

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

Printing date: 09/22/2016

Revision: 09/22/2016

1 Identification

- **Product identifier**
- **Trade name:** Spal Pro RS-88 Part B ISO
- **Product code:** No other identifiers
- **Recommended use and restriction on use**
- **Recommended use:** Component of a Control Joint Polyurethane System
- **Restrictions on use:** No relevant information available.
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
 METZGER/McGUIRE
 Mailing Address:
 PO Box 2217
 Concord, NH 03302
 Shipping Address:
 807 Route 3-A
 Bow, NH 03304
 Phone: 603-224-6122
 Toll Free: 800-223-6680
 Email: info@metzgermcguire.com
- **Emergency telephone number:**
 ChemTel Inc.
 (800)255-3924, +1 (813)248-0585

2 Hazard(s) identification

- **Classification of the substance or mixture**
- Acute Tox. 4 H332 Harmful if inhaled.
- Skin Irrit. 2 H315 Causes skin irritation.
- Eye Irrit. 2A H319 Causes serious eye irritation.
- Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- Skin Sens. 1 H317 May cause an allergic skin reaction.
- Carc. 2 H351 Suspected of causing cancer.
- STOT SE 3 H335 May cause respiratory irritation.
- STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

- **Label elements**

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms:**



GHS07 GHS08

- **Signal word:** Danger

- **Hazard statements:**

H332 Harmful if inhaled.

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H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 H317 May cause an allergic skin reaction.
 H351 Suspected of causing cancer.
 H335 May cause respiratory irritation.
 H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements:

P201 Obtain special instructions before use.
 P202 Do not handle until all safety precautions have been read and understood.
 P260 Do not breathe mist/vapors/spray.
 P284 In case of inadequate ventilation wear respiratory protection.
 P264 Wash thoroughly after handling.
 P280 Wear protective gloves and eye protection.
 P271 Use only outdoors or in a well-ventilated area.
 P272 Contaminated work clothing must not be allowed out of the workplace.
 P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P302+P352 IF ON SKIN: Wash with plenty of water.
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
 P314 Get medical advice/attention if you feel unwell.
 P362+P364 Take off contaminated clothing and wash it before reuse.
 P405 Store locked up.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Other hazards** There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Components:**

101-68-8	4,4'-methylenediphenyl diisocyanate ⚠ Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373 ⚠ Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	%-Trade Secret
9016-87-9	diphenylmethanediisocyanate, isomeres and homologues ⚠ Resp. Sens. 1, H334; STOT RE 2, H373 ⚠ Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	%-Trade Secret
108-32-7	propylene carbonate ⚠ Eye Irrit. 2, H319	%-Trade Secret

· **Additional information:**

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret.

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For the wording of the listed Hazard Statements refer to section 16.

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4 First-aid measures

Description of first aid measures**After inhalation:**

Supply fresh air.

Seek immediate medical advice.

Provide oxygen treatment if affected person has difficulty breathing.

If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

After skin contact:

Immediately wash with water and soap and rinse thoroughly.

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

After eye contact:

Remove contact lenses if worn, if possible.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; immediately call for medical help.

Most important symptoms and effects, both acute and delayed:

Asthma attacks

Breathing difficulty

Dizziness

Coughing

Allergic reactions

Irritating to eyes, respiratory system and skin.

Gastric or intestinal disorders when ingested.

Nausea in case of ingestion.

Cyanosis

Danger:

Danger of impaired breathing.

May cause damage to organs through prolonged or repeated exposure.

Harmful if inhaled.

Suspected of causing cancer.

Indication of any immediate medical attention and special treatment needed:

Contains isocyanates. May produce an allergic reaction.

Severe allergic skin reaction, bronchial spasms and anaphylactic shock are possible.

Medical supervision for at least 48 hours.

If necessary oxygen respiration treatment.

Later observation for pneumonia and pulmonary edema.

Treat skin and mucous membrane with antihistamine and corticoid preparations.

If medical advice is needed, have product container or label at hand.

In cases of irritation to the lungs, initial treatment with corticoid steroid inhalants.

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5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
 - Foam
 - Carbon dioxide
 - Gaseous extinguishing agents
 - Water spray
 - Fire-extinguishing powder
- **For safety reasons unsuitable extinguishing agents:** Water stream.
- **Special hazards arising from the substance or mixture**
 - During heating or in case of fire poisonous gases are produced.
- **Advice for firefighters**
- **Protective equipment:**
 - Wear self-contained respiratory protective device.
 - Wear fully protective suit.
- **Additional information:** Cool endangered product with water spray.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures:**
 - Use respiratory protective device against the effects of fumes/dust/aerosol.
 - Use personal protective equipment as required.
 - Ensure adequate ventilation.
 - Isolate area and prevent access.
- **Environmental precautions:**
 - Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Methods and material for containment and cleaning up:**
 - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
 - Send for recovery or disposal in suitable receptacles.
- **Reference to other sections:**
 - See Section 7 for information on safe handling.
 - See Section 8 for information on personal protection equipment.
 - See Section 13 for disposal information.

