

SAFETY DATA SHEET

Metzger/McGuire Co.

Polyether Polyol

1. Identification

1.1 Product Name: Spal Pro RS-88 Part A Polyol

1.2 Recommended Use: Component of a Control Joint Polyurethane System

Issue Date: 3/28/15

Supersedes: 6/20/13

Reason for revision: Update hazard statements

1.3 Manufacturer: Metzger/McGuire Co.

PO BOX 2217

CONCORD, NH 03302-2217

PH: (800) 223-6680

FAX: (603) 224-6020

Email: info@metzgermcguire.com

1.4 In Case of Emergency: INFOTRAC: 1-800-535-5053

Outside the US and Canada, call 1-352323-3500

2. Hazards Identification

2.1 According to 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification: May cause respiratory tract, eye and skin irritation.

2.2 Label Elements:

Hazard pictograms:



Signal Word

Caution

2.3 Hazard Classification according to EC No. 1272/2008 (CLP/GHS)

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

2.4 Precautionary statements:

P264 Wash thoroughly after handling.

P273 Avoid release to the environment.

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P280 Wear protective gloves / protective clothing / eye protection / face protection.

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

P333 + P313 If skin irritation or rash occurs: Get medical advice / attention.

Contains: Polyether polyol

See **toxicological information (Section 11)**

GENERAL INFORMATION: Read the entire SDS for a more thorough evaluation of the hazards.

3. Composition information

Name

3.1 Substances Polyether polyol mixture

3.2 Mixture: Concentration of composition has been withheld as a Trade Secret.

4. First Aid Measures

4.1 Eye contact: Check for and remove any contact lenses. Immediately flush eyes with plenty of running tepid water for 15 minutes, occasionally lifting the upper and lower eyelids. If effects occur get medical attention as appropriate.

Skin contact: Wash immediately with warm soapy water. Get medical attention if irritation develops. Was clothing or personal items that cannot be decontaminated.

Inhalation: Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen clothing such as collar, tie, belt or waistband.

Ingestion: Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately. **Notes to physician:** No specific treatment. Treat symptomatically. Practically non-toxic if swallowed.

4.2 Symptoms of exposure:

Eye contact: Irritation, redness and pain.

Skin contact: Irritation, redness, itching.

Inhalation: Dizziness, difficulty breathing if fumes are highly concentrated.

Ingestion: May cause irritation.

5. Fire-Fighting Measures

NFPA Flammable classification: Combustible liquid III B

Flash point: >190°C (open cup)

5.1 Extinguishing Media

Suitable: Water fog, carbon dioxide, foam, dry chemical.

Not Suitable: None

5.2 Special hazards: Combustion products may include: carbon monoxide, carbon dioxide.

5.3 Special protective actions for fire fighters: Use protective fire fighting clothing and positive pressure self-contained breathing apparatus (SCBA) to protect against potential harmful and/or irritating fumes. Do not use high volume water jet as this may spread the area of the fire.

6. Accidental Release Measures

6.1 Personal precautions: Isolate area; keep unnecessary and unprotected personnel away from spill area. Avoid contact with skin, eyes and clothing. Use appropriate safety equipment. No health effects expected from the cleanup of this material if contact can be avoided.

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6.2 Environmental precautions: Avoid disposal of spilled material and runoff and contact with soil, waterways, drains and sewers.

6.3 Methods for cleaning up: Contain and absorb large spills with an inert, non-flammable absorbent carrier (such as earth, sand or clay). Shovel into labeled open-top drums or plastic bags for further decontamination if necessary. Wash the spillage area clean with liquid decontaminant. (See section 13 for disposal considerations). Notify applicable government authorities if release is reportable.

7. Handling and Storage

7.1 Precautions for safe handling: Avoid personal contact with the product. Use only with adequate ventilation to ensure that the occupational exposure limit is not exceeded. Regularly monitor the efficiency of the ventilation system. Avoid breathing aerosols, mists and vapors. (See section 8 Exposure control for details). Keep stocks of de-contaminant readily available.

7.2 Storage: Keep containers tightly closed and store in a cool, dry well ventilated area. Suitable containers include HDPE, LDPE, carbon steel and stainless steel.

8. Exposure Controls/Personal Protection

8.1 Exposure parameters: None established.

8.2 Engineering controls: Ventilation through local exhaust if appropriate.

Eye/face protection: Safety glasses, goggles, face mask as appropriate.

