skin thoroughly after handling.
P280: Wear protective gloves, protective clothing, eye protection and face protection.

Response:

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313: If eye irritation persists: Get medical advice.
P308+P313: IF exposed or concerned: Get medical advice.

3. Composition/information on ingredients

Chemical name	% w/w	CAS No.

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Hydroxy Terminated Poly(Oxyalkylated) Polyol	10 - 20	102-60-3
Hydrotreated Heavy Naphtha	5 - 10	64741-65-7
N-Methyl-2-Pyrrolidinone	≤ 0.3	872-50-4

4. First-aid measures

Eye: Immediately flush eyes with plenty of water. Remove contact lenses, if present. Seek medical advice if irritation persists.

Skin: Immediately flush skin with plenty of water.

Ingestion: If person is conscious, wash out mouth with water. Give one or two glasses of water to drink. Never give anything by mouth to an unconscious person. Do not induce vomiting unless instructed to do so by poison center or doctor.

Inhalation: Move person to fresh air.

5. Fire-fighting measures

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

Fire fighting equipment: Fire fighters must wear NIOSH-approved positive pressure self-contained breathing apparatus with full-face mask and full protective clothing.

6. Accidental release measures

Small spill: Isolate the area and prevent entry of unnecessary and unprotected personnel. Do not walk through or otherwise scatter spilled product. Absorb with dry chemical absorbent, earth, sand or any other inert material. Place in a chemical waste container.

Large spill: Same procedure as for a small spill. Prevent entry into waterways, sewers, basements and confined areas.

7. Handling and storage

Precautions for safe handling: Do not get in eyes, on skin or on clothing. Wash hands before eating, drinking or smoking. Do not breathe vapors or mist. Use only with adequate ventilation. Keep container closed when not in use. Do not reseal if contaminated. Keep away from heat and flame.

Conditions for safe storage: Store in tightly closed containers in a cool, dry and well-ventilated area away from heat or sources of ignition. Keep out of direct sunlight.

Storage temperature: Minimum 12.8 to 15.5 ^{o}C (55 to 60 ^{o}F)

8. Exposure controls/personal protection

Appropriate engineering controls: Local exhaust ventilation used in combination with general ventilation as necessary to control air contaminates.

Individual protection measures, such as personal protective equipment

Eye / face protection: Wear a face shield and chemical safety glasses or goggles.

Skin protection - hand protection: Wear impervious gloves. Cover exposed skin.

Respiratory protection: In case of formation of vapors or aerosols, wear a NIOSH approved air-purifying respirator equipped with organic vapor cartridges.

Occupational hygiene practices: Avoid eating, drinking or smoking while using this product. Wash hands thoroughly after handling.

9. Physical and chemical properties

Physical state: Liquid

Color: Various colors

Odor: Hydrocarbon-like

Freezing point: Not established

Initial boiling point and boiling range: Not established

Flash point: > 60.6°C (141°F)

Relative vapor density: Heavier than air

Relative density: 1.03 (water = 1) at 25°C (77°F)

Solubility: Slight

Auto-ignition temperature: Not established

Dynamic viscosity: 300 cP at 25°C (77°F)

10. Stability and reactivity

Dangerous polymerization: Will not occur

Chemical stability: Stable

Hazardous decomposition products: Carbon oxides, nitrogen oxides and sulfur oxides

Incompatible materials: Strong acids and strong oxidizers

11. Toxicological information

Acute toxicity

Chemical name	LD_{50} (oral) mg/kg(rat)	LD_{50} (dermal) mg/kg(rabbit)	LC_{50} (inhalation) mg/l
Hydroxy Terminated Poly(Oxyalkylated) Polyol	3280 mg/kg	> 2000 mg/kg	
Hydrotreated Heavy Naphtha	> 5000 mg/kg	> 5000 mg/kg	> 5000 mg/m^3/4h(rat)
N-Methyl-2-Pyrrolidinone	3914 mg/kg	8000 mg/kg	> 5100 ppm/4h (rat)

