

Document Type:	MSDS	Document #:	MSDS027
Reviewed by:	J. Rabb	Revision #:	2
Page #:	1 of 3	Revision/Review Date:	1/23/2014

**Information Number:** 

330-769-5583

# Material Safety Data Sheet R Hardener

#### 1. IDENTIFICATION OF THE SUBSTANCE AND COMPANY

Trade Names: R Hardener Emergency Phone Number: 800-424-9300

**Description:** Isocyanate / Rubber Adhesive / Curative Accelerator **International Number:** 202-483-7616

Company Blair Rubber Company
Identification: 5020 Panther Parkway

Seville, OH 44273

## 2. COMPOSITION/INFORMATION ON THE COMPONENTS

Cas No.		Percentage (W/W)	TLV
4, 4' Diphenylmethane			
diisocyanate	101-68-8	1-10	.005 ppm TWA (ACGIH)
Dichloromethane	75-09-2	75-85	50 ppm TWA (ACGIH)

# 3. PHYSICAL DATA

Form: Liquid Mixture Solubility in water: reacts Color: Brown Specific Gravity: 1.32

Vapor Pressure: 453 mbar at 20° C in Methylene Chloride. Boiling Point: 40° C @ 1013 mbar

0.5 x 10 mbar at 20°C isocyanate only in solution

Note: The physical data presented above are typical values and should not be construed as a specification.

# 4. FIRE AND EXPLOSION DATA

Flash Point .....: N/A Autoignition.....: 605°C

Flammable Limits in air (%): LEL 13% by volume UEL 22% by volume

EXTINGUISHING MEDIA: Extinguishing powder, CO2 and halons, large fires use also foam and water

**FIRE FIGHTING PROCEDURE:** Wear self contained breathing apparatus in confined areas or when exposed to combustion products.

THERMAL DECOMPOSITION: No decomposition below initial boiling point.

## 5. REACTIVITY DATA

CHEMICAL STABILITY: Stable at ambient temperatures and pressure

MSDS027 Rev. 2 R Hardener Page 1 of 3

HAZARDOUS POLYMERIZATION: Will not occur.

INCOMPATABILITY: Avoid contamination with water and strong oxidizers and foreign matter.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Thermal decomposition may produce hydrogen cyanide and oxides of nitrogen and carbon. Methylene chloride may decompose to trace elements of hydrochloric acid, Phosgene, chlorides.

**HAZARDOUS REACTIONS:** Exothermic reaction with amines, alcohols, acids and alkali. Reacts with water forming CO2. Closed containers may rupture owing to increase in pressure.

Methylene Chloride may react violently under decomposition with unprotected aluminum surfaces.

#### 6. HEALTH RELATED DATA

**SPECIFIC HAZARD:** Potential skin, eye and respiratory irritant

**EXPOSURE LIMITS:** Isocyanate: TWA TLV .005 (ACGIH 1988-89)

Methylene Chloride: 50 ppm TLV

**ROUTES OF EXPOSURE:** Inhalation, skin, eye contact

**ANIMAL DATA:** Oral LD50, Rat 5019 mg/Kg

**EFFECTS OF OVEREXPOSURE:** Vapors of methylene chloride are not likely to cause organic injury. Overexposure may cause anesthetic effects. Prolonged skin exposure may cause dermatitis and defatting of the skin.

#### FIRST AID:

**EYES:** Immediately flush with plenty of flowing water for at least 15 minutes. Get medical attention.

**SKIN:** Wipe off excess material with clean cloth. Clean exposed area with isopropanol followed by soap and water. Remove clothing if contaminated and launder before reuse. Seek medical attention if irritation persists or dermatitis develops.

**INHALATION:** Remove to fresh air, restore or aid breathing if required. Get medical attention.

**INGESTION:** Do not induce vomiting. Get medical attention.

# 7. SPILL, LEAK PROCEDURES

**STORAGE & HANDLING:** Store at room temperature away from heat and moisture. Do not expose to temperatures above 40°C. Handle only in well ventilated area. Use personal equipment for protection of eyes and skin. Keep away from foodstuffs.

**SPILLS:** Cover spills with inert absorbent material. Wear full protective equipment including self contained breathing apparatus. Saturate spill with excess neutralizing solution (1% ammonia in water + 10% isopropanol). Ventilate the area. Do not use unprotected aluminum storage vessels to hold leaked materials.

**WASTE DISPOSAL:** In accordance to local, provincial/state and federal reagualtions.

**ENVIRONMENTAL INFORMATION:** Reacts with water at the interface producing CO2 and forming and insoluble polyurea with a high melting point. This reaction is accelerated by ammonia, soda, or alcohols in connection with surfactants (e.g. detergents). Polyurea is inert and not biodegradable.

## 8. CONTROL MEASURES

MSDS027 Rev. 2 R Hardener Page 2 of 3

**RESPIRATORY PROTECTION:** Approved atmospheric supply respirator in pressure demand or other positive pressure modes in unventilated areas.

PROTECTIVE GLOVES: Impervious PVA gloves.

**EYE PROTECTION:** Chemical safety goggles

**VENTILATION:** Sufficient ventilation to prevent against overexposure to vapors.

**CLOTHING:** Protective clothing to cover exposed skin.

## 9. REGULATORY INFORMATION

**WHMIS:** D.1.B.

D.2.A.

**PROPER SHIPPING NAME:** Dichloromethane

UN Number: UN 1593

**Labeling:** Toxic

**TDS:** UN 1593 Cl. 6.1 Pkg. III

(IATA and IMO)

## 10. OTHER INFORMATION/ADDITIONAL COMMENTS

**USERS RESPONSIBILITY:** A bulletin such as this cannot be expected to cover all possible individual situations. As the user has the responsibility to provide a safe workplace, all aspects of an individual operation should be examined to determine if, or where, precautions - in addition to those described herein- are required. Any health hazard and safety information herein should be passed on to your customers or employees, as the case may be.

**DISCLAIMER OF LIABILITY:** The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. All chemicals may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. Final determination of suitability of the chemical is the sole responsibility of the user. No representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose or any other nature are made hereunder with respect to the information contained herein or the chemical to which the information refers. It is the responsibility of the user to comply with all applicable federal, state and local laws and regulations.

The ingredients listed Composition/Information on the Components Section are embedded in the product and are provided for information.

Blair Rubber Company provides the information herein compliance with Federal hazard communication standard, 29 CFR 1910.1200, to give warning of actual and assumed hazards, and to inform of generally applicable precautions and control measures which are known to Blair Rubber Company. Hazard information is based on available scientific evidence, but is not always obtained from sources under the direction or control of Blair Rubber Company. Blair Rubber Company makes no warranty or representation that the information is accurate, reliable, complete or representative and Buyer may rely thereon only at Buyer's own risk. Blair Rubber Company warrants only that it has made no effort to censor other than trade secret information or to conceal hazards of its products. The data shown on these pages in no way modifies, amends or enlarges any specification or warranty.

MSDS027 Rev. 2 R Hardener Page 3 of 3