Skin & hand protection: Protective clothing as necessary to guard against product contact. PVC, neoprene or nitrile rubber gloves, safety shoes.

Respiratory protection: Not needed under normal use conditions under adequate ventilation.

Other protective equipment: Eye wash stations and emergency showers should be available. The type and degree of personal protective equipment will depend on the specific work operation.

8.3 Environmental exposure controls: None established.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties.

Appearance	: Liquid
Color	: As supplied
Type of odor	: Faint odor
Vapor pressure	: <1 mm Hg) 20°C
Vapor density	: No data available
Boiling point	: >200°C
Specific gravity	: 1.02-1.05 grams / cc
Water solubility	: Soluble
pH	: 10-12

10. Stability and Reactivity

10.1 Reactivity: Reacts with isocyanates.

10.2 Stability: Stable at room temperature.

10.3 Hazardous polymerization: Will not occur by itself.

10.4 Conditions to avoid: No specific data.

10.5 Incompatible materials: See conditions to avoid.

10.6 Hazardous decomposition products: None produced under normal conditions of use.

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11. Toxicological Information

- 11.1 Acute oral toxicity:** LD50 (rat): >2,000 mg/kg.
- 11.2 Acute dermal toxicity:** LD50 (rabbit) >2,000 mg/kg
- 11.3 Acute inhalation toxicity:** The LC50 has not been determined.

12. Ecological Information

- 12.1 Toxicity to fish:** LC50 (96 h) >100 mg/l. Data derived from products of similar composition.
- 12.2 Persistence and degradability:** Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions.

13. Disposal Considerations

13.1 Waste treatment methods: Do not dump into any sewers, on the ground, or into any body of water. Significant quantities of waste product residues should be processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local requirements.

Container disposal: Drain container of all residual material prior to disposal.

14. Transport Information Not classified as a dangerous good.

- 14.1 DOT Bulk and Non-Bulk:** Not regulated for ground transport.
- 14.2 TDG Classification:** Not regulated
- 14.2 ADR, IMDG Class:** Not regulated
- 14.3 IATA-DGR Class:** Not regulated

15. Regulatory Information

15.1 Safety health and environmental regulations/legislation:

OSHA Hazard Communication Standard, 29 CFR 1910.1200. Eye damage / irritation.
EPCRA 311/312 (40 CFR 370.2) (Hazard Categories): Chronic
SARA Title III Section 313 (40CFR372): No reportable components.
CERCLA Status (40CFR302): No reportable quantity components.
TSCA Inventory status: Released / listed.
OSHA/NTP/IARC Carcinogen Status: Not listed.
Chemicals known to the state of California to cause Cancer or reproductive toxicity: None
Pennsylvania (Worker and Community Right-to-Know Act): Hazardous Substances List and/or Environmental Hazardous Substance List and/or Special Hazardous Substance List: To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

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16. Other Information

HMIS/NFPA rating: Health: 1 Fire: 1 Reactivity: 0

Label requirements: May cause respiratory tract, eye and skin irritation.

(Personal protective equipment selection is best assigned by the user after performing a hazard assessment on the product as it is to be used in the specific work process).

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SAFETY DATA SHEET
Metzger / McGuire Co. Polyurethane Prepolymer

1. Identification

1.1 Product Name: **Spal Pro RS-88 Part B ISO**
1.2 Recommended Use: Component of a Control Joint Polyurethane System.
Issue Date: 3/28/15
Supersedes: 4/25/13
Reason for revision: Update Hazards Classification.
1.3 Manufacturer:

Metzger/McGuire Co.
PO BOX 2217
CONCORD, NH 03302-2217
PH: (800) 223-6680
FAX: (603) 224-6020
Email: info@metzgermcguire.com

1.4 In Case of Emergency: INFOTRAC: 1-800-535-5053
Outside the US and Canada, call 1-352-323-3500

2. Hazards Identification

2.1 OSHA/HCS status: This material is considered hazardous under OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification: Acute Toxicity: Inhalation - Cat. 4
Skin corrosion/irritation - Cat. 2
Serious Eye Damage/ Eye irritation - Cat. 2A
Respiratory Sensitization - Cat. 1
Skin Sensitization - Cat. 1
Specific Target Organ Toxicity (single exposure)
[respiratory tract irritation] - Cat 3

2.2 GHS Label Elements:
Hazard pictograms:

Signal word:



Warning

Danger

2.3 Hazard statements:

H315 Causes skin irritation.
H317 May cause an allergic skin reaction.

