

*in accordance with 1272/2008 EU

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

1.1. Product identifier:

Trade name: **BITULIT**

UFI:

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

Cold bituminous primer before application of bituminous products in general.

1.3.a Details of producer: FRAGMAT S D.O.O.

Branka Erića 7, 22240 Šid

Tel + 381 22 710 666

Fax +381 22 710 633

e-mail: office@fragmat.rs

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

1.4. Emergency telephone number: POISION CENTAR

Section 2. HAZARD IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Hazard classes and categories	Hazard statements*
Flam. Liq.2	H225
Repr.2	H361d
STOT RE 2	H373
Asp.Tox.1	H304
Skin irrit.2	H315
STOT SE 3	H336

*The full text for all H –phrases are displayed in section 16.

2.2. Label elements

Classification (EC 1272/2008)

Pictograms:	  
Signal word:	Danger



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Hazard statements:	H225-Highly flammable liquid and vapour H304-May be fatal if swallowed and enters airways H315-Causes skin irritation H336- May cause drowsiness or dizziness. H361d-Suspected of damaging to unborn child H373- May cause damage to organs through prolonged or repeated exposure.
Precautionary statements:	P102-Keep out of reach of children. P210-Keep away from heat/sparks/open flames/hot surfaces.-No smoking. P260-Do not breathe gas/fumes/vapour/spray P273-Avoid release to the environment P280-Wear protective gloves/protective clothing/eye protection/face protection. P301+P310-IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P303+P361+P353-IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P304+P340- IF INHALED: Remove person to fresh air and keep comfortable for breathing. P501-Dispose of contents/container in accordance with national regulations.

2.3. Other hazards:

No other hazards.

vPvB substances: None- PBT substances: None

Section 3. COMPOSITION/INFORMATION ON INGREDIENTS:**3.1. Substances:**

N.A.

3.2. Mixture:**Mixture-chemical composition: mixture of bitumen and organic solvent (toluene)**

Chemical name of the substance	Content (%)	CAS/EC/ Index number	Registr. number REACH	Classification (EC 1272/2008)
Asphalt oxidized (bitumen)	60-65	64742-93-4/ 265-196-4	01-2119498270-36	/
Toluen	35-40	108-88-3/ 203-625-9/ 601-021-00-3	01-2119471310-51	Flam.Liq.2 H225 Repr.2 H361d STOT RE2 H373 Asp.tox.1 H304 Skin irrit.2 H315 STOT SE3 H336



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Section 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: Remove contaminated clothing. Wash the skin with soap and water. Get medical attention promptly if symptoms occur after.

Eye contact: Promptly rinse eyes with plenty of clean water while lifting the eyelids. Continue to rinse for at least 10-15 minutes. Check for contact lenses which must be removed from the eyes before rinsing. If irritation does not stop, it is necessary to visit an eye specialist.

Ingestion: In the case of ingestion DO NOT INDUCE VOMITING. Get medical attention immediately.

4.2. Most important symptoms and measures:

Vapours of the product have a narcotic effect and irritate mucous membranes. Long lasting exposure may cause loss of consciousness and also death. The solvent is absorbed through the skin, but it does not have acute, immediate effects. In high concentration it may cause irritation of the eyes and mucous membranes. In case of suspected poisoning the victim has to be brought into medical care. It is necessary to show this material safety data sheet to the doctor.

4.3. Indication of any immediate medical attention and special treatment needed: no data available

Section 5. FIREFIGHTING MEASURES

5.1. Extinguishing media:

Suitable extinguishing media: Dry extinguishing agents, dry powder, light foam extinguisher and water mist.
Unsuitable extinguishing media : Full jet of water.

5.2 Special hazards arising from the substances or mixture:

Fire hazards: Flammable.

Products of combustion: CO, CO₂, NO_x , mixed hydrocarbons.

5.3. Advice for fire-fighters:

In fires of bigger dimension and fires inside it is absolutely necessary to use an isolating breathing apparatus EN 145(closed circuit) and protective clothing.

Specific hazards of fire and explosion: Vapours are heavier than air, there is a danger of explosion. Use only non-sparking tools.

Section 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 about the danger of inhaling vapours and the danger of fire. During removal wear clothes, completely protecting you(section 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.

