

MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME	800 PERMANENT ASPHALT REPAIR	D2B
PRODUCT USE	Asphalt cold mix for patching and repairing potholes in asphalt.	
MANUFACTURER or DISTRIBUTOR	IMCO TECHNOLOGIES INC. 6254 SKYWAY RD., PO BOX 915 SMITHVILLE, ON. L0R 2A0	TEL 1-888-818-4626 FAX 905-527-0606
EMERGENCY NUMBER	613-996-666 or *666 CANUTEC 1-800-535-5053 UNITED STATES POISON INFORMATION CENTRE	
MSDS REVISION DATE	September 2, 2014	

2. COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS	WEIGHT %	CAS NUMBER	TWA ppm	LD50 ORAL RAT Mg/kg	LC50 INHAL RAT ppm
ASPHALT	3 – 5	8052-42-4	5	NA	NA
FUEL OIL	0.5 – 1.5	68334-30-5	NA	NA	NA

3. HAZARDS IDENTIFICATION

ROUTE OF ENTRY	Eye contact, Ingestion, Skin contact, and Inhalation.
CARCINOGENIC STATUS	IARC has determined that there is sufficient evidence for the carcinogenicity of asphalt fumes (refined bitumen) in experimental animals, but not in humans.
TARGET ORGANS	Eye, and Skin
HEALTH EFFECTS – EYE	Severe irritation including redness, tearing and blurred vision.
HEALTH EFFECTS – SKIN	Prolonged or repeated contact may cause skin irritation and/or dermatitis.
HEALTH EFFECTS – INGESTION	Swallowing these materials can cause irritation of the mouth, throat and stomach. Nausea, vomiting and diarrhea may result from ingestion. However, it is unlikely that people working with this product would swallow it.
HEALTH EFFECTS – INHALATION	Breathing the fumes from this product, particularly when heated and/or in an enclosed space may cause headache, nausea, and feeling of dizziness or weakness. Fumes can irritate the nose, throat and lungs. Prolonged exposure to high levels of fumes may result in loss of consciousness and in rare instances, death as a result of not being able to breath.

4. FIRST AID MEASURES

FIRST AID – EYE	Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention.
FIRST AID – SKIN	Immediately flood the skin with large quantities of water. Remove contaminated clothing and shoes. Obtain medical attention.
FIRST AID – INGESTION	Do not induce vomiting. Vomiting can cause the product to be aspirated into the lungs, causing chemical pneumonitis. This can be fatal. Obtain immediate medical attention.
FIRST AID – INHALATION	Move person from the fumes to fresh air. If breathing is difficult, administer oxygen and obtain immediate medical attention.

5. FIRE FIGHTING MEASURES

CONDITIONS OF FLAMMABILITY	This product is flammable when exposed to sparks or open flames.
EXTINGUISHING MEDIA	Carbon dioxide, dry chemical, foam, water spray.
SPECIAL HAZARDS OF PRODUCT	Product may release hydrogen sulphide gas at high temperatures.
PROTECTIVE EQUIPMENT FOR FIRE FIGHTING	Firefighters should wear positive pressure, self-contained breathing apparatus. Equipment should be decontaminated after use.
FLASH POINT (PMCC) (°C/F)	>93.3C/200F
UPPER FLAMMABLE LIMIT %VOL	Unknown
LOWER FLAMMABLE LIMIT %VOL	Unknown
AUTOIGNITION TEMP (°C/F)	NA
EXPLOSION DATA – SENSITIVITY TO IMPACT	NA
EXPLOSION DATA – SENSITIVITY TO STATIC DISCHARGE	NA

6. ACCIDENTAL RELEASE MEASURES

SPILL PROCEDURES	Remove all sources of ignition and flames. Increase ventilation in the spill area. Scoop up material into a suitable container. The material can be reused.
PERSONAL PRECAUTIONS	Wear chemical goggles, body-covering protective clothing, chemical resistant gloves and rubber boots. Avoid breathing vapours and contact with product. Ventilate area. Handle as a flammable solid.
ENVIRONMENTAL PRECAUTIONS	Prevent the material from entering drains or watercourses. Notify authorities if spill has entered watercourse or sewer.

7. HANDLING AND STORAGE

HANDLING	Avoid prolonged or repeated skin-contact as well as inhalation of vapours or mist. Wear personal protective equipment and work with adequate ventilation.
STORAGE	Keep the material away from sparks, fire, open flames and heat. Store in a cool dry well-ventilated area away from sunlight.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROL MEASURES	Use with adequate ventilation. Keep containers closed. Safety shower and eyewash fountain should be within direct access.
RESPIRATORY PROTECTION	Use a NIOSH-approved organic vapour respirator cartridge if material is used in confined areas or poorly ventilated areas.
HAND PROTECTION	Full-length gloves should be worn during all handling operations. Neoprene gloves. Wash hands thoroughly after working with this material.
EYE PROTECTION	Chemical goggles should be worn during all handling operations.
BODY PROTECTION	Discard contaminated protective equipment. Wear impervious clothing and shoes.
PROTECTION DURING APPLICATION	During application, adequate ventilation must be provided. Mix in a well-ventilated area. If ventilation is poor, wear respiratory protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE	Solid
ODOUR & APPEARANCE	Petroleum, black coated stones
ODOR THRESHOLD (ppm)	NA
SPECIFIC GRAVITY	Greater than water
VAPOR DENSITY (AIR = 1)	Heavier than air
VAPOR PRESSURE 20 C	NA
EVAPORATION RATE	NA
BOILING POINT (°C)	Not Applicable
FREEZING POINT (°C)	Not Applicable
pH	Not Applicable
COEFFICIENT OF WATER/OIL DISTRIBUTION	Not Applicable
SOLUBILITY IN WATER	Negligible
VOC (g/l)	NA

