

MATERIAL SAFETY DATA SHEET

This Material Safety Data Sheet meets or exceeds the requirements of the Canadian Controlled Product Regulations (WHMIS)

1. Product and Supplier Identification

Product: ABR 404 Polyurethane Graffiti Stop

Product Use: Anti-graffiti Coating

Supplier: Canadian Building Restoration Products, Inc.,
#102 – 876 Cordova Diversion,
Vancouver, BC V6A 3R3
Emergency Telephone: (604) 254 3325

Manufacturer: American Building Restoration Products, Inc.,
9720 South 60th Street,
Milwaukee, Wisconsin, USA, 53132

2. Composition

Component	% (w/w)	Exposure Limits
Homopolymer of 1,6-diisocyanatohexane (CAS No 28182-81-2)	49	ACGIH 0.005 ppm (8 hour Exposure Limit for hexamethylene diisocyanate) Sensitizer. ALARA substance.
Propylene glycol monomethyl ether acetate (CAS No 108-65-6)	25	No exposure limits have been determined
Xylene (CAS No 1330-20-7)	26	ACGIH TLV-TWA: 100 ppm (8 hour Exposure Limit) ACGIH TLV-STEL: 150 ppm (651 mg/m ³)

3. Hazards Identification

Routes of Entry:

Skin Contact: Major Eye Contact: Moderate Ingestion: Minor Inhalation: Minor

Acute Health Effects: Studies with xylene isomers have shown irritation, redness and a burning sensation can result from contact. These effects are reversible shortly (usually within 1 hour) after the contact stops. Repeated or prolonged exposure to xylene can defat the skin resulting in dermatitis. Xylene liquid or vapour can be absorbed through the skin, but not as readily as when inhaled or ingested. Significant harmful effects are not expected by this route of exposure. For eye contact, the liquid is a mild irritant. The main effect of inhaling vapour is depression of the central nervous system (CNS), with symptoms such as headache, dizziness, nausea and vomiting. The product is only slightly toxic by ingestion. Ingestion of large amounts is likely to cause CNS effects such as dizziness, nausea and vomiting. Ingestion is not a common route of occupational exposure. SENSITIZER – HDI may sensitize persons causing chest tightness,

wheezing, cough, shortness in breath or asthmatic responses. Once sensitized, the individual can experience these symptoms from exposure to cold, dust, or other irritants.

Chronic Health Effects: Long-term xylene exposure may cause harmful effects on the nervous system, but there is not enough information available to draw firm conclusions. Isocyanates are known to cause respiratory sensitization. This may be caused by a single, very large exposure, or by multiple exposures. After being sensitized, persons may experience severe asthmatic attacks, or other respiratory symptoms varying in severity by even a minute exposure.

4. First Aid Measures

Eye Contact: Quickly and gently blot or brush away excess chemical. Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 20 minutes or until the chemical is removed, while holding the eyelid(s) open. Obtain medical attention immediately.

Skin Contact: Avoid direct contact, wear chemical resistant protective clothing. As quickly as possible, remove contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Quickly and gently blot or brush away excess chemical. Wash gently and thoroughly with water and non-abrasive soap for at least 20 minutes or until chemical is removed. Obtain medical advice immediately. Completely decontaminate clothing, shoes and leather goods before re-use or discard.

Inhalation: This product is flammable and a possible reproductive hazard. Take proper precautions (e.g. remove any sources of ignition, wear appropriate protective equipment). Remove source of contamination or move victim to fresh air. If breathing is difficult, oxygen may be beneficial if administered by trained personnel, preferably on a doctor's advice. **DO NOT** allow the victim to move about unnecessarily. Symptoms of pulmonary edema can be delayed up to 48 hours after exposure. Immediately transport victim to an emergency care facility.

Ingestion: Never give anything by mouth if victim is rapidly losing consciousness. Have victim rinse mouth thoroughly with water. **Do not induce vomiting.** Dilute contents of stomach with 240 to 300 ml of water. If vomiting occurs naturally have victim lean forward to reduce risk of aspiration. Seek immediate medical attention.

5. Fire Fighting Measures

Flash point:	27 °C
Autoignition temperature:	464 °C (xylene)
Lower Explosive Limit:	1% (xylene)
Upper Explosion Limit:	7% (xylene)
Sensitivity to Impact:	Not sensitive.
Sensitivity to Static Discharge:	Not sensitive.

Hazardous Combustion Products: Carbon monoxide, carbon dioxide, reactive hydrocarbons, aldehydes, oxides of nitrogen, traces of cyanide.

Extinguishing Media: Carbon dioxide, dry chemical powder, foam, water spray or fog. Water may be ineffective since it may not cool xylene below its flash point. Firefighting foams are the extinguishing agent of choice for most flammable liquid fires.