6.3. Methods and material for containment and cleaning up:



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Cover contaminated surfaces 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 section 13.

6.4. Reference to other section:
See sections 8 and 13.

Section 7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Use the product in well-ventilated place. Keep away from heat, sparks or flame.

Do not smoke, or eat and drink near the product. Handling the product, it is necessary to use protective equipment (section 8).

7.2. Conditions for safe storage, including any incompatibilities:

Material has to be stored in a dry, cool place, and well-ventilated place. The product should not be at places, where formation of sparks can occur (static electricity) and not be in contact with open flames. Store away from flammable materials.

7.3. Specific end use(s):

Use the product in accordance with the instructions stated on the label of the product.

Section 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limit values.

Name	CAS number	Exposure limit values				Note
		GVI		KGVI		
		ppm	mg/m ³	ppm	mg/m ³	
Toluen	108-88-3	50	192	100	384	EU**, K

EU ** - note that these are chemical substances for which the indicative exposure limits according to Directive 2006/15 / EC (second sheet) have been established

K- note that the chemical substance can cause harm to the skin.

8.2. Exposure controls and personal protection:

Respiratory protection: Avoid inhaling the vapours. Wear a protective mask for the whole face (EN136)

Hand protection: Protection gloves from nitrile rubber (EN 374)

Eye protection: Goggles with side protection or protective mask (EN 166)

Skin protect: In normal conditions warm clothes and footwear from rubber. Promptly remove any clothing that becomes contaminated. In case of danger from spillage, clothes for the protection from liquid chemicals (Viton, PVC, Himex) (EN 465)

Hygienic measures: When using do not eat, drink or smoke. Wash hands at the end of each work shift.

Engineering measures: Provide adequate general and local exhaust ventilation .



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Section 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Property	Value
Form	Liquid
Color	Black
Odour(odour treshold):	Odour similar to bitumen and toluen
pH	No data available
Melting point/freezing point	No data available
Initial boiling point and boiling range	110°C
Flash point	25 - 35°C
Evaporation rate	No data available
Flammability	inflammable
Upper/lower flammability or explosive limits	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	0.90 – 0.95 kg/m ³
Solubility(ies)	Not soluble
Partition coefficient: n-octanol/water(logPow)	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	Vapours of the product together with air are explosive.
Oxidising properties	No data available

9.2. Other information

Product BITULIT contains max 410g/l volatile organic substances (VOC)

Section 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.



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10.4. Conditions to avoid:

Remove all sources of inflammation and warmth and open flames.

10.5. Incompatible materials:

Oxidants, strong acids and bases.

10.6. Hazardous decomposition products:

Combustion products in case of fire: CO, CO₂, NO_x, mixed hydrocarbons.

Section 11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

The toxicity of the mixture is estimated based on the toxicological effects of the individual components in the mixture.

Substances:

	Toluen	Bitumen
Acute toxicity	LD ₅₀ /oral/rat >5000mg/kg LD ₅₀ /dermal/rabbit >5000mg/kg LC ₅₀ /inhaling/4h/rat>20mg/l	LD ₅₀ /oral/rat >5000mg/kg LD ₅₀ /dermal/rabbit >5000mg/kg LC ₅₀ /inhaling/4h/rat>94.4mg/l

Mixture:

Acute toxicity	Due to relatively high concentrations of solvents contained in the mixture, if swallowed and enters the respiratory system may cause lung damage-pulmonary edema. Specific symptoms include: cough, vertigo, nausea, vomiting, loss of consciousness and coordination.
Skin corrosion/irritation	Causes redness, itching, drying or cracking after multiple contacts.
Serious eye damage/irritation	No data
Respiratory or skin sensitisation	No data
Germ cell mutagenicity	No data
cancerogenicity	Contains less than 0.1% carcinogenic substances
Reproductive toxicity	No data
STOT- single exposure	May cause drowsiness and dizziness.
STOT –repeated exposure	Longer or repeated exposure may cause damage to the body by inhalation. . Vapors can cause drowsiness, headache, nausea and dizziness.
Aspiration hazard	May be fatal if swallowed and enters the respiratory system.

Section 12. ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicological properties: Not known or expected under normal conditions of use of the product.

