

MATERIAL SAFETY DATA SHEET

DURAL - Division of MULTIBOND Inc.

SECTION I - MATERIAL IDENTIFICATION AND USE				
Material Name UL-2130				
Manufacturer and Supplier Dural - Division of Multibond Inc.				
Street Address 550 Marshall Avenue				
City Dorval			Province Quebec	
Postal Code H9P 1C9			Emergency Telephone (613) 996-6666 (Collect)	
Chemical Formula Complex mixture			Chemical Family Aromatic Isocyanate	
Trade Name (Synonym) UI-2130			Product Use Flooring Adhesive	
WHMIS Classification D2A, D2B, B2 TDG Other Regulated Substances, Liquid, N.O.S. (contains Methylene Diphenyl Diisocyanate (MDI); Class 9, UN NA3082; PG III)				
SECTION II - HAZARDOUS INGREDIENTS				
Hazardous Ingredients	Conc. %	CAS Number	Exposure Limits	LD ₅₀ /LC ₅₀ Species & Route
Polymeric Diphenylmethane Diisocyanate (pMDI)	22-26	9016-87-9	N/E	Acute Oral Toxicity: LD50:>2000 mg/kg (rat, Male/Female) Acute Inhalation Toxicity: LC: 490 mg/m3, vapour, 4 h (rat)
4,4'-Diphenylmethane Diisocyanate (MDI)	19-22	101-68-8	0.005 ppm 0.051 mg/m3 TWA US.ACGIH Threshold Limit Values	Acute Inhalation Toxicity: LC50: 369 mg/m3, 4 h (rat, Male/Female) LC50: >2240 mgm3, aerosol, 1 h (rat) Acute dermal toxicity: LD50: >10,000 mg/kg (rabbit)
SECTION III - PHYSICAL DATA				
Physical State Gas <input type="checkbox"/> Liquid <input checked="" type="checkbox"/> Solid <input type="checkbox"/>			Odour/Appearance Odourless /Brown Paste	
Odour Threshold (ppm) N/E	Vapour Pressure (mm Hg) <1 x 10 ⁻⁵ /25°C	Specific Gravity 1.41	Vapour Density (air =1) Approx 8.6	
Evaporation Rate N/E	Boiling Point (°C) > 200	Freezing Point (°C) N/E	pH N/A	
% Volatile (by weight) 0%	Solubility in Water (20°C) Insoluble. Reacts with water to liberate CO2 gas	Coefficient of Oil/Water Distribution N/E		

N/E: Not Established

N/A: Not Applicable

SECTION IV - FIRE AND EXPLOSION DATA			
Flammability? if yes state conditions Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			
Flashpoint & Method > 250°C (Closed Cup)		Sensitivity to Static Discharge None	
Upper Explosion Limit (% by volume) N/E	Special Procedures Wear self-contained breathing apparatus and full protective equipment.	Auto Ignition Temp (°C) N/E	Means of Extinction Use CO ₂ , foam, water fog or dry chemicals on dried product.
Lower Explosion Limit (% by volume) N/E	Explosive Power N/E	Hazardous Combustion Products During a fire, HDI vapours and other irritating, highly toxic gases may be generated by thermal decomposition or combustion.	Rate of Burning N/E
SECTION V - REACTIVITY DATA			
Chemical Stability If no, state conditions Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			
Incompatibility Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Water, organic acids, strong oxidising agents.			
Reactivity, and under what conditions May occur; Contact with moisture or other materials which react with isocyanates or temperatures over 204°C may cause polymerisation.			
Hazardous Decomposition Products By high heat and fire: nitrogen oxides, carbon dioxide, carbon monoxide, traces of HCN.			
SECTION VI - TOXICOLOGICAL PROPERTIES			
Route of Entry Inhalation Acute <input checked="" type="checkbox"/> Eye Contact <input checked="" type="checkbox"/> Inhalation <input checked="" type="checkbox"/> Skin Contact <input checked="" type="checkbox"/> Ingestion <input checked="" type="checkbox"/> Skin Absorption <input type="checkbox"/>			
Effects of Acute Exposure Excessive over exposure may cause sensitisation of the eyes, upper respiratory tract and lungs. Effects may be delayed. Decreased ventilatory capacity has been associated with similar materials.			
Effects of Chronic Exposure May cause aggravation asthmatic symptoms.			
LD ₅₀ of Product (Species & Route) 10,000mg/Kg (rats)	LC ₅₀ of Product (Species) 137-1150mg/m ³ (rats)	Exposure Limits N/E	
Irritancy As above	Sensitization Respiratory explosively.	Synergistic Materials None known.	
Carcinogenicity <input checked="" type="checkbox"/> Reproductive Effects <input type="checkbox"/> Teratogenicity <input type="checkbox"/> Mutagenicity <input type="checkbox"/>			
SECTION VII - PREVENTIVE MEASURES			
Always use protective equipment and clothing as necessary to keep exposure to this material below applicable exposure limits. Avoid contact with skin. Wash exposed areas with soap and water.			
Gloves Butyl rubber or neoprene latex gloves recommended.	Respiratory Use with adequate local and mechanical ventilation..		
Eye Use safety goggles when splash potential exists.	Footwear		
Clothing Wear as required to use conditions.	Other		
Engineering Controls Provide sufficient ventilation to maintain airborne concentrations below the exposure guideline.			
Leak & Spill Procedure Cover the spill with sawdust, vermiculite, other absorbent material. Pour decontamination solution over spill area and allow to react for at least 10 minutes. Collect material in open containers and add further amounts of decontamination solution. Remove containers to a safe place, cover loosely, and allow to stand for 24 to 48 hours. Decontamination solution: Concentrate ammonia (3-8%), detergent (2%) plus water (90-95%). Respiratory protection recommended.			
Waste Disposal Solidify and dispose of in an approved industrial landfill, consult your provincial or local authorities for proper disposal			

SECTION IV - FIRE AND EXPLOSION DATA

in the event more restrictive requirements apply.

Handling Procedures & Equipment Keep container closed when not in use.

Shipping & Storage Requirements Keep away from heat, sparks and open flame. Ground containers during storage and transfer operations. Store in tightly closed containers to prevent moisture contamination. Do not reseal if contamination is suspected. Ideal storage temperature range for ease of handling is 10-27°C.

SECTION VIII - FIRST AID MEASURES

General If symptoms of over exposure develop, seek immediate medical attention.

Skin Wash affected area with soap and water. Possible allergic reaction to susceptible individuals. Launder contaminated clothing before reuse.

Eye Flush immediately with water for 15 minutes. May cause slight eye irritation. Refer individual to physician for immediate follow up.

Inhalation Move to an area free from risk of further exposure. Administer oxygen or artificial respiration as needed. Obtain medical attention. Asthmatic-type symptoms may develop and may be immediate or delayed up to several hours. Treatment is essentially symptomatic. Consult physician.

Ingestion Do not induce vomiting. Do not give anything by mouth to an unconscious or convulsing person. Consult physician.

SECTION IX - PREPARATION OF MSDS

Prepared by Product Safety Dept.

Date: December 14, 2007

Phone: (514) 636-6230

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