

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING *

1.1. **Product identifier:** IBITOL E-5

1.2. **Relevant identified uses of the substance or mixture and uses advised against:**

Cold bituminous primer used before application of bituminous products for roads constructions, made from bitumen and organic solvents.

1.3. **Details of the supplier of the safety data sheet:**

FRAGMAT TIM, Tovarna izolacijskega materiala d.o.o.
Spodnja Rečica 77
3270 Laško Slovenia
phone: + 386 (0)3 73 44 500
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e-mail: info@fragmat.si

1.4. **Emergency telephone number:** FRAGMAT TIM d.o.o., phone: + 386 (0)3 73 44 500

2. HAZARDS IDENTIFICATION

2.1. **Classification of the substance or mixture**

Classification of mixture according EU Regulation 1272/2008/EC

Flam. Liq. 3, H226

Acute Tox. 4 (Dermal), H312

Acute Tox. 4 (Inhalation), H332

Skin Irrit. 2 H315

Eye Irrit. 2 H319

Asp. Tox.1 H304

STOT SE 3 H335

STOT SE 3 H336

STOT RE 1 H372

Aquatic Chronic 2 H411

Full text of H phrases: see Section 16.

Contain: Xylene, mixture of isomers, Naphtha (petroleum), hydrodesulfurized heavy.

2.2. **Label elements:**



Signal word: **Danger**

H226 Flammable liquid and vapour. H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin. H315 Causes skin irritation.

H319 Causes serious eye irritation. H332 Harmful if inhaled.

H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness.

H372 Causes damage to organs (nervous systems) through prolonged or repeated exposure (inhalation).

H411 Toxic to aquatic life with long lasting effects.

P102 Keep out of reach of children.

P270 Do not eat, drink or smoke when using this product. P273 Avoid release to the environment.

P301+P310+P333 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P403+P235 Store in a well-ventilated place. Keep cool. P501 Dispose of contents/container according to national regulations.

2.3. **Other hazards:** /

3. COMPOSITION/INFORMATION ON INGREDIENTS ***3.2. Mixture - chemical composition:** mixture of hydrocarbons.**3.2.1. Information on ingredients:**

REGULATION (EU) Nr. 1272/2008							
Composition	Index number	EINECS number	CAS number	Content (weight %)	Directives (H)	Class and hazard category	Registr. number REACh
Residues (petroleum), Vacuum	/	265-057-8	64741-56-6	45-50	/	/	/
Bitumen, oxidized	/	265-196-4	64742-93-4		/	/	01-2119498270-36
Bitumen	/	232-490-4	8052-42-4		/	/	01-2119480172-44
Xylene, mixture of isomers	601-022-00-9	215-535-7	1330-20-7	10-15	H226, H304 H312, H315, H319, H332, H335, H373	Flam. Liq. 3, Acute Tox. 4 (Dermal), Acute Tox. 4 (Inhalation), Skin Irrit. 2 Eye Irrit. 2 Asp. Tox.1 STOT SE 3 STOT RE 2	01-2119488216-32
Naphtha (petroleum), hydrodesulfurized heavy - White Spirit	649-330-00-2	(919-446-0) 265-185-4	64742-82-1	35-40	H226 H304 H336 H372 H411 EUH066	Flam.Liq. 3 Asp. Tox. 1 STOT SE 3 STOT RE 1 Aquatic Chronic 2	01-2119458049-33

4. FIRST AID MEASURES**4.1. Description of first aid measures:**

Inhalation: The victim should be brought to fresh air and if necessary, artificial respiration has to be carried out. It is necessary to call for the help of a doctor.

Skin contact: It is necessary to wash contaminated parts thoroughly with lots of water and soap. In case of burns, rinse with water until the pain stops.

If irritation appears, it is necessary to seek medical advice.

Eye contact: Remove contact lenses, if present. Open eyes also under the eyelids, rinse immediately with plenty of running water. If irritation does not stop, it is necessary to visit an eye specialist.

Ingestion: In case of ingestion do not cause vomiting. Aspiration hazard if swallowed. Call a doctor immediately. Show to the doctor this safety data sheet or label of product.

4.2. Most important symptoms and measures:

Inhalation: Harmful. Causes respiratory tract irritation. (cough, sneezing, nasal discharge, difficulty breathing). Symptoms: drowsiness, dizziness, headache, nausea. With longer inhalation of vapors may cause lung damage.