Toluen (108-88-3)

Fish : LC₅₀/96h 24mg/l(Oncorhynchus mykiss)

Daphnia: EC₅₀/48h 11.5 mg/l(Daphnia magna)

Algae/aquatic plants: IC₅₀/72h 12 mg/l(pseudokirch neriella subcapitata)



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Other organisms: NOEC/16h 29mg/l(pseudomonas putida)

12.2. Persistence and degradability:

The product is not biodegradable. The solvent evaporate.

12.3. Bio-accumulative potential

No data

12.4. Mobility in soil

The product does not mix with water

12.5. Results of PBT and vPvB assessment

No data

12.6. Other adverse effects

Additional information: Do not flush into surface water or sanitary sewer system.

Section 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

The waste product is classified as hazardous waste. It must not be mixed with other hazardous and non-hazardous waste. The waste is not disposed of in surface water, sewage or soil. We recommend that the packaging is completely empty and drain. The rest of the unused product and contaminated packaging handed over to the care legal entity authorized by the ministry responsible for environmental protection. Dispose of in accordance with local and national regulations.

The wastes of the product are classified as:

- **Cleaned waste packaging:** 15 01 02 plastic packaging , 15 01 04 metal packaging;
- **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 othe dangerous substances 08 04 09 *

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

Section 14. TRANSPORT INFORMATION

14.1. UN number: 1993

14.2. UN proper shipping name: **FLAMMABLE LIQUID, N.D.N:BITULIT**

14.3. Transport hazard classe(s):

14.3.1. ADR/ RID

Class: 3-flammable liquid

Enviromental hazards

(Kempler number): 33

Classification code: F1

Labels ADR/RID: 3- flammable liquid

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**14.3.2. ADN****Classification code:** 3+F
Class: 3**14.3.3. IMO:****IMDG class:** 3- flammable liquid**14.3.4. IATA/ICAO****Class:** 3- flammable liquid**14.4. Packaging group:II****14.5. Environmental hazards: 33****14.6. Special precautions for user: no data****14.7. Transport in bulk according to Annex II of MARPOL 73/78 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)**Section 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 des GHS(CLP)
- Directive 67/548/EWG and 1999/45/EG EC.

15.2. Chemical safety assessment:

For the product is not carried out a chemical safety assessment.

Section 16. OTHER INFORMATION:

List of all Hazard phrases(H codes):

- H225-Highly flammable liquid and vapour
- H304-May be fatal if swallowed and enters airways
- H315-Causes skin irritation
- H336- May cause drowsiness or dizziness.
- H361d-Suspected of damaging to unborn child
- H373- May cause damage to organs through prolonged or repeated exposure.



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List of all notifications precautions :

P code:

P102-Keep out of reach of children.

P210-Keep away from heat/sparks/open flames/hot surfaces.-No smoking.

P260-Do not breathe gas/fumes/vapour/spray

P273-Avoid release to the environment

P280-Wear protective gloves/protective clothing/eye protection/face protection.

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

P303+P361+P353-IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340- IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P501-Dispose of contents/container in accordance with national regulations.

Abbreviations and Acronyms::

CAS number: Chemical Abstract Service-CAS.

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals.

CLP: Classification, Labelling and Packaging according to 1272/2008/EC.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

RID: Regulations concerning the International Carriage of dangerous goods by rail.

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.

IMDG: International Maritime Code for Dangerous cargo

IMO: Organization of international maritime transport.

IATA: International Organization for air transport.

ICAO: Međunarodna organizacija civilnog vazduhoplovstva.

MARPOL: International Convention for the Prevention of Pollution from Ships.

LC₅₀: Lethal concentration, 50% of the population.

LD₅₀: Lethal dose, 50% of the population.

EC₅₀: Median effective concentration.

IC₅₀: Inhibitory concentration, 50% of population.

PBT: Criteria for identifying chemicals as persistent, bioaccumulative and toxic.

vPvB: Criteria for identifying chemicals as very persistent, very bioaccumulative.

Note: Material Safety Data Sheet has been changed in section 1.

References:

1.Euroean Chemicals Agency (www.echa.europa.eu)

2.Europian chemical Substances information System (<http://esis.jrc.ec.europa.eu/>)

The information in this safety data sheet are based on our experience and knowledge for the safe handling, storage and transport of chemicals. This safety data sheet has been prepared and may be used only for this product.

View: Safety Data Sheets for specific product ingredients