Carcinogenicity

Chemical name	IARC
Hydrotreated Heavy Naphtha	Group 2B - Possibly carcinogenic to humans

12. Ecological information

Aquatic ecotoxicity

Chemical name	96-hour LC_{50}	48-hour EC_{50}
N-Methyl-2-Pyrrolidinone	3048 mg/l (Salmo gairdneri)	4897 mg/l (Daphnia magna)

13. Disposal considerations

Disposal methods: Dispose in accordance with local, state, provincial or national regulations.

Empty container: Decontaminate and pass to an approved drum recycler or destroy.

RCRA/EPA waste information: If discarded in its purchased form, this material is not a RCRA hazardous waste.

General comments: The generation of waste should be avoided or minimized whenever possible. Chemical waste, even small quantities, should never be poured into drains, sewers or waterways.

14. Transport information

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USA Department of Transport Regulations (DOT): Combustible liquid for DOT ground shipping. In non-bulk container, this product is not regulated for ground transportation. Bulk container ships as NA1993, Combustible Liquid, NOS, (Petroleum Distillates), III

ICAO / IATA - Air: Not regulated as dangerous goods.

IMO / IMDG - International: Not regulated as dangerous goods.

15. Regulatory information

UNITED STATES

SARA Title III

311/312 Health hazards: Carcinogenicity, Eye Irritation, Reproductive Toxicity

311/312 Physical hazards: Flammable Liquids

TSCA (The Toxic Substances Control Act)

TSCA regulatory: All components are in TSCA inventory.

16. Other information

Approved by: Loretta Priest **Title:** Health and Safety Officer

Date revised: 11/20/2024

Additional SDS information:

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstracts Service
EC_{50}	Median effective concentration
EINECS	European Inventory of Existing Commercial Chemical Substances
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
LC_{50}	Lethal concentration to 50% of exposed laboratory animals
LD_{50}	Lethal dose to 50% of exposed laboratory animals
TWA	Time-weighted average
TLV	Threshold limit value
NIOSH	US National Institute of Occupational Safety and Health
NE	Not established
NTP	US National Toxicology Program
OEL	Occupational exposure limit
OSHA	US Occupational Safety Health Administration
PEL	Permissible exposure limit
RQ	Reportable quantity
STEL	Short term exposure limit
U.S. DOT	United States Department of Transportation

Manufacturer disclaimer: The information in this SDS was obtained from sources that we believe are reliable. The information is provided without warranty, implied or expressed, concerning accuracy. The manufacturer assumes no legal responsibility for use or reliance on this information. This SDS is provided solely for the purpose of conveying health, safety, and environmental information. This SDS is not a specification data sheet. Some of the information and conclusions may be derived from sources other than test data on the material itself.

METZGER/McGUIRE

SAFETY DATA SHEET

Date issued : 03/26/2015 **Date revised :** 11/20/2024 **Revision number :** 2

1. Identification

Product identifier: SRG Part B Iso

Manufacturer

Metzger/McGuire
Mailing Address: PO Box 2217, Concord, NH 03302
Shipping Address: 8 Integra Dr., Concord, NH 03301
Toll Free: 800-223-6680
Phone: 603-224-6122 Fax: 603-224-6020
www.metzgermcguire.com

Emergency telephone number: ChemTel, Inc. 800-255-3924 (North America) +1 813-248-0585 (International)

2. Hazard identification

Classification of the substance or mixture

Health hazards:

Acute Toxicity (Inhalation), Category 4
Skin Irritation, Category 2
Skin Sensitization, Category 1
Eye Irritation, Category 2A
Respiratory Sensitization, Category 1
Target Organ Toxicity (Single exposure), Category 3
Target Organ Toxicity (Repeated exposure), Category 2

Label elements

Health hazard Exclamation mark

Signal word: DANGER

Hazard statement(s)

H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H332: Harmful if inhaled.
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335: May cause respiratory irritation.
H373: May cause damage to respiratory system through prolonged or repeated exposure.