Skin contact: Harmful. Irritant (itching, redness, pain). It can cause damage.

Eye contact: Irritant (redness, tearing, pain).

Ingestion: Harmful. When entering into the respiratory tract can be fatal.

4.3. Indication of any immediate medical attention and special treatment needed: /

5. FIREFIGHTING MEASURES

- 5.1. Extinguishing media:** Dry extinguishing agents, dry powder, light foam extinguisher and water mist.
- 5.2. Special hazards arising from the substance or mixture:** Sputtering of the liquid compound, vapors form together with air an explosive mixture that is heavier than air.
- 5.3. Advice for fire-fighters:** In fires of bigger dimension and fires inside it is absolutely necessary to use an isolating breathing apparatus and protective clothing. Use non-sparkling materials, which do not produce electrostatic charges.
Dangerous decomposition products: Dense black smoke, CO, CO₂ and soot.
Unsuitable extinguishing media: Full jet of water.

6. ACCIDENTAL RELEASE MEASURES

- 6.1. Personal precautions, protective equipment and emergency procedures:**
Remove all sources that could cause inflammation. Evacuate and ventilate the place of outflow. Inform all persons in the vicinity of the place of outflow about the danger of inhaling vapors and the danger of fire. During removal use full protective clothing (chapter. 8).
- 6.2. Environmental precautions:** Prevent the outflow of the preparation into water, the sewage system or into the ground water. Prevent further evaporation into the air. In the case of larger contamination must be removed contaminated soil layer.
- 6.3. Methods and material for containment and cleaning up:** Cover contaminated surface with earth or other adequate absorbing materials. Material that was removed, is kept in containers in good ventilated rooms and is disposed of as described in chapter 13.
- 6.4. Reference to other sections:** See chapter 13.

7. HANDLING AND STORAGE

- 7.1. Precautions for safe handling:** Handling the product, it is necessary to use protective equipment, as described in point 8 of this material safety data sheet. Smoking is prohibited. Avoid contact with skin and eyes. Inhaling the vapors should be avoided.
- 7.2. Conditions for safe storage, including any incompatibilities:** Material has to be stored in a dry and cool place, in warehouses that prevent contamination. The product should not be at places, where formation of sparks can occur (static electricity) and not be in contact with open flames. Keep away from oxidizing agents. Storage class: Class 3A .
- 7.3. Specific end use(s):** Use the product in accordance with the instructions stated on the label of the product.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1. Control parameters:** Good ventilation should be taken care of, this will make sure that the prescribed limit values of exposure are not exceeded – in case they are exceeded, it is necessary to protect the respiratory organs with a breathing device. Avoid contact of the product with the skin or the eyes. The floor of the storage room has to be resistant to solvents. Only earthed devices should be used.
There is an 8-hour exposure limit in the atmosphere of the working place.
Xylene, mixed isomers; BV= 221 mg/m³; 50 ml/m³; KTV 2.
BAT= blood; 14.13 µmol/L (1.50 mg/l) at the end of the work shift.
Aromatic hydrocarbons, group 2; BV= 350 mg/m³; 70 ml/m³; KTV 4.
- 8.2. Exposure controls**
Respiratory protection: Avoid inhaling the vapors. Wear a protective mask. If higher concentrations appear (above average allowed concentration), respectively for longer exposition: filter type A for gases/vapors of organic substances (EN 136).
Hand protection: Protection gloves from nitrile rubber (EN 374).
Eye protection: Goggles with side protection or protective mask (EN 166).
Skin protection: In normal conditions warm clothes and shoes that cover the entire foot. In case of danger from spillage, clothes for the protection from liquid chemicals (Viton, PVC, Himex) (EN 465).
Hygienic measures: Ensure adequate ventilation. Protect possible sources of ignition or heat Do not smoke! Avoid contact with eyes and skin. Avoid static electricity. Work clothes washed more often than normal.

9. PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties**

a) Appearance:	Black, viscous liquid
b) Odor:	odor similar to bitumen and naphtha
c) Odor threshold;	/
d) pH	not important (is not used)
e) Melting point/freezing point;	/
f) Initial boiling point and boiling range;	~ 135°C
g) Flash point;	30°C to 40°C
h) Evaporation rate;	/
i) Flammability (solid, gas);	inflammable
j) Upper/lower flammability or explosive limits;	1 - 8 vol.%
k) Vapor pressure;	/
l) Vapor density;	/
m) Relative density;	0,91– 0,93 kg/l
n) Solubility(ies)	not soluble
o) Partition coefficient: n-octanol/water;	/
p) Auto-ignition temperature;	> 220°C
q) Decomposition temperature;	/
r) Viscosity;	15 – 20 s
s) Explosive properties;	vapors of the product together with air are explosive
t) Oxidizing properties.	/

9.2. Other information: /**10. STABILITY AND REACTIVITY**

10.1. Reactivity: The product is not chemically reactive.

10.2. Chemical stability: Product is stable under normal use.

10.3. Possibility of hazardous reactions: With normal use, hazardous reactions are not expected.

10.4. Conditions to avoid: Remove all sources of inflammation and warmth and open flames. Heating causes an increase in pressure.

10.5. Incompatible materials: Oxidants, strong acids and bases, halogens, peroxides, chromates, nitrates, chlorates, perchlorates.

10.6. Hazardous decomposition products: Products are CO, CO₂, NO_x mixed hydrocarbons.

11. TOXICOLOGICAL INFORMATION**11.1 Information on toxicological effects****11.1.1 Substances**

	XYLENE, mixture of isomers	WHITE SPIRIT	BITUMEN
a) acute toxicity	LD50/oral (rat): > 4300 mg/kg Harmful if inhaled. Harmful in contact with skin.	LD50/oral (rat): > 5000 mg/kg Harmful if inhaled. Harmful in contact with skin.	LD50/oral (rat): > 2000 mg/kg
b) skin corrosion/irritation	LD 50 dermal (rabbit): > 4300 mg/kg Causes skin irritation.	LD 50 dermal (rat): > 4 ml/kg Causes skin irritation.	LD 50 dermal (rabbit): > 2000 mg/kg
c) serious eye damage/irritation;	Causes serious eye irritation.	No irritation effects.	No data.
d) respiratory or skin sensitization	LC50/inhaling /4h (vapour): > 18,8 mg/l (rat)	LC50/inhaling /4h (vapor): > 13,1 mg/l (rat).	LD 50 inhaling: > 5mg/l/4h, danger of hydrogen sulfide at high temperatures. The ability to recognize H ₂ S is very high in the human being at the beginning, but it decreases quickly with the time of exposition - a quick cessation of the strong smell of foul eggs.
e) germ cell mutagenicity	No germ cell mutagenicity.	No germ cell mutagenicity.	No germ cell mutagenicity.
f) carcinogenicity;	No carcinogenicity.	No carcinogenicity.	No carcinogenicity.
g) reproductive toxicity	No reproductive toxicity.	No reproductive toxicity.	No reproductive toxicity.
h) STOT-single exposure	STOT SE 3 May cause respiratory irritation.	STOT SE 3 May cause drowsiness or dizziness.	No STOT-single exposure.
i) STOT-repeated exposure	STOT RE 2 May cause damage to organs (lung, skin) through prolonged or repeated exposure (dermal, inhalation, oral).	STOT RE 1 Causes damage to organs (nervous systems) through prolonged or repeated exposure (inhalation).	No STOT-repeated exposure.
j) aspiration hazard	May be fatal if swallowed and enters airways	May be fatal if swallowed and enters airways	No aspiration hazard.

11.1.2 Mixture

a) acute toxicity;	Due to the relatively high concentrations of solvent contained in the mixture it affects the acute toxicity, if the mixture gets into the lungs (during swallowing or vomiting) may cause lung damage. Effects may include: unconsciousness, convulsions, salivation, vomiting, sudden loss of consciousness.
b) irritation	Due to the relatively high concentrations of solvents contained in the mixture it causes skin and eye irritation, which may manifest as skin inflammation, dry, red skin and eye irritation to mucous membranes.
c) corrosivity	Not corrosive
d) sensitization	Product causes skin irritation.
e) repeated dose toxicity	Causes damage to organs (nervous systems) through prolonged or repeated exposure (inhalation).
f) carcinogenicity	No carcinogenicity.
g) mutagenicity	No germ cell mutagenicity.
h) toxicity for reproduction.	No reproductive toxicity.

