

**MATERIAL SAFETY DATA SHEET**

Business Hours 8:00 am - 5:00 pm  
 Emergency Telephone Number  
 918/227-4533

CARLISLE COATINGS AND WATERPROOFING, INC.  
 Subsidiary of Carlisle Corporation  
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 Sapulpa, Oklahoma 74067-1600

FOR TRANSPORTATION EMERGENCIES  
 CALL CHEMTREC 800/424-9300

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**SECTION I**

PRODUCT NAME & SYNONYMS <b>Liquideck(tm) Part B</b>	CHEMICAL FAMILY
PRODUCT USE Waterproofing/Surfacing compound	FORMULA Mixture

**SECTION II - HAZARDOUS INGREDIENTS**

HAZARDOUS INGREDIENTS	CAS #	%	OSHA PEL (ppm)		Skin Designation	LD50 of Ingredient mg/kg	LC50 of Ingredient ppm/4H
			TWA	STEL			
Diphenylmethane 4,4'-diisocyanate (MDI), containing:	026447-40-5	40-50					
Methylene bis(phenylisocyanate)	101-68-8			0.02			
<b>Diphenylmethane 4,4'-diisocyanate Homopolymer</b>	039310-05-9	10-20	none				
Aromatic Hydrocarbon Oil	64742-03-6	15-25	5 mg/m3				

**SECTION III - PHYSICAL DATA**

SPECIFIC GRAVITY 1.1	BOILING POINT >550F (288 C)	% VOLATILES BY WT <1	VAPOR DENSITY (Air = 1) Not determined
VAPOR PRESSURE <1 at 20 C (0.0003 for MDI)	FREEZING POINT Not determined	SOLUBILITY IN WATER Reacts with water	EVAPORATION RATE (NBuAc=1) <0.01
pH N/A	PHYSICAL STATE Liquid	ODOR THRESHOLD N/D	VOC <10 g/l

## ODOR &amp; APPEARANCE

Amber liquid with slight odor

**SECTION IV - FIRE AND EXPLOSION HAZARD DATA**

FLAMMABILITY No	IF YES, UNDER WHAT CONDITIONS		
FLASHPOINT 104 C, 220 F TCC	AUTOIGNITION TEMPERATURE N/D	LOWER FLAMMABLE LIMIT N/A	UPPER FLAMMABLE LIMIT N/A

## HAZARDOUS COMBUSTION PRODUCTS

Carbon dioxide, carbon monoxide, oxides of nitrogen, hydrogen cyanide.

## EXTINGUISHING MEDIA

CO2, foam, dry chemical. NOTE: Water may react violently with hot product.

## SPECIAL FIREFIGHTING PROCEDURES

Firefighters should wear self-contained breathing apparatus and full protective clothing. Do not breath smoke or vapors given off by burning material. Heat may build pressure and rupture closed containers.

## UNUSUAL FIRE &amp; EXPLOSION HAZARDS

In case of fire, evacuate all downwind personnel. If product becomes contaminated, do not reseal containers as pressure buildup may rupture them.

**SECTION V - REACTIVITY DATA**

STABILITY Stable	HAZARDOUS POLYMERIZATION May occur	CONDITIONS TO AVOID Contact with water, alcohols, amines, metal compounds. Avoid temperatures above 320 F (160 C).
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## INCOMPATIBILITY

Water, alcohols, amines, bases, metal compounds, zinc, aluminum, brass, copper. Gas generation can create pressure.

## DECOMPOSITION PRODUCTS

Isocyanate vapor, carbon dioxide, carbon monoxide, oxides of nitrogen, hydrogen cyanide.

**SECTION VI - TOXICOLOGICAL PROPERTIES**

Route of Entry: Skin Contact X Skin Absorption X Eye Contact X Inhalation X Ingestion X

## EFFECTS OF ACUTE EXPOSURE TO PRODUCT

At room temperature, vapors are minimal due to low vapor pressure. Spraying or heating can produce increased vapors. Breathlessness, chest discomfort, reduced pulmonary function, skin rash. The manifestations of respiratory symptoms may be delayed. May cause eye irritation and temporary corneal injury. Material may stick to skin causing skin irritation.