Precautionary statement(s)

Prevention:

P260: Do not breathe mist, vapors and spray.
P264: Wash skin thoroughly after handling.
P271: Use only outdoors or in a well-ventilated area.
P272: Contaminated work clothing should not be allowed out of the workplace.
P280: Wear protective gloves, protective clothing, eye protection and face protection.
P284: In case of inadequate ventilation wear respiratory protection.

Response:

P302+P352: IF ON SKIN: Wash with plenty of water.

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P333+P313: If skin irritation or rash occurs: Get medical advice.
P362: Take off contaminated clothing.
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P342+P311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313: If eye irritation persists: Get medical advice.
P314: Get medical advice if you feel unwell.

3. Composition/information on ingredients

Chemical name	% w/w	CAS No.
Polymeric Diphenylmethane Diisocyanate	20 - 40	9016-87-9
4,4'-Diphenylmethane Diisocyanate	20 - 40	101-68-8

4. First-aid measures

Eye: Immediately flush eyes with plenty of water. Remove contact lenses, if present. Seek medical advice if irritation persists.

Skin: Immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Seek medical advice if irritation or rash occurs.

Ingestion: If person is conscious, wash out mouth with water. Do not induce vomiting. Immediately call a poison center or doctor.

Inhalation: Move person to fresh air. Seek medical attention if symptoms of respiratory distress occur. Symptoms may be delayed for several hours.

5. Fire-fighting measures

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

Explosion hazards: Water contamination produces carbon dioxide gas. This may cause pressurization or explosion of containers.

Fire fighting equipment: Fire fighters must wear NIOSH-approved positive pressure self-contained breathing apparatus with full-face mask and full protective clothing.

6. Accidental release measures

Small spill: Isolate the area and prevent entry of unnecessary and unprotected personnel. Do not walk through or otherwise scatter spilled product. Ventilate the area. Absorb with dry chemical absorbent or any other dry inert material. Place in a chemical waste container.

Large spill: Same procedure as for a small spill. Prevent entry into waterways, sewers, basements and confined areas.

General procedures: Clean spill area with a decontamination solution. Suggested formula: Sodium carbonate (5-10%), liquid detergent (1-2%), water (88-94%). Alternate formula: Concentrated ammonia (3-8%), liquid detergent (1-2%, water (90-96%). Ensure adequate ventilation to prevent overexposure to ammonia.

Comments: Avoid using earth, sand and clay as absorbents as these can be wet. Isocyanates react with water to form carbon dioxide. Carbon dioxide functions as a blowing agent, causing the product to form. Allow the waste container to stand loosely covered for 48 hours before closing. Reaction with water can be slow. Build up of carbon dioxide in a closed container can cause rupture.

7. Handling and storage

Precautions for safe handling: Do not get in eyes, on skin or on clothing. Wash hands before eating, drinking or smoking. Do not breathe vapors or mist. Use only with adequate ventilation. Keep container closed when not in use. Do not reseal if contaminated. Keep away from heat and flame.

Conditions for safe storage: Store in tightly closed containers in a cool, dry and well-ventilated area away from heat or sources of

ignition. Keep out of direct sunlight.

Storage temperature: 15.5°C (60°F) Minimum to 37.7°C (100°F) Maximum

8. Exposure controls/personal protection

Exposure controls

Control parameters				
	Occupational exposure limit values			
Chemical name	**Type**		**ppm**	**mg/m³**
4,4'-Diphenylmethane Diisocyanate	**OSHA PEL**	**TWA**	0.02 [1]	0.2 [1]
	ACGIH TLV	**TWA**	0.005	
Footnotes: **1**. Ceiling				

Appropriate engineering controls: Local exhaust ventilation used in combination with general ventilation as necessary to control air contaminates.