7 Handling and storage

- **Handling**
- **Precautions for safe handling:**
 - Prevent formation of aerosols.
 - Avoid splashes or spray in enclosed areas.
 - Use only in well ventilated areas.
- **Information about protection against explosions and fires:** No special measures required.

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- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:**
 Provide ventilation for receptacles.
 Avoid storage near extreme heat, ignition sources or open flame.
 Protect from humidity and water.
- **Information about storage in one common storage facility:**
 Store away from foodstuffs.
 Do not store together with oxidizing and acidic materials.
- **Further information about storage conditions:**
 Keep containers tightly sealed.
 Storage Temperatures : 20 - 30 °C.
- **Specific end use(s):** No relevant information available.

8 Exposure controls/personal protection

- **Control parameters**

- **Components with limit values that require monitoring at the workplace:**

101-68-8 4,4'-methylenediphenyl diisocyanate

PEL (USA)	Ceiling limit value: 0.2 mg/m ³ , 0.02 ppm
REL (USA)	Long-term value: 0.05 mg/m ³ , 0.005 ppm Ceiling limit value: 0.2* mg/m ³ , 0.02* ppm *10-min
TLV (USA)	Long-term value: 0.051 mg/m ³ , 0.005 ppm
EL (Canada)	Long-term value: 0.005 ppm Ceiling limit value: 0.01 ppm Skin; S
EV (Canada)	Long-term value: 0.005 ppm Ceiling limit value: 0.02 ppm
LMPE (Mexico)	Long-term value: 0.005 ppm

- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
 The usual precautionary measures for handling chemicals should be followed.
 Keep away from foodstuffs, beverages and feed.
 Wash hands before breaks and at the end of work.
 Do not inhale gases / fumes / aerosols.
 Avoid contact with the eyes and skin.
- **Engineering controls:** No relevant information available.
- **Breathing equipment:**



Combined Organic Vapor and Particulate Respirator is recommended for use during all processing activities.

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Protection of hands:


Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Eye protection:


Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.

· **Body protection:** Protective work clothing

· **Limitation and supervision of exposure into the environment**

No relevant information available.

· **Risk management measures**

Organizational measures should be in place for all activities involving this product.

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **Appearance:**

Form: Liquid

Color: Pale.

· **Odor:** Musty.

· **Odor threshold:** Not determined.

· **pH-value:** Not determined.

· **Melting point/Melting range:** Not determined.

· **Boiling point/Boiling range:** >300 °C (>572 °F) (decomposes)

· **Flash point:** >110 °C (>230 °F) (Setaflash Closed Cup)

· **Flammability (solid, gaseous):** Not applicable.

· **Auto-ignition temperature:** >600 °C (>1112 °F)

· **Decomposition temperature:** >300 °C (>572 °F)

· **Danger of explosion:** Product does not present an explosion hazard.

· **Explosion limits**

Lower: Not determined.

Upper: Not determined.

· **Oxidizing properties:** Not determined.

· **Vapor pressure:** Not determined.

· **Density:** 1.2 g/cm³ (10.014 lbs/gal)

· **Relative density:** Not determined.

· **Vapor density:** Not determined.

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- | | |
|---|------------------------------------|
| · Evaporation rate: | Not determined. |
| · Solubility in / Miscibility with Water: | Slowly reacts with water. |
| · Partition coefficient (n-octanol/water): | Not determined. |
| · Viscosity | |
| Dynamic: | Not determined. |
| Kinematic: | Not determined. |
| · Other information | No relevant information available. |

10 Stability and reactivity

- **Reactivity:** No relevant information available.
- **Chemical stability:** Stable under normal temperatures and pressures.
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions:**
Exothermic polymerization.
Reacts with water and acids.
Reacts with alcohols, amines, aqueous acids and alkalis.
Reacts with catalysts.
Reacts with peroxides and other radical forming substances.
Toxic fumes may be released if heated above the decomposition point.
- **Conditions to avoid:** Excessive heat.
- **Incompatible materials:** Oxidizers, strong bases, strong acids
- **Hazardous decomposition products:**
Carbon dioxide
Carbon monoxide
Nitrogen oxides
Hydrocarbons
Hydrogen cyanide (prussic acid)
Isocyanate

11 Toxicological information

- **Information on toxicological effects**
 - **Acute toxicity:**
- | | | |
|---|------|--------------------|
| · LD/LC50 values that are relevant for classification: | | |
| 101-68-8 4,4'-methylenediphenyl diisocyanate | | |
| Oral | LD50 | 2200 mg/kg (mouse) |
- **Primary irritant effect:**
 - **On the skin:** Irritant to skin and mucous membranes.
 - **On the eye:** Irritating effect.

