

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Revision Date: 04/05/2016 Date of issue: 08/07/2015

Version: 1.0

## **SECTION 1: IDENTIFICATION**

# 1.1. Product Identifier Product Form: Mixture

Product Name: DR-2100 -Base ISO (RMI-Flex "A" ISO)

## 1.2. Intended Use of the Product

Use of the substance/mixture: Use in accordance with manufacturer's recommendations.

## 1.3. Name, Address, and Telephone of the Responsible Party

#### Company

RoofMart International, Inc.

PO Box 502

Chapman, KS 67431 800-345-1439

www.roofrmi.com

#### 1.4. Emergency Telephone Number

Emergency Number : 800-451-8346 3E Company

## **SECTION 2: HAZARDS IDENTIFICATION**

## 2.1. Classification of the Substance or Mixture

#### **Classification (GHS-US)**

Acute Tox. 4	H332
(Inhalation:dust,mist)	
Skin Irrit. 2	H315
Eye Irrit. 2A	H319
Resp. Sens. 1	H334
Skin Sens. 1	H317
Carc. 2	H351
STOT SE 3	H335
STOT RE 2	H373
Full text of H-phrases: see	e section 16

#### 2.2. Label Elements

### **GHS-US Labeling**

Hazard Pictograms (GHS-US)





Signal Word (GHS-US) : Danger

Hazard Statements (GHS-US) : H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation.

H319 - Causes serious eye ii i

H332 - Harmful if inhaled.

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

H335 - May cause respiratory irritation. H351 - Suspected of causing cancer.

H373 - May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements (GHS-US) : P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P260 - Do not breathe vapors, mist, or spray.

P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.

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

P272 - Contaminated work clothing must not be allowed out of the workplace.

P280 - Wear protective gloves, protective clothing, and eye protection.

P284 - [In case of inadequate ventilation] wear respiratory protection .

08/07/2015 EN (English US) 1/6

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

P302+P352 - If on skin: Wash with plenty of water.

P304+P340 - If inhaled: Remove person to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313 - If exposed or concerned: Get medical advice/attention.

P312 - Call a poison center or doctor if you feel unwell.

P342+P311 - If experiencing respiratory symptoms: Call a poison center or doctor.

P362+P364 - Take off contaminated clothing and wash it before reuse.

P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

P405 - Store locked up.

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

#### 2.3. Other Hazards

Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

#### 2.4. Unknown Acute Toxicity (GHS-US)

No data available

## **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

Name	Product Identifier	%	Classification (GHS-US)
Modified Polymeric MDI/Diphenylmethane Diisocyanate/4,4' MDI mixture	(CAS No) Proprietary	99 - 99.8	Acute Tox. 4 (Inhalation), H332
			Skin Irrit. 2, H315 Eye Irrit. 2A, H319
			Resp. Sens. 1, H334
			Skin Sens. 1, H317
			Carc. 2, H351
			STOT SE 3, H335
			STOT RE 2, H373
1,4-Bis(p-tolylamino)anthraquinone	(CAS No) Proprietary	0.2 - 1	Not classified

The specific chemical identity and/or exact percentage of composition has been withheld as a trade secret.

Full text of H-phrases: see section 16

## **SECTION 4: FIRST AID MEASURES**

#### 4.1. Description of First Aid Measures

**First-aid Measures General**: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

**First-aid Measures After Inhalation**: When symptoms occur: go into open air and ventilate suspected area. Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention.

**First-aid Measures After Skin Contact**: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.

**First-aid Measures After Eye Contact**: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

## 4.2. Most important symptoms and effects, both acute and delayed

**Symptoms/Injuries:** Causes serious eye irritation. Causes skin irritation. May cause respiratory irritation. Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Skin sensitization. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure.

**Symptoms/Injuries After Inhalation:** Irritation of the respiratory tract and the other mucous membranes. Inhalation is likely to cause adverse health effects including but not limited to: irritation, difficulty breathing, and unconsciousness. Exposure may produce cough mucous secretions, shortness of breath, chest tightness or other symptoms indicative of an allergic/sensitization reaction.

**Symptoms/Injuries After Skin Contact:** Redness, pain, swelling, itching, burning, dryness, and dermatitis. May cause an allergic skin reaction.

