MATERIAL SAFETY DATA SHEET

HI-TECH UNIK URBAIN
Revision Date : Mai 8th 2013

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

Product identifier/Trade name: HI-TECH UNIK URBAIN
Product code/Internal Identification: N/Av
Product use/Description: Bituminous coating
Supplier identifier: BAUVAL TECH-MIX
3350, Butte-aux-Renards, Varennes, Québec (Canada), J3X 1P7 www.tech-mix.com
Manufacturer identifier: Same as supplier
Emergency phone number: (613) 996-6666 (CANUTEC)

SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	CAS #	% (weight)	ACGIH TLV	OSHA PEL
Silica, amorphous, fused	60676-86-0	10-30	N/Av	PEL-TWA 0.1 mg/m^3 (dust)
Sodium monoxide	12401-86-4	< 0.1	N/Av	N/Av
Titanium dioxide	13463-67-7	0.1-1.0	TLV-TWA 10 mg/m^3	PEL-TWA 10 mg/m^3
Manganese monoxide	1344-43-0	1-5	TLV-TWA 0.2 mg/m^3	PEL-TWA 1 mg/m^3 PEL-STEL 3 mg/m^3
Phosphoric acid anhydride	1314-56-3	0.1-1.0	N/Av	N/Av
Chromium(III) oxide	1308-38-9	0.1-1.0	TLV-TWA 0.5 mg/m^3	PEL-TWA 0.5 mg/m^3
Sodium silicate	1344-09-8	1-5	N/Av	N/Av
Calcium	7440-70-2	0.1-1.0	N/Av	N/Av
Aluminum powder	7429-90-5	0.1-1.0	TLV-TWA 1 mg/m^3	N/Av
Iron	7439-89-6	0.1-1.0	N/Av	N/Av
Magnesium	7439-95-4	0.1-1.0	N/Av	N/Av
Titanium	7440-32-6	< 0.1	N/Av	N/Av
Silica-crystalline, Quartz	14808-60-7	< 0,1	TLV-TWA 0.025 mg/m^3 (respirable particles)	PEL-TWA 30 mg/m^3 (total dust) 10 mg/m^3 (respirable particles)
Aluminum oxide	1344-28-1	3-7	TLV-TWA 1 mg/m^3	PEL-TWA 15 mg/m^3 (total dust) 5 mg/m^3 (respirable particles)
Calcium oxide	1305-78-8	15-40	TLV-TWA 2 mg/m^3	PEL-TWA 5 mg/m^3
Magnesium oxide	1309-48-4	7-13	TLV-TWA 10 mg/m^3	PEL-TWA 15 mg/m^3
Iron trioxide	1309-37-1	15-40	TLV-TWA 5 mg/m^3	PEL-TWA 10 mg/m^3
Potassium oxide	12136-45-7	< 0,1	N/Av	N/Av
Sulfur	7704-34-9	< 0.1	N/Av	N/Av
Fuel oil, no. 2	68476-30-2	1-5	TLV-TWA 100 mg/m^3	N/Av
Butadiene-styrene polymer	9003-55-8	< 1.0	N/Av	N/Av
Asphalt (petroleum)	8052-42-4	1-5	N/Av	N/Av

This material is classified as hazardous under OSHA regulations (29CFR 1910.1200).

SECTION 3 - HAZARDS IDENTIFICATION

Emergency Overview

IRRITANT. May cause slight respiratory tract, eye and skin irritations or burns.

POTENTIAL HEALTH EFFECTS (for more details, refer to Section 11)

Primary entry route(s): Skin, eye, ingestion and inhalation.

Target organs: None

Effects of short-term (acute) exposure:

Inhalation: May cause slight tract irritations or burns.

Skin: May cause slight skin irritations or burns.

Eye: May cause slight eye irritations or burns.

Ingestion: Unlikely. May cause gastric disturbances.

Long-term (chronic) exposure: Unlikely.

Conditions aggravated by exposure: None known.

Carcinogenic status: See TOXICOLOGICAL INFORMATION, Section 11.

Additional health hazards: For further information, see TOXICOLOGICAL INFORMATION, Section 11.

Potential environmental effects: See ECOLOGICAL INFORMATION, Section 12.

SECTION 4 - FIRST AID MEASURES

Inhalation:

Remove source of contamination or have victim move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Obtain medical attention immediately.

Skin contact:

Flush contaminated area with soap and lukewarm, gently running water for at least 15 minutes or until the chemical is removed. Under running water, remove contaminated clothing. If irritation persists, obtain medical advice. Completely decontaminate clothing before reuse or discard.