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· **Sensitization:** May cause sensitisation by inhalation and skin contact.

· **IARC (International Agency for Research on Cancer):**

101-68-8	4,4'-methylenediphenyl diisocyanate	3
9016-87-9	diphenylmethanediisocyanate, isomeres and homologues	3

· **NTP (National Toxicology Program):**

None of the ingredients are listed.

· **OSHA-Ca (Occupational Safety & Health Administration):**

None of the ingredients are listed.

· **Probable route(s) of exposure:**

Ingestion.
Inhalation.
Eye contact.
Skin contact.

· **Acute effects (acute toxicity, irritation and corrosivity):**

Harmful if inhaled.
Irritating to eyes, respiratory system and skin.

· **Repeated dose toxicity:** Possible risk of irreversible effects.

· **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

Carc. 2

· **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.

· **Carcinogenicity:** Suspected of causing cancer.

· **Reproductive toxicity:** Based on available data, the classification criteria are not met.

· **STOT-single exposure:** May cause respiratory irritation.

· **STOT-repeated exposure:** May cause damage to organs through prolonged or repeated exposure.

· **Aspiration hazard:** Based on available data, the classification criteria are not met.

12 Ecological information

· **Toxicity**

· **Aquatic toxicity** No relevant information available.

· **Persistence and degradability** No relevant information available.

· **Bioaccumulative potential:** No relevant information available.

· **Mobility in soil:** No relevant information available.

· **Additional ecological information**

· **General notes:**

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects:** No relevant information available.

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13 Disposal considerations

- **Waste treatment methods**

- **Recommendation:**

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

The generation of waste should be avoided or minimized whenever possible. When practical, recycle in an environmentally acceptable, regulatory compliant manner. Dispose of non-recyclable products in accordance with all applicable Federal, State, Provincial, and Local requirements.

- **Uncleaned packagings**

- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **UN-Number**

- DOT, ADR, IMDG, IATA Not regulated.

- **UN proper shipping name**

- DOT, ADR, IMDG, IATA Not regulated.

- **Transport hazard class(es)**

- DOT, ADR, IMDG, IATA

- Class Not regulated.

- **Packing group**

- DOT, ADR, IMDG, IATA Not regulated.

- **Environmental hazards**

- Marine pollutant: No

- **Special precautions for user**

Not applicable.

- **Transport in bulk according to Annex II of**

MARPOL73/78 and the IBC Code Not applicable.

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**

- United States (USA)

- SARA

- **Section 355 (extremely hazardous substances):**

None of the ingredients are listed.

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Section 313 (Specific toxic chemical listings):

101-68-8	4,4'-methylenediphenyl diisocyanate
9016-87-9	diphenylmethanediisocyanate, isomeres and homologues

TSCA (Toxic Substances Control Act)

All ingredients are listed.

Proposition 65 (California)
Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

Carcinogenic categories
EPA (Environmental Protection Agency):

101-68-8	4,4'-methylenediphenyl diisocyanate	D, CBD
9016-87-9	diphenylmethanediisocyanate, isomeres and homologues	CBD

IARC (International Agency for Research on Cancer):

101-68-8	4,4'-methylenediphenyl diisocyanate	3
9016-87-9	diphenylmethanediisocyanate, isomeres and homologues	3

NIOSH-Ca (National Institute for Occupational Safety and Health):

None of the ingredients are listed.

Canadian Domestic Substances List (DSL):

All ingredients are listed.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Date of preparation / last revision 09/22/2016 / -

Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
 IMDG: International Maritime Code for Dangerous Goods
 DOT: US Department of Transportation
 IATA: International Air Transport Association
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative
 NIOSH: National Institute for Occupational Safety

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OSHA: Occupational Safety & Health
Acute Tox. 4: Acute toxicity – Category 4
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
Resp. Sens. 1: Respiratory sensitisation – Category 1
Skin Sens. 1: Skin sensitisation – Category 1
Carc. 2: Carcinogenicity – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

• **Sources**

Website, European Chemicals Agency (echa.europa.eu)
Website, US EPA Substance Registry Services (ofmpub.epa.gov/sorinternet/registry/substreg/home/overview/home.do)
Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)
Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: ISBN: 978-0-470-07488-6
Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.
Safety Data Sheets, Individual Manufacturers

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