Individual protection measures, such as personal protective equipment

Eye / face protection: Wear a face shield and chemical safety glasses or goggles.

Skin protection - hand protection: Wear impervious gloves. Cover exposed skin.

Respiratory protection: For airborne exposure above the exposure limit(s), wear a NIOSH approved air-purifying respirator equipped with organic vapor cartridges. For situations where the atmospheric levels may exceed the level for which an air-purifing respirator is effective, use a positive-pressure air-supplying respirator.

Occupational hygiene practices: Avoid eating, drinking or smoking while using this product. Wash hands thoroughly after handling.

9. Physical and chemical properties

Physical state: Liquid

Color: Amber

Odor: Slightly musty

Freezing point: Not established

Initial boiling point and boiling range: Not established

Flash point: > 93.3°C (200°F)

Vapor pressure: < 0.001 mmHg at 25°C (77°F)

Relative vapor density: Heavier than air

Relative density: 1.13 (water = 1) at 25°C (77°F)

Solubility: Insoluble

Auto-ignition temperature: > 572°C (300°F)

Dynamic viscosity: 200 cP at 25°C (77°F)

10. Stability and reactivity

Dangerous polymerization: Can be caused by elevated temperatures

Chemical stability: Stable

Hazardous decomposition products: Carbon oxides, nitrogen oxides, isocyanates, formaldenyde and trace amounts of hydrogen cyanide

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Incompatible materials: This product will react with any materials containing active hydrogens such as water, alcohol, amines, bases and acids. The reaction with water is very slow under 122 ºF (50 ºC), but is is accelerated at higher temperatures.

11. Toxicological information

Acute toxicity

Chemical name	LD_{50} (oral) mg/kg(rat)	LD_{50} (dermal) mg/kg(rabbit)	LC_{50} (inhalation) mg/l
4,4'-Diphenylmethane Diisocyanate	> 10000 mg/kg	> 9400 mg/kg	0.49 mg/l/4h (rat)

12. Ecological information

Aquatic ecotoxicity

Chemical name	96-hour LC_{50}	48-hour EC_{50}
4,4'-Diphenylmethane Diisocyanate	> 1000 mg/l (Brachydanio rerio)	> 1000 mg/l (Daphnia magna)

13. Disposal considerations

Disposal methods: Dispose in accordance with local, state, provincial or national regulations.

Empty container: Decontaminate and pass to an approved drum recycler or destroy.

RCRA/EPA waste information: If discarded in its purchased form, this material is not a RCRA hazardous waste.

General comments: The generation of waste should be avoided or minimized whenever possible. Chemical waste, even small quantities, should never be poured into drains, sewers or waterways.

14. Transport information

Comments: Not regulated as dangerous goods.

15. Regulatory information

UNITED STATES

SARA Title III

311/312 Health hazards: Acute Toxicity (Inhalation), Eye Irritation, Respiratory Sensitization, Skin Irritation, Skin Sensitization, Target Organ Toxicity (Repeated exposure), Target Organ Toxicity (Single exposure)

EPCRA Section 313 Toxic Chemicals

Chemical name	% w/w	CAS No.	Comments
Polymeric Diphenylmethane Diisocyanate	20 - 40	9016-87-9	Diisocyanates category
4,4'-Diphenylmethane Diisocyanate	20 - 40	101-68-8	Diisocyanates category

CERCLA Hazardous Substances and Reportable Quantities (RQ)

Chemical name	% w/w	CERCLA RQ
4,4'-Diphenylmethane Diisocyanate	20 - 40	5000 lb.

TSCA (The Toxic Substances Control Act)

TSCA regulatory: All components are in TSCA inventory.

National response center: Any spill or release to the environment above the RQ must be reported to the National Response Center (800-424-8802).

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16. Other information

Approved by: Loretta Priest **Title:** Health and Safety Officer

Date revised: 11/20/2024

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