Eye contact:

Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 15 minutes, or until the chemical is removed, while holding the eyelid(s) open. Obtain medical attention immediately

Ingestion:

NEVER give anything by mouth if victim is rapidly losing consciousness, or is unconscious or convulsing. Rinse mouth thoroughly with water. DO NOT INDUCE VOMITING. Have victim drink two glasses of water. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Repeat administration of water. Obtain medical attention immediately.

SECTION 5 - FIRE FIGHTING MEASURES

Fire hazards/conditions of flammability: Does not burn under normal handling conditions.

Flammability classification (OSHA 29 CFR 1910.1200): N/Av

Flash point (Method): > 93,3°C

Lower flammable limit (% by volume): N/Av

Upper flammable limit (% by volume): N/Av

Explosion data – Sensitivity to mechanical impact: Not sensitive.

Explosion data – Sensitivity to static discharge: Probably not sensitive.

Auto-ignition temperature: N/Av

Oxidizing properties: N/Ap

Suitable extinguishing media:

Carbon dioxide, dry chemical powder and appropriate foam for surrounding products.

Special fire-fighting procedures/equipment:

During a fire, irritating/toxic smoke and fumes may be generated. Vapours can accumulate in confined spaces, resulting in a toxicity and flammability hazard. A self-contained breathing apparatus is required for fire-fighting personnel to protect themselves from toxic products produced during the combustion. Closed containers may explode with the pressure building from the heat. Use water to cool fire exposed containers and prevent this situation.

Hazardous combustion products:

Carbon monoxide, carbon dioxide and other irritant gases, which may include toxic constituents.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions:
Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel only. Wear adequate personal protective equipment (See Section 8). Ventilate area.

Spill response/Cleanup:
Stop the flow if it can be done safely. Prevent material from entering waterways, sewers or confined spaces.

Environmental precautions:
Confine spill, preventing it from entering sewer lines or waterways. Dispose of as per local, state and federal regulations.

Prohibited materials: N/Av

Special spill response procedures: N/Av

SECTION 7 - HANDLING AND STORAGE

Safe handling procedures:
Before handling, it is very important that engineering controls are operating and that protective equipment requirements and personal hygiene measures are being followed. People working with this chemical should be properly trained regarding its hazards and its safe use. Avoid generating dusts, vapours or mists. Inspect containers for leaks before handling. Label containers appropriately. Keep containers closed when not in use. Assume that empty containers contain residues which are hazardous. Do not use with incompatible materials such as strong acids.

Storage requirements:
Store in a dry, cool and well-ventilated area. Store in suitable, labelled containers. Keep containers tightly closed. Empty containers may contain hazardous residues.

Special packaging materials: N/Av

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering controls:
Mechanical ventilation system is recommended to maintain concentrations of contaminants below exposure limits.

Respiratory Protection:
If engineering controls and work practices are not effective in controlling exposure to this material, then wear suitable approved respiratory protection. Have appropriate equipment available for use in emergencies such as spills or fire. Respiratory protection is required if the concentrations are higher than the exposure limits. Use a NIOSH approved respirator if the exposure limits are unknown.

Skin protection and other protective equipment:
Wear chemically protective gloves (impervious), boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area. Separate contaminated work clothes from street clothes. Launder before reuse. Seek advice from protective equipment supplier.

Eye / face protection:
Wear protective safety glasses, chemical safety goggles or a face shield.

General hygiene considerations:
Avoid contact with skin and eyes. Avoid breathing dusts, vapours or mists. Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material.

Permissible exposure levels: For individual ingredient exposure levels, see Section 2.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state, colour and odour: Black solid with a slight petroleum odour.
Odour threshold: N/Av
pH : N/Av
Boiling point: N/Av
Melting/freezing point: N/Av
Vapour pressure: N/Av
Solubility in water: Insoluble
Coefficient of oil/water distribution: N/Av
Specific gravity or density (water = 1, at 4 °C): N/Av
Vapour density: N/Av
Evaporation rate: N/Av
% volatile by volume: N/Av
Viscosity: N/Av

SECTION 10 - REACTIVITY AND STABILITY DATA

Stability and reactivity: Stable at room temperature, in normal handling and storage conditions.
Polymerisation: Hazardous polymerisation should not occur.
Conditions to avoid: Avoid STRONG ACIDS.
Materials to avoid: Avoid STRONG ACIDS.
Hazardous decomposition products: None reported.

SECTION 11 - TOXICOLOGICAL INFORMATION

Toxicological data: N/Av for the product.