12. ECOLOGICAL INFORMATION**Substances:**

	KSILEN, zmes izomerov	WHITE SPIRIT	BITUMEN
Toxicity:	EC50/ daphnia /48h; > 165 mg/l , EC50/algae/72h; 160 mg/l, LC/fish/96h: 10 – 100 mg/l.	EC50/ daphnia /48h; 100 – 200 mg/l , EC50/algae/72h; 0,53 – 0,94 mg/l , NOEC/daphnia: 0,097 – 0,372 mg/l.	EC 50/96h daphnia = 100-10000 mg/l , LC 50/96h trout = 13,5 - 22 mg/l, LC 50/96 algae = 160 - 10 mg/l.
Persistence and degradability:	Can be volatile.	Can be volatile.	No data.
Bio-accumulative potential:	No bio-accumulative potential.	No data.	No data.
Mobility in soil:	Liquid under normal circumstances. Lighter than water: Volatile also at normal temperatures of the surrounding.	Liquid under normal circumstances. Lighter than water: Volatile also at normal temperatures of the surrounding.	In the solid state of aggregation it does not mix with water.
Results of PBT and vPvB assessment:	Chemical use of oxygen; CUO=3170 mgO2/g.	No PBT and vPvB effects.	Chemical use of oxygen; CUO=3090 mgO2/g Effects on the atmosphere: none of its components is harmfulness for the ozone layer
Other adverse effects:	No data.	It forms a layer on the water surface that prevents the entry of oxygen into the water and therefore causes harmful effects on the water flora and fauna.	No data.

Mixture:

12.1	Toxicity:	Toxic to aquatic life with long lasting effects
12.2	Persistence and degradability:	The mixture is decomposed by evaporate solvent.
12.3	Bio-accumulative potential:	No bio accumulative.
12.4	Mobility in soil:	The product does not mix with water. It forms a compact layer on the water surface, that prevents the entry of oxygen into the water. This may cause the suffocation of water animals
12.5	Results of PBT and vPvB assessment	No PBT and vPvB effects.
12.6	Other adverse effects:	Do not allow product to reach surface water, groundwater or sewers.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods: The waste of product is classified as a hazardous waste. Waste should not be mixed with other hazardous and non-hazardous waste, or it can not be disposed of in water, sewers or ground. The waste of product must be collected separately and shall be submitted an authorized organization for waste management.

The waste of the product are classified as:

Cleaned waste packaging: metal packaging 15 01 04.

Not-cleaned waste packaging: group packaging that contains rests of dangerous substances or is contaminated with dangerous substances 15 01 10*

Wastes of the product: wastes from adhesives and sealing compounds that contain organic solvents and other dangerous substances 08 04 09*

Process of waste disposal according to the Regulations for the Disposal of Waste.

14. TRANSPORT INFORMATION

14.1. UN number: UN 1993
14.2. UN proper shipping name: FLAMMABLE LIQUID N.O.S. (Contains Xylene and Turpentine substitute).
14.3. Transport hazard class (s): 3
14.4. Packing group: III
14.5. Environmental hazards: IMDG: MARINE POLLUTANT
14.6. Special precautions for user: /
14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: /
14.8. The limit for tunnels (ADR / RID): D/E
Legislation:
The European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR).

15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture:
- Regulation (EU) 1907/2006 - REACH.
- Regulation (EU) 1272/2008 - Regulation GHS (CLP).
- Directive 1999/13/EC (VOC Directive): /
15.2. Chemical safety assessment: For the product is not carried out a chemical safety assessment.

16. OTHER INFORMATION

This document contains important information regarding storage, handling and use of the mentioned product.

Safety Data Sheet is prepared in accordance with Commission Regulation (EU): 2015/830 (Official Journal of the EU No. L 132/2015). - Amending Regulation 1907/2006 - REACH (EU Official Journal No. L 136/2007).

H directives from point 2:

H226 Flammable liquid and vapor.

H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

H372 Causes damage to organs (nervous systems) through prolonged or repeated exposure (inhalation).

H411 Toxic to aquatic life with long lasting effects.

Date of the first issue of the material safety data sheet: 15.09.2015.

Changes in this safety data sheet on the previous version: in points 1 and 3.

Sources: Material safety data sheet for suppliers of solvent 19.09.2011-Xylenes, 01.06.2015-WŠ and bitumen (11.08.2015).