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H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H334 May cause allergy or asthma symptoms of breathing difficulties if inhaled.

H335 May cause respiratory irritation.

2.4 Precautionary statements:

P261 Avoid breathing vapor.

P264 Wash thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allow out of the work place.

P273 Avoid release to the environment.

P281 Wear protective gloves / protective clothing /eye protection / face protection.

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

P333 + P313 If skin irritation or rash occurs: Get medical advice / attention.

GENERAL INFORMATION: Read the entire SDS for a more thorough evaluation of the hazards.

3. Composition/Information

	<u>Name</u>	<u>CAS number</u>
3.1 Substances	4,4'-Diphenylmethane Diisocyanate	101-68-8
	Propylene Carbonate	108-32-7
3.2 Mixture:	Concentration of composition has been withheld as a Trade Secret	

4. First Aid Measures

4.1 Eye contact: Check for and remove any contact lenses. Immediately flush eyes with plenty of running tepid water for 15 minutes, occasionally lifting the upper and lower eyelids. If effects occur get medical attention immediately.

Skin contact: Wash immediately with warm soapy water. Corn oil may be more effective than soap and water. Get medical attention if irritation develops. Wash clothing before re-use. Discard personal items that cannot be decontaminated.

Inhalation: Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention immediately. Loosen clothing such as collar, tie, belt or waistband.

Ingestion: Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Notes to Physician: No specific treatment. Treat symptomatically. Call poison control center if large quantities have been ingested.

4.2 Symptoms of exposure:

Eye contact: Irritation, watering, redness and pain.

Skin contact: Irritation, redness, itching.

Inhalation: Dizziness, difficulty breathing if fumes are highly concentrated.

Ingestion: No specific data, may cause irritation.

5. Fire-Fighting Measures

NFPA Flammable classification: Combustible liquid IIIB

Flash point: >110°C Closed Cup (Setaflash)

5.1 Extinguishing Media

Suitable: Carbon dioxide, foam, dry chemical.

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Not Suitable: Water may be used if no other available and then in copious quantities. Reaction between water and hot isocyanate may be vigorous.

5.2 Special hazards: Combustion products may include: carbon monoxide, carbon dioxide, nitrogen oxides, hydrocarbons and HCN. In a fire or if heated, pressure will increase in containers which may burst.

5.3 Special protective actions for fire fighters: Use protective fire fighting clothing and positive pressure self-contained breathing apparatus (SCBA) to protect against potential harmful and/or irritating fumes. Do not use high volume water jet as this may spread the area of the fire.

6. Accidental Release Measures

6.1 Personal precautions: Isolate area; keep unnecessary and unprotected personnel away from spill area. Avoid contact with skin, eyes and clothing. Use appropriate safety equipment. No health effects expected from the cleanup of this material if contact can be avoided. Provide adequate ventilation.

6.2 Environmental precautions: Avoid disposal of spilled material and runoff and contact with soil, waterways, drains and sewers.

6.3 Methods for cleaning up: Contain and absorb large spills with an inert, non-flammable absorbent carrier (such as earth, sand or clay). Shovel or pump into labeled open-top drums or plastic bags for further decontamination if necessary. Apply lids loosely to avoid pressure build-up. Wash the spillage area clean with a mixture of water and non-ionic surfactant or a suitable liquid detergent. (See section 13 for disposal considerations). Notify applicable government authorities if release is reportable. CERCLA RQ for 4,4-MDI is 5,000 lbs.

7. Handling and Storage

7.1 Precautions for safe handling: Avoid personal contact with the product. Use only with adequate ventilation to ensure that the occupational exposure limit is not exceeded. Regularly monitor the efficiency of the ventilation system. Avoid breathing aerosols, mists and vapors. (See section 8 Exposure control for details). Keep stocks of de-contaminant readily available.

7.2 Storage: Keep containers tightly closed and store in a cool, dry well ventilated area at 68-86F.

8. Exposure controls/personal protection

8.1 Exposure parameters: Diphenylmethane 4,4'-diisocyanate:

ACGIH TLV (TWA): 0.005 ppm 8 hrs. CEIL: 0.02 ppm CEIL: 0.2 mg/m³

8.2 Engineering controls: Ventilation through local exhaust if appropriate.

Eye/face protection: Safety glasses, goggles, face mask as appropriate.