08/07/2015 EN (English US) 2/6

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Symptoms/Injuries After Eye Contact: Contact causes severe irritation with redness and swelling of the conjunctiva.

Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure.

#### 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

## **SECTION 5: FIRE-FIGHTING MEASURES**

#### 5.1. Extinguishing Media

Suitable Extinguishing Media: Water spray, dry chemical, foam, carbon dioxide.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

#### 5.2. Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Not considered flammable but may burn at high temperatures.

**Explosion Hazard:** Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

### 5.3. Advice for Firefighters

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire. **Firefighting Instructions:** Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

#### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures**: Do not breathe vapor, mist or spray. Do not get in eyes, on skin, or on clothing. Avoid all contact with skin, eyes, or clothing.

#### 6.1.1. For Non-emergency Personnel

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

#### **6.1.2.** For Emergency Responders

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** Ventilate area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

## **6.2.** Environmental Precautions

Prevent entry to sewers and public waters.

#### 6.3. Methods and Material for Containment and Cleaning Up

**For Containment:** Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. As an immediate precautionary measure, isolate spill or leak area in all directions. Ventilate area.

**Methods for Cleaning Up:** Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

#### 6.4. Reference to Other Sections

See Heading 8. Exposure controls and personal protection. See Section 13, Disposal Considerations.

## **SECTION 7: HANDLING AND STORAGE**

## 7.1. Precautions for Safe Handling

**Precautions for Safe Handling:** Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid contact with eyes, skin and clothing. Use only outdoors or in a well-ventilated area. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes, on skin, or on clothing. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin, eyes and clothing. **Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures.

## 7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

**Storage Conditions:** Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

**Incompatible Products:** Strong acids, strong bases, strong oxidizers.

#### 7.3. Specific End Use(s)

Use in accordance with manufacturer's recommendations.

08/07/2015 EN (English US) 3/6

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **Control Parameters**

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), or OSHA (PEL).

Modified Pol	Modified Polymeric MDI/Diphenylmethane Diisocyanate/4,4' MDI mixture		
USA ACGIH	ACGIH TWA (ppm)	0.005 ppm	
<b>USA NIOSH</b>	NIOSH REL (TWA) (mg/m³)	0.05 mg/m <sup>3</sup>	
<b>USA NIOSH</b>	NIOSH REL (TWA) (ppm)	0.005 ppm	
<b>USA NIOSH</b>	NIOSH REL (ceiling) (mg/m³)	0.2 mg/m³	
<b>USA NIOSH</b>	NIOSH REL (ceiling) (ppm)	0.020 ppm	
USA IDLH	US IDLH (mg/m³)	75 mg/m³	
USA OSHA	OSHA PEL (Ceiling) (mg/m³)	0.2 mg/m³	
USA OSHA	OSHA PEL (Ceiling) (ppm)	0.02 ppm	

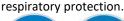
#### 8.2. **Exposure Controls**

**Appropriate Engineering Controls** : Emergency eye wash fountains and safety showers should be available in the

> immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed. Gas

detectors should be used when toxic gases may be released.

**Personal Protective Equipment** Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear











**Materials for Protective Clothing** 

**Boiling Point** 

**Hand Protection** : Wear protective gloves. **Eye Protection** : Chemical safety goggles.

**Skin and Body Protection** : Wear suitable protective clothing.

**Respiratory Protection** : If exposure limits are exceeded or irritation is experienced, approved respiratory

protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory

protection.

**Other Information** : When using, do not eat, drink or smoke.

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**Information on Basic Physical and Chemical Properties Physical State** : Liquid

**Appearance** : Green Odor

: Aromatic, faint : No data available **Odor Threshold** : No data available μH **Evaporation Rate** No data available **Melting Point** : No data available **Freezing Point** : No data available : > 200 °C (392 °F)

**Flash Point**  $: > 110 \,^{\circ}\text{C} (230 \,^{\circ}\text{F})$ **Auto-ignition Temperature** No data available **Decomposition Temperature** : No data available Flammability (solid, gas) : No data available **Vapor Pressure** : No data available Relative Vapor Density at 20 °C : No data available

**Relative Density** No data available : Water: Reacts with water Solubility

08/07/2015 EN (English US) 4/6

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Partition Coefficient: N-Octanol/Water : No data available