10. STABILITY AND REACTIVITY

STABILITY	Stable under normal conditions
CONDITIONS TO AVOID	Sparks and open flames, excessive heat approaching flash point.
MATERIALS TO AVOID	Strong acids, alkalis, oxidizing agents i.e.: nitric acids, permanganates, and chlorine oxygen.
HAZARDOUS POLYMERIZATION	Will not occur.
HAZARDOUS DECOMPOSITION PRODUCTS	Carbon monoxide and other potentially hazardous organic compounds may be formed when this material burns.

11. TOXICOLOGICAL INFORMATION

EFFECTS OF ACUTE EXPOSURE	Inhalation – Excessive exposure to vapours may be irritating to the nose, throat, upper respiratory tract and lungs. Excessive exposure to vapours can result in headache, dizziness, nausea and narcotic effects. This product contains sulfur, which may form hydrogen sulphide. Signs and symptoms of overexposure to hydrogen sulphide include respiratory tract irritation, headaches, dizziness, nausea, gastrointestinal disturbances, coughing a sensation of dryness and pain in the nose, throat and chest, confusion and unconsciousness. Skin – Drying, cracking or inflammation of skin (cool material). Thermal burns may result from contact with hot material resulting in pain, discoloration and swelling. Toxic amounts of product may be absorbed through the skin. Eyes – The cool material will cause minor eye irritation. However, thermal burns may result from contact with hot material. The degree of the injury will depend on the amount that gets into the eye and the speed and thoroughness of the first aid. Symptoms may include: pain, tears, swelling, redness and blurred vision. Ingestion – If swallowed, this product may cause vomiting, nausea and diarrhea.
EFFECTS OF CHRONIC EXPOSURE	May cause dermatitis and irritation on repeated contact.
EXPOSURE LIMITS	Asphalt – TLV 5 ppm (fumes)
IRRITANCY	Moderate irritation expected
SENSITIZATION	NA
CARCINOGENICITY	IARC has determined that there is sufficient evidence for the carcinogenicity of asphalt fumes (refined bitumen) in experimental animals, but not in humans.
REPRODUCTIVE TOXICITY	NA
TERATOGENICITY	NA
MUTAGENICITY	NA
TOXICOLOGICALLY SYNERGISTIC PRODUCTS	NA

12. ECOLOGICAL INFORMATION

MOBILITY	This product is poorly absorbed onto soils or sediments.
PERSISTENCE/DEGRADABILITY	The heavier molecular weight of asphalt may be persistent under some environmental conditions.
BIO-ACCUMULATION	There is no evidence that the components of this product bioaccumulate in food chains.
ECOTOXICITY	No data available.

13. DISPOSAL CONSIDERATIONS

PRODUCT DISPOSAL	Use old or contaminated material as a base for fresh product. Dispose in approved landfill site.
CONTAINER DISPOSAL	Labels should not be removed from containers until they have been cleaned. Empty containers may contain hazardous residues. Dispose of containers with care.

14. TRANSPORTATION INFORMATION

CANADA	TDG CLASSIFICATION
HAZARD LABEL NOT REQUIRED	Not Regulated.
EXPORT	
DOT CFR 172.101 DATA	Not Regulated by D.O.T. as a hazardous substance.
UN PROPER SHIPPING NAME	NA
UN CLASS	NA
UN NUMBER	NA
UN PACKAGING GROUP	NA
FLASH POINT	NA
HAZARDOUS MATERIAL	NA
HAZARD LABEL	NA

15. REGULATORY INFORMATION

WHMIS CLASSIFICATION: CLASS D, DIV.2, SUBDIVISION B-Material causing other toxic effects.
CEPA STATUS (DSL) : All of the ingredients of this product are listed on the Domestic Substances List.
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by CPR.

16. OTHER INFORMATION

HAZARD RATING (HMIS)	HEALTH: 1 FLAMMABILITY: 1 REACTIVITY: 0 0-MINIMAL; 1-SLIGHT; 2-MODERATE; 3-HIGH; 4-EXTREME
KEY	NA: No applicable information found or available CAS#: Chemical Abstracts Service Number ACGIH: American Conference of Governmental Industrial Hygienists OSHA: Occupational Safety and Health Administration TLV: Threshold Limit Value PEL: Permissible Exposure Limit STEL: Short Term Exposure Limit NTP: National Toxicology Program IARC: International Agency for Research on Cancer R: Risk S: Safety LD50: Lethal Dose 50% LC50: Lethal Concentration 50%
PREPARED BY:	Imco Technologies Inc.

Provided data is offered in good faith as typical values and not as a product specification. No warranty, either express or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable, however, each user should review these recommendations.