Skin & hand protection: Protective clothing as necessary to guard against product contact. PVC, neoprene or nitrile rubber gloves, safety shoes.

Respiratory protection: Not needed under normal use conditions under adequate ventilation.

Other protective equipment: Eye wash stations and emergency showers should be available. The type and degree of personal protective equipment will depend on the specific work operation.

8.3 Environmental exposure controls: See Exposure parameters.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties.

Appearance	: Liquid
Color	: Clear, pale yellow
Type of odor	: Slight musty
Vapor pressure	: Not Available
Flash Point	: >110°C Closed Cup (Setaflash)
Boiling point	: >300°C decomposes

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Auto-ignition temperature : >600°C
Specific gravity : 1.2 grams / cc
Water solubility : Insoluble, reacts slowly with water to liberate CO₂ gas.

10. Stability and Reactivity

10.1 Reactivity: Reacts with water producing carbon dioxide gas. Exothermic reaction with materials containing active hydrogen groups.

10.2 Stability: Stable at room temperature.

10.3 Hazardous polymerization: May occur under certain conditions of storage and use..

10.4 Conditions to avoid: Water, alcohol, amines, strong bases and acids.

10.5 Incompatible materials: Water, alcohols, amines, bases and acids.

10.6 Hazardous decomposition products: Carbon monoxide, carbon dioxide, nitrogen oxides, hydrocarbons and HCN.

11. Toxicological Information

11.1 Acute Inhalation Toxicity: LC50: 0.49 mg/l, (rat- male/female)

11.2 Acute Dermal Toxicity: LD50: >9,000 mg/kg (rabbit- male/female)

Conclusion/Summary: Irritating to respiratory system.

12. Ecological Information

12.1 Acute Toxicity: EC50 24 hours static, >1000 mg/l (daphnia)

12.2 Acute Toxicity: LC50 96 hours static, >1000 mg/l (fish)

12.3 Persistence and degradability: Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions.

13. Disposal Considerations

13.1 Waste treatment methods: Do not dump into any sewers, on the ground, or into any body of water. Significant quantities of waste product residues should be processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local requirements.

Container disposal: Drain container of all residual material prior to disposal.

14. Transport Information:

14.1 Land transport (DOT): Single containers less than 5,000 lbs. are not regulated.

14.2 Proper Shipping name: OTHER REGULATED SUBSTANCES, LIQUID, N.O.S.
(contains 4,4'- Diphenylmethane Diisocyanate (MDI))

14.3 Hazard Division/Label: Class 9 UN/NA Number: NA3082 PG III

14.4 Reportable Quantity: 5,000 lbs. Single containers less than 5,000 lbs. are not regulated.

14.5 Sea transport (IMDG) Not regulated

14.6 Air transport (ICAO/IATA) Not regulated

15. Regulatory Information

15.1 Safety health and environmental regulations/legislation:

SARA Section 311/312: Immediate (acute) health hazard.

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Polyurethane Prepolymer

CERCLA Hazardous Substances Listed: Diphenylmethane 4,4' diisocyanate RQ: 5,000 lbs.

TSCA 8(b) Inventory status: All components are listed or exempted.

TSCA 5(a) 2 final (SNUR) : No ingredients listed.

Canadian CEPA DSL Status: All components are listed or exempt.

Canadian WHMIS Classification: Class D-2A, Material causing other toxic effects (very toxic).

Class D-2B, Material causing other toxic effects (toxic).

OSHA/NTP/IARC Carcinogen Status: Not listed.

California Prop 65: This product contains no listed substances known to the State of California to cause cancer, birth defects or reproductive harm, at levels which would require a warning under the statute.

Pennsylvania - RTK: Dimethylmethane 4,4' diisocyanate

16. Other Information

HMIS/NFPA rating: Health: 2* Fire: 1 Reactivity: 1 Personal Protection: H

Label requirements: Harmful by inhalation. Irritating to the eyes, skin and respiratory system. May cause sensitization by inhalation and skin contact. A hyper-reactive response to even minimal concentrations of diisocyanates may develop in sensitized persons. (Personal protective equipment selection is best assigned by the user after performing a hazard assessment on the product as it is to be used in the specific work process). * = Chronic health hazard