

MATERIAL SAFETY DATA SHEET

Technical Barrier Systems
 151 Randall Street
 Oakville, Ontario, Canada, L6J 1P5
 (905) 842-9488

SECTION 01 : CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identifier (WHMIS Classification)	Maintenance, Maintenance XL, Hydroflex Formula XL
Product Use	Media blasting
Manufacturer's Name	Technical Barrier System Inc.
Street Address	151 Randall Street
City	Oakville
Province	ON
Postal Code	L6J 1P5
Emergency Telephone	888-537-2888
Date MSDS Prepared	24-Feb-11
MSDS Prepared by	Keith Seaman
Phone Number	888-537-2888
Supplier's Name	Technical Barrier System Inc.
Street Address	151 Randall Street
City	Oakville
Province	ON
Postal Code	L6J 1P5
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SECTION 02 : COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS, %	C.A.S.#	LD/50,ROUTE,SPECIES	LC/50,ROUTE,SPECIES
Sodium Bicarbonate	144-55-8	Oral-rat 8.0g/Kg	>4.94 mg/L in rats over a 4 1/2 hr exposure period

All percentages listed are weight / weight

SECTION 03 : HAZARDS IDENTIFICATION

Route of Entry	
Skin Contact	Not a skin irritant
Skin Absorption	
Eye Contact	Not an eye irritant. Solid or dust particles may cause irritation due to mechanical action if left unwashed.
Inhalation	Non-toxic, but may aggravate pre-existing upper respiratory and lung disorders.
Ingestion	Ingestion of small amounts (1-2 tablespoonfuls) during normal handling operations may cause abdominal discomfort but are not likely to cause injury. Ingestion of larger amounts may cause injury.
Emergency Overview	May generate static sparks during dry blasting with improperly grounded equipment Nuisance dusts
WHMIS Symbols	

SECTION 04 : FIRST AID MEASURES

Skin Contact	Wash exposed areas thoroughly with soap or mild detergent and a large amount of water.
Eye Contact	Immediately flush eyes with a directed stream of water for at least 15 minutes, forcibly holding eyelids apart to ensure complete irrigation of all eye and lid tissue. IF IRRITATION PERSISTS GET MEDICAL ATTENTION.
Inhalation	If over-exposure occurs, remove to area free from risk of further exposure. Treat symptomatically> Seek medical attention if irritation persists.
Ingestion	If large amounts are ingested, give water to drink. Do not give anything to orally to an unconscious person. Seek medical attention.

SECTION 05 : FIRE FIGHTING MEASURES

Flammable: Yes / No	No
If yes under which conditions?	
Means of Extinction	Use extinguishing media for surrounding fire
Flashpoint (°C) and Method	Non-flammable, non-combustible

Upper Flammable Limit (% by volume)Not applicable

Lower Flammable Limit (% by volume)Not applicable

Autoignition Temperature (°C)

Explosion Data - Sensitivity to Impact

Explosion Data - Sensitivity to Static Discharge

Static sparks may be generated during the blast operation. Special consideration should be given to work areas and applications in which flammable or combustible vapors, mists, gasses or clouds of combustible dust are either present or may be released.

Hazardous Combustion Products

Carbon dioxide may be generated by thermal decomposition or exposure to acids. Wear self contained breathing apparatus and full protective equipment (bunker gear)

SECTION 06 : ACCIDENTAL RELEASE MEASURES

Leak and Spill Procedures

Scoop into clean, dry containers for disposal. Wash away uncontaminated residue with water.

SECTION 07 : HANDLING AND STORAGE

Handling Procedures and Equipment

Wear approved dust mask during use or if dusts are generated during handling.

Storage Requirements

Store in original containers in a cool, dry area away from incompatible materials.