Ingredient	LD_{50} (route, specie)	LC_{50} # hours (specie)
Silica, amorphous, fused	N/Av	N/Av
Sodium monoxide	N/Av	N/Av
Titanium dioxide	N/Av	N/Av
Manganese monoxide	N/Av	N/Av
Phosphoric acid anhydride	N/Av	1317 mg/m^3 (rat) 1 hr
Chromium(III) oxide	N/Av	N/Av
Sodium silicate	1960 mg/kg (oral, rat)	N/Av
Calcium	N/Av	N/Av
Aluminum powder	N/Av	N/Av
Iron	30 g/kg (oral, rat)	N/Av
Magnesium	N/Av	N/Av
Titanium	N/Av	N/Av
Silica-crystalline, Quartz	N/Av	N/Av
Aluminum oxide	N/Av	N/Av
Calcium oxide	N/Av	N/Av
Magnesium oxide	N/Av	N/Av
Iron trioxide	N/Av	N/Av
Potassium oxide	N/Av	N/Av
Sulfur	N/Av	N/Av
Fuel oil, no. 2	12 g/kg (oral, rat) 4720 µL/kg (dermal, rabbit)	N/Av
Butadiene-styrene polymer	N/Av	N/Av
Asphalt (petroleum)	N/Av	N/Av

For more details, refer to Section 3.
Carcinogenicity: Titanium dioxide and Silica-crystalline, Quartz are listed by IARC, ACGIH, NTP and OSHA as possible carcinogens.
Teratogenicity, mutagenicity, other reproductive effects: N/Av
Skin sensitization: N/Av
Respiratory tract sensitization: N/Av
Synergistic materials: N/Av
Other important hazards: N/Av

SECTION 12 - ECOLOGICAL INFORMATION

Environmental effects: N/Av
Important environmental characteristics: N/Av
Aquatic toxicity: N/Av

SECTION 13 - WASTE DISPOSAL

Handling and storage conditions for disposal:
Store material for disposal as indicated in Handling and Storage (Section 7).
Methods of disposal:
Review federal, provincial and local government requirements prior to disposal.
RCRA:
If this product, as supplied, becomes a waste, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. For disposal of unused or waste material, check with local, state and federal environmental agencies.

SECTION 14 - TRANSPORTATION INFORMATION

Transportation of Dangerous Goods (TDG) in Canada :
TDG Classification: Not Restricted
Special case: N/Ap

49 CFR/DOT information in USA:
49 CFR Classification: Not Restricted
Special case: N/Ap

SECTION 15 - REGULATORY INFORMATION

In Canada
WHMIS information:
Product is regulated according to the Controlled Product Regulation (CPR) in Canada. This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and this MSDS contains all the information required by the CPR.
WHMIS Classification: D2A & D2B – Toxic material with other effects.
CEPA information: Ingredients are listed on the DSL inventory.
In USA
TSCA information: Ingredients are listed on the TSCA inventory.
EPA / CERCLA (40 CFR 302.4) information:
Refer to the 49 CFR Section 172.101 Appendix A for the reportable quantities, designated as hazardous substances.
SARA TITLE III:
Verify if this material is subject to the TSCA notification requirements, as per *Sec. 313, Toxic Chemicals Notification, 40 CFR 372*.
California Proposition 65:
This product contains chemicals that are known to the State of California to cause cancer or other reproductive harm.
New Jersey Labeling Requirements: Substances listed in Section 2 are required to be disclosed on product labelling

SECTION 16 - OTHER INFORMATION

Prepared by: NSS ENTREPRISE INC. for BAUVAL TECH-MIX
Telephone number: (514) 239-8785 or (450) 652-0689
References:

1. Material Safety Data Sheets from manufacturer/supplier.
2. CSST, Répertoire Toxicologique, Les produits, 2013.
3. Canadian Centre for Occupational Health and Safety, CCInfoWeb databases, 2013.

Abbreviations:

ACGIH	American Conference of Governmental Industrial Hygienists
C	Ceiling
CAS	Chemical Abstract Service
CEPA	Canadian Environmental Protection Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CFR	Code of Federal Regulations (Transportation in U.S.A.)
DOT	Department of Transport (U.S.A.)
DSL	Domestic Substance List
EPA	United States Environmental Protection Agency
EST	Eastern Standard Time
HSDB	Hazardous Substance Data Bank
IARC	International Agency for Research on Cancer
LC	Lethal concentration
LD	Lethal Dosage
N/Av	Not Available
N/Ap	Not Applicable
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program (U.S.A.)
OSHA	Occupational Safety and Health Administration (U.S.A.)
PEL	Permissible Exposure Limit
RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendments & Reauthorization Act
STEL	Short-term Exposure Limit
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

End of the MSDS