**SECTION VI - TOXICOLOGICAL PROPERTIES**

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## EFFECTS OF CHRONIC EXPOSURE TO PRODUCT

Allergic skin sensitization may occur in some individuals. Decreased ventilatory capacity is possible..

May cause respiratory sensitization in susceptible individuals. MDI concentrations below the exposure guidelines may cause allergic respiratory reactions in individuals already sensitized.

EXPOSURE LIMITS OSHA PEL 0.02 ppm ceiling (MDA)	SENSITIZATION TO PRODUCT May occur	IRRITANCY OF PRODUCT Slight eye, skin irritant	SYNERGISTIC PRODUCTS None known
CARCINOGENICITY Aromatic oil-IARC Group 2	MUTAGENICITY & TUMORIGENICITY Inconclusive	REPRODUCTIVE TOXICITY Unlikely	TERATOGENICITY None reported

**SECTION VII - PREVENTIVE MEASURES**

## EYE PROTECTION

Safety glasses or goggles

## GLOVES

Hycron or other impermeable

## RESPIRATOR

NIOSH/MSHA approved respirator in confined spaces.

## FOOTWEAR

Industrial shoes to protect feet from contact with product.

## OTHER

Protective skin creams or emollients useful.

Wash with soap and water after each use. Remove all material under fingernails.

## ENGINEERING CONTROLS

Mechanical exhaust ventilation recommended for enclosed spaces to maintain atmospheric levels below the exposure guideline of 0.02 ppm.

## LEAK OR SPILL PROCEDURE

Soak up spill with sawdust, clay or other absorbent material and remove with shovel or broom. Avoid materials such as cement powder. Transfer to open containers in a well ventilated area. Neutralize by adding a 5% ammonia or 5% sodium bicarbonate solution in water with 2% detergent, allowing CO2 gas to escape.

## WASTE DISPOSAL

Neutralize as described above and dispose of in accordance with all local, state, and federal regulations.

## HANDLING PROCEDURES &amp; EQUIPMENT

Avoid breathing vapor or mists. Avoid contact with skin and eyes. Launder contaminated clothing.

Wash hands thoroughly with soap and water after each use, especially before eating, drinking or smoking.

## STORAGE REQUIREMENTS

Keep container(s) tightly closed and upright when not in use. Store indoors between 75 - 105 F (24 - 41 C).

Keep out of reach of children.

## SPECIAL SHIPPING INFORMATION

DOT Classification: Diphenylmethane 4, 4' diisocyanate, 6.1, UN 2489, PGIII, Limited Quantity

**SECTION VIII - FIRST AID MEASURES**

## EYE CONTACT

Avoid eye contact. In case of contact, immediately flush eyes thoroughly with water for at least 15 minutes.

Get medical attention if irritation develops and persists. Consult medical personnel.

## SKIN CONTACT

Avoid skin contact. In case of contact, immediately wash with soap and water. Remove all material under fingernails. Get medical attention if irritation develops and persists. Wash clothing before reuse.

## INHALATION

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, oxygen should be administered by qualified personnel. Call a physician or transport to a medical facility.

## INGESTION

Do not take internally. If swallowed, call a physician and do NOT induce vomiting unless directed by physician.

**SECTION IX - SARA SECTION 313 SUPPLIER NOTIFICATION**

This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning & Community Right-to-Know Act of 1986 & of 40 CFR 372.

CHEMICAL NAME	CAS #	%	CHEMICAL NAME	CAS #	%
Methylene bis(phenylisocyanate)	101-68-8	40-50			

**SECTION X - PREPARATION INFORMATION**

PREPARED BY: PAUL BENSON	PHONE NUMBER: 800-338-8701	DATE: 7/1/98	REPLACES MSDS DATED: original
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