SECTION 08 : EXPOSURE CONTROL / PERSONAL PROTECTION

Exposure Limits: ACGIH TLV; OSHA PEL; Other

For particles not otherwise classified (PNOC) - TLV-TWA of 10 mg/m3 as a nuisance dust (AGGIH)

Specific Engineering Controls (such as ventilation, enclosed process)

ABRASIVE BLASTING: A NIOSH approved respirator with a dust filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits for general exposure to ARMEX dust above the established exposure guideline, and for outdoor blasting of non-hazardous coatings. Use an abrasive blasting respirator for indoor or enclosed work, and wherever blasting hazardous coatings. Whenever possible, use appropriate engineering controls and/or containment measures during abrasive blasting to minimize exposure to airborne dusts. SOLUBLE MEDIA INJECTOR / POWER WASHING: Respiratory protection is not normally required since the media is solubilized and dusts are not typically generated during this process. Conditions where respiratory protection would be required include worker exposure to excessive mists, work involving the removal of hazardous or potentially hazardous coatings, or when working in a confined space or area with limited ventilation. When it is determined that respiratory protection is required for certain operations, use an approved air purifying or air-supplied respirator as appropriate.

Personal Protective Equipment

PROTECTIVE GLOVES: General purpose for handling dry product or heavy gauge when dry blasting. Impervious (preferably heavy rubber) when wet blasting. EYE PROTECTION: Wear safety goggles or face shield during abrasive blasting operations. PROTECTIVE CLOTHING: Full cover clothing is sufficient for general handling. Aprons or impervious cover for blasting operations. RESPIRATORY PROTECTION: ARMEX medias alone do not represent an inhalation hazard to the user. However, the use of the medias in ARMEX cleaning and coating removal systems presents use-specific exposure potentials based on the particular system and blasting conditions employed, and the characteristics of the coating being removed.

SECTION 09 : PHYSICAL AND CHEMICAL PROPERTIES

Physical State

Odour and Appearance

white crystalline powder, no odor

Odour Threshold (ppm)

Specific Gravity

Vapour Density (air=1)

NA

Vapour Pressure (mmHg)

NA

Evaporation Rate

Boiling Point (°C)

NA

Freezing Point (°C)

NA

pH

Coefficient of Water / Oil

Distribution

SECTION 10 : STABILITY AND REACTIVITY

Chemical Stability Yes/No

stable

If no, under what conditions?

Compatibility with Other Substances: Reacts with acids to release carbon dioxide. May also yield free caustic in presence of lime dust (CaO) and moisture

Yes/No

If yes, which ones?

Reactivity, and under what conditions?

Hazardous Decomposition Products Exposure to temperatures in excess of 228 F or incompatible material (acids) may cause high levels of carbon dioxide gas to be generated. This presents a danger in confined spaces. Thermal decomposition brought on by exposure to temperatures in excess of 1000 F will yield sodium oxide, a severe skin, eye, and inhalation irritant.

SECTION 11 : TOXICOLOGICAL INFORMATION

Effects of Acute Exposure ARMEC blast media was non-toxic when tested in accordance with 40 CFR 798.11

Effects of Chronic Exposure

Irritancy of Product

Skin Sensitization

Respiratory Sensitization

Carcinogenicity - IARC Not listed as carcinogenic

Carcinogenicity - ACGIH Not listed as carcinogenic

Reproductive Toxicity

Teratogenicity

Embryotoxicity

Mutagenicity

Name of Synergistic Products / Effects

SECTION 12 : ECOLOGICAL INFORMATION

Aquatic Toxicity Product is classified practically non-toxic

SECTION 13 : DISPOSAL CONSIDERATIONS

Waste Disposal Handle disposal of waste material in manner which complies with local, state, province and federal regulation.

SECTION 14 : TRANSPORT INFORMATION

Special Shipping Instructions

PIN

TDG Not regulated

ICAO

SECTION 15 : REGULATORY INFORMATION

WHMIS Classification

OSHA Not hazardous under 29CFR 1910.1200

SERA

TSCA All chemicals in this product are not subject to TSCA

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the the information required by CPR.

SECTION 16 : OTHER INFORMATION

DSL All substances listed on the Canadian Domestic Substance List or are not required to be listed.