Safety data sheet
(in compliance with directive 91/155/EEC and 2001/58/EC)

COLD ASPHALT

Date 08.09.2005

1. IDENTIFICATION OF THE SUBSTANCE /PREPARATION AND OF THE COMPANY/UNDERTAKING
Identification of the substance or preparation: COLD ASPHALT
Other names (synonyms): POTHOLE FILLER, COLD ASPAHLT

Use of the substance: for repairing holes in asphalt and concrete covering ("patching").
Supplier/producer: Made in the European Union
Technical information: Langeproon Inseneriehitus OÜ, Käo St. 52/1 Tallinn 11311, Phone (+372) 6552 502

2. COMPOSITION/INFORMATION ON INGREDIENTS
Empirical (molecular) formula: none.
Molecular mass: none.
Composition: dolomite gravel covered with asphalt base petroleum containing functional additives.

3. HAZARDS IDENTIFICATION
Flammability and explosion hazard: flammable when exposed to open flame.
Health hazards after possible exposure
Inhalation: no real hazard, but if spilt the product is inhaled in a closed room during a longer period, it may cause irritation of the respiratory system, dizziness and nausea.
Contact with skin: no real hazard, difficult to remove bitumen stains.
Contact with eye: product consists of gritty granules, no real hazard.
Ingestion: no real hazard.
Environmental hazard and possible consequences: no significant damage has been noted.

4. FIRST AID MEASURES
Ways of exposure to the substance or preparation
Inhalation: prolonged inhalation of vapour – leave the room and carry out the affected person into fresh air and calm down.
Skin contact: the product consists of gritty granules and may be spilt. If bitumen stains remain on the skin, wash with soap and water and use special skin cleansers. Do not use white spirits, petrol or other organic solutions for cleaning hands.
Eye contact: in case of any eye damage consult a doctor.
Ingestion: rinse the mouth with water, administer active charcoal. Consult a doctor immediately.
Measures applied by doctors only: in case any dangerous symptoms of health hazards occur, immediately consult a doctor.

5. FIRE FIGHTING MEASURES
Suitable extinguishing media: sand, non-flammable blanket, foam, carbon dioxide.
Unsuitable extinguishing media: small amount of water.
Special exposure hazards proceeding from the contact with the chemical, burning residue or emitted gasses: smoke, soot and toxic gases, including carbon monooxyde, variety of thermal decomposition and burning residues.
Special protection equipment for fire-fighters: protective clothing, isolated gas masks.

6. ACCIDENTAL RELEASE MEASURES
Personal precautions: ventilate rooms if it smells of bitumen or petroleum products. Avoid inhaling vapour. Use personal protection equipment as foreseen in article 8. Evacuate from the area people not involved in the liquidation of the accident.
Environmental precautions: observe and try to prevent spread of the product into rainwater drains and water bodies.
Clean-up methods: collect the spilt matter in a polyethylene bag or a tightly closed container. If the product is not contaminated with dust, sand or soil, it may be used for the intended purpose. Unusable waste should be disposed as hazardous waste (see article 13).

7. HANDLING AND STORAGE
Handling: use according to the purpose and instructions described in the technical specification. Provide sufficient ventilation when handling the product. Avoid inhalation of vapour. Keep away from flammable sources. Follow relevant security and occupational safety requirements.
Storage: store in well-ventilated rooms, keep away from sources of heat. Keep away from direct sunlight. Do not damage the packaging. Packages stored outside have to be protected from sun light and precipitation.
Avoid storage with other chemicals: strong oxidizing agents.
Limit values for storing the chemical: not applicable.

Requirements to the package of the chemical: polyethylene bags and other tightly sealed containers. If the product is used at once, it may be transported without tare.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits value in the working environment: data of white spirits foreseen for petroleum products in regulation HN 23:2001:

Chemical substance		Concentration limit value						Reference mark
		Prolonged impact limit value		Short term impact limit value		Limit value not to be exceeded		
Name	CAS nr	mg/m^3	ppm	mg/m^3	ppm	mg/m^3	ppm	
White spirits		300	about 50	600	about 100	-	-	1)

Reference mark 1): applied to white spirits used as solvent or diluent, i.e. ligroin, which comprises 17-22 aromatic compounds (according to capacity about 15-20), and the range of boiling temperature is about 150-200 °C. The approximate value of capacity concentration (ppm) is calculated according to white spirits, which has 22 aromatic compounds.
Exposure controls: good ventilation so that the concentration of vapour exceeds no limit values.
Respiratory protection: in case of emergency or inadequate ventilation use breathing apparatus or filter half masks, which protect from organic gases or vapour (hazard level A1 according to standard EN 141).
Hand and skin protection: protective gloves.
Eye protection: use safety goggles if there is a risk of splashing.
Other skin protection equipment (working clothes, footwear, etc): working clothes, rubber or leather footwear, which reaches above feet.
Personal hygiene supply: protective skin cream, soap and water. Do not eat, smoke or drink at workplace. Wash your hands after work.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical status (solid, liquid, gas): solid gritty granules with a diameter of 5-30 mm, which may become sticky.
Perceptible properties (appearance, odour): specific smell of petroleum product, colour - black.
Value of hydrogen ions concentration, pH: not applicable.
Boiling point/range °C: precise data not available
Flammability
Self-ignition point °C: >200.
Flash point °C: not applicable.
Explosive properties (vapour of hydrocarbon):
lower explosive limit, unit%: ~1
upper explosive limit, unit%: ~7