Viscosity : 140 mPa·s

**9.2.** Other Information No additional information available

## **SECTION 10: STABILITY AND REACTIVITY**

- **10.1. Reactivity:** Hazardous reactions will not occur under normal conditions.
- 10.2. Chemical Stability: Stable under recommended handling and storage conditions (see section 7).
- 10.3. Possibility of Hazardous Reactions: Hazardous polymerization will not occur.
- 10.4. Conditions to Avoid: Direct sunlight, extremely high or low temperatures, and incompatible materials.
- **10.5. Incompatible Materials:** Strong acids, strong bases, strong oxidizers.
- 10.6. Hazardous Decomposition Products: Carbon oxides (CO, CO<sub>2</sub>), nitrogen oxides, black smoke, isocyanate, isocyanic acid.

## **SECTION 11: TOXICOLOGICAL INFORMATION**

## 11.1. Information On Toxicological Effects

Acute Toxicity: Inhalation:dust,mist: Harmful if inhaled.

1,4-Bis(p-tolylamino)anthraquinone	
LD50 Oral Rat	3660 mg/kg

**Skin Corrosion/Irritation:** Causes skin irritation.

Serious Eye Damage/Irritation: Causes serious eye irritation.

Respiratory or Skin Sensitization: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergia skin reaction

allergic skin reaction.

**Germ Cell Mutagenicity:** Not classified **Carcinogenicity:** Suspected of causing cancer.

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): May cause respiratory irritation.

Specific Target Organ Toxicity (Repeated Exposure): May cause damage to organs through prolonged or repeated exposure.

Aspiration Hazard: Not classified

**Symptoms/Injuries After Inhalation:** Irritation of the respiratory tract and the other mucous membranes. Inhalation is likely to cause adverse health effects including but not limited to: irritation, difficulty breathing, and unconsciousness. Exposure may produce cough mucous secretions, shortness of breath, chest tightness or other symptoms indicative of an allergic/sensitization reaction.

**Symptoms/Injuries After Skin Contact:** Redness, pain, swelling, itching, burning, dryness, and dermatitis. May cause an allergic skin reaction.

Symptoms/Injuries After Eye Contact: Contact causes severe irritation with redness and swelling of the conjunctiva.

Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure.

## **SECTION 12: ECOLOGICAL INFORMATION**

## 12.1. Toxicity

**Ecology - General** : Not classified.

## 12.2. Persistence and Degradability

RMI-Flex "A" ISO	
Persistence and Degradability	Not established.

#### 12.3. Bioaccumulative Potential

RMI-Flex "A" ISO	
Bioaccumulative Potential	Not established.

**12.4. Mobility in Soil** No additional information available

12.5. Other Adverse Effects

Other Information : Avoid release to the environment.

#### **SECTION 13: DISPOSAL CONSIDERATIONS**

#### 13.1. Waste treatment methods

**Waste Disposal Recommendations:** Dispose of contents/container in accordance with local, regional, national, and international regulations.

Additional Information: Container may remain hazardous when empty. Continue to observe all precautions.

Ecology - Waste Materials: Avoid release to the environment.

08/07/2015 EN (English US) 5/6

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

## **SECTION 14: TRANSPORT INFORMATION**

14.1. In Accordance with DOT
14.2. In Accordance with IMDG
14.3. In Accordance with IATA
Not regulated for transport
Not regulated for transport

## **SECTION 15: REGULATORY INFORMATION**

## 15.1 US Federal Regulations

RMI-Flex "A" ISO	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
	Delayed (chronic) health hazard
1,4-Bis(p-tolylamino)anthraquinone	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

15.2 US State Regulations Neither this product nor its chemical components appear on any US state lists.

## SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date : 08/07/2015

Other Information : This document has been prepared in accordance with the SDS

requirements of the OSHA Hazard Communication Standard 29 CFR

1910.1200.

#### **GHS Full Text Phrases:**

Acute Tox. 4 (Inhalation)	Acute toxicity (inhalation) Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Carc. 2	Carcinogenicity Category 2
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Resp. Sens. 1	Respiratory sensitisation Category 1
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization Category 1
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
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
H351	Suspected of causing cancer
H373	May cause damage to organs through prolonged or repeated exposure

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SDS US (GHS HazCom)

08/07/2015 EN (English US) 6/6