Fire Fighting Instructions: Evacuate area and fight fire from a safe distance or a protected location. Approach fire from upwind to avoid hazardous vapours and toxic decomposition products. Do not enter confined fire space without proper personal protection. Use approved positive pressure self-contained breathing apparatus. If possible, isolate materials not yet involved in the fire, and move containers from fire area if this can be done without risk, and

protect personnel. Otherwise, fire-exposed containers or tanks should be cooled by application of hose streams and this should begin as soon as possible and should concentrate on any unwetted portions of the container.

6. Accidental Release Measures

Personal Protection: See Section 8 for proper protective equipment to be worn while cleaning an accidental spill.

Environmental Precautions: Prevent product from entering sewers, natural waterways, or confined spaces.

Cleanup Procedures: Restrict access to area until completion of cleanup. Extinguish or remove all ignition sources. Decontaminate with a solution of 10% ammonium hydroxide, 2-5% detergent, and up to 20% isopropanol, remainder, water. This solution must be used outside, since the decontaminating process may liberate heat. Absorb onto sand or other inert absorbent media and shovel into approved closable waste containers for disposal.

7. Handling and Storage

Handling Procedures: This product is very toxic due to its sensitization properties. Before handling, it is imperative that the personal equipment requirements and personal hygiene measures be followed. Inspect containers for damage or leaks before handling. Unprotected persons should avoid all contact with this product including contaminated equipment. Use in smallest quantities in a well ventilated area. Do not use with incompatible materials such as water and alcohols. Ensure all containers are correctly labeled indicating hazards. Keep container tightly closed when not in use. Wash face and hands thoroughly after handling, and before eating, drinking, or using tobacco products.

Storage: Store in cool, dry, well ventilated area out of direct sunlight, and away from heat and ignition sources.

8. Exposure Controls, Personal Protection

Engineering Controls: If used indoors, ensure adequate ventilation by using local exhaust. Prevent handling methods that will increase airborne vapours.

Respiratory Protection: For vapour concentrations up to 0.05 ppm, use supplied air respirator. Concentrations up to 1 ppm, positive pressure, full-face air supplied respirators should be used.

Skin Protection: Use chemical protective gloves, coveralls, aprons, overshoes.

Eye and Face Protection: Chemical splash-proof goggles or face shield must be worn at all times.

Footwear: Chemical resistant boots or overshoes.

Other: Eye wash station should be located near work area.

9. Physical and Chemical Properties

Appearance:	Clear liquid	Freezing Point	0 °C
Odour:	Solvent odour	Boiling Point:	149 °C
Odour Threshold:	No data	Critical Temperature:	Not applicable.
pH:	Not applicable	Relative Density:	No Data (water = 1)
Vapour Pressure:	0.8-0.86794 kPa @ 20°C (xylene)	Partition Coefficient:	No data
Solubility:	Insoluble in water.	Evaporation Rate:	Slower than ether
Vapour Density:	Not available		

10. Stability and Reactivity

Chemical Stability and Reactivity: Product is normally stable.

Incompatibility: Avoid contact with oxidizing agents, materials containing active hydrogen such as water, alcohol, ammonia, amine, and strong bases.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, reactive hydrocarbons, aldehydes, oxides of nitrogen, traces of cyanide.

Hazardous Polymerization: Hazardous uncontrolled exothermic polymerization may occur in contact with certain incompatible substances.

11. Toxicological Information

Acute Exposure: Flammable and very toxic (sensitizer). Theoretical LD₅₀ (rat/oral) for product exceeds 2000 mg/kg.

Chronic Exposure:	See Section 3.
Exposure Limits:	See Section 2.
Irritancy:	See Section 3.
Sensitization:	Yes. See Section 3.
Carcinogenicity:	Information not available
Teratogenicity:	Fetotoxic results have been demonstrated in some tests.
Reproductive toxicity:	Information not available
Mutagenicity:	Information not available.
Synergistic products:	None known.

12. Ecological Information

Environmental toxicity: No data available.

Biodegradability: No data available.

13. Disposal Considerations

Canadian Environmental Protection Act: All ingredients are listed on the DSL. Dispose according to all local, provincial and federal requirements.

14. Transport Information

Canadian Transportation of Dangerous Goods Regulations: Paint, Class 3, UN 1263, P.G. II

International Air Transport Association (IATA): UN1263, Paint, Class 3, P.G. II.

International Maritime Organization (IMO): Paint, Class 3, UN 1263, P.G. II

15. Regulatory Information

Canadian Federal Regulations:

Canadian Environmental Protection Act: All ingredients are on the Domestic Substances List.
WHMIS Classification: B2, D1A, D2B

16. Other Information

Original Preparation Date: February 17, 2000

Prepared by: Kel-Ex Agencies Ltd., P.O. Box 52201, North Vancouver, BC, Canada, V7J 3V5

Comments: This Material Safety Data Sheet was prepared using information provided by Canadian Building Restoration Products, Inc., and CCINFO.

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