Oxidizing features: data not available.
Freezing/melting temperature °C: not applicable, when heated bitumen softens and melts slowly.
Vapour pressure: data not available.
Relative density g/cm^3: not regulated.
Solubility (in water and fat): not soluble in water, bitumen is partly soluble in fat and soluble in hydrocarbon.
Partition coefficient (n-octanol/water): not applicable
Viscosity: not applicable.
Vapour density: data not available.
Vaporization speed: data not available

10. STABILITY AND REACTIVITY

Chemical stability and hazardous chemical reactions: stable under normal conditions.
Conditions to avoid: avoid contact with open flame. Avoid storing next to strong oxidizing agents.
Hazardous decomposition products: when burning evolves thick black smoke, which contains soot, carbon monooxyde, various residues of thermal decomposition and burning of hydrocarbons.
Need for stabilizers: none.
Possibility of exothermic reaction: none.
Hazardous decomposition products: none.

11. TOXICOLOGICAL INFORMATION

Acute toxicity on tested animals: data not available.
Irritation, dispersion, prolonged impact on tested animals: data not available.
Carcinogenicity, mutagenicity, toxic impact on reproductive toxicity (negative impact on fertility): bitumen is a mixture of various long-chain hydrocarbons. Carcinogenicity of hydrocarbons has been proved.
Reference mark: see article 3.

12. ECOLOGICAL INFORMATION

Environmental hazard: not soluble in water, sinks to the bottom.
Ecotoxicity, mobility, bio-accumulative potential: solid product is insoluble in water, no other properties.
Persistence and degradability: bitumen is not readily biodegradable.
Other adverse effects: constitutes no direct hazard to plants and animals if spread on fields but causes visual pollution.

13. DISPOSAL CONSIDERATIONS

Waste must not be disposed in the environment: the product must not be spilt in the sewage system, water bodies or fields.
Disposal of chemical waste and used packaging: residues of chemicals are disposed at the collection points of hazardous waste. As the product granules contain mineral filler, they cannot be disposed completely by burning.
Waste disposal code: 17 03 02 – bitumen composites, not to be shown 17 03 01.

14. TRANSPORT INFORMATION

Requirements to transportation of dangerous goods are not applied.

15. REGULATORY INFORMATION

Legal normative acts, which provide the classification of chemical substances or preparations, labelling, limits of use, employees' safety and health requirements, limit values in working environment, disposal, etc.

- Safety data sheet requirements and the submission procedure to professional users (approved by order no. 687 of the Republic of Lithuania Minister of Health Care as of December 29, 2001, Žin. [Notifier], 2002, no. 26-946).
- Classification and labelling order of hazardous chemical substances and preparations. (Approved by order no. 532/742 of the Minister of Environment and the Minister of Health Care as of December 19, 2000, and by the wording of order no. 345/313 of the Minister of Environment and the Minister of Health Care as of June 27, 2002, Žin., 2002, no. 81-350, and amendments approved by order no. 411/V-460 of the Minister of Environment and the Minister of Health Care as of August 4, 2003, Žin., 2003, no. 81(1)-3703).
- List of special medical first aid measures used in case of acute health disorders caused by hazardous chemical substances and preparations and biological substances (approved by order no. V-769 of the Republic of Lithuania Minister of Health Care as of December 24, 2003, Žin. 2004, nr 7-157).
- Packaging requirements to hazardous chemical substances and preparations and the order of packaging. (Approved by order no. 599 of the Republic of Lithuania Minister of Environment as of November 19, 2002, Žin., 2002, no. 115-5161).
- HN 23:2001 Value limits of hazardous substances in the air of working environment. General requirements.
- Rules to the handling of packaging and packaging waste (approved by order no. 348 of the Republic of Lithuania Minister of Environment as of June 27, 2002, Žin., 2002, no. 81-3503).
- Rules of waste management. (Approved by the order no. 722 of the Republic of Lithuania Minister of Environment as of December 30, 2003, Žin., 2004, no. 68-2381).
- Requirements to the supply of employees with personal protection equipment (Approved by order no. 77 of the Republic of Lithuania Ministry of Social Security and Labour as of April 20, 1998, Žin., 1998, no. 43-1188).
- General regulation of storing chemical substances and preparations. (Approved by order no. 272 of the Republic of Lithuania Minister of Environment as of December 22, 1998, Žin., 1999, no. 31-896).

Information about the chemical substance or preparation on the package (tare) label (in compliance with directive 67/548/EEC and 1999/45/EC). Not applicable.

16. OTHER INFORMATION

Hazard symbols and numerical marking in article 2: none.

Data included in this safety sheet has to be available to anybody, whose work is connected with the chemical substance or its production. The data is in compliance with our current knowledge and provides the description of the chemical, implemented in security and health care procedures and environmental protection. Information on the safety data sheet is updated if any new information about the impact of the chemical substance or preparation on health and environment becomes available, and about the precaution measures, which enable to diminish the hazards or totally avoid them. Data of the safety data sheet describes no other specific properties of the chemical substance or preparation.