Bitu Seal 310ml

SECTION 1: Identification of the substance/mixture and of the company/ undertaking

* **1.1. Product identifier**

Trade name/designation:

Bitu Seal 310ml

Article No.:
T602106

UFI:
A5SM-RWF1-CPE7-R5G5

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

Use of the substance/mixture:
Bitumen. Restricted to professional users.

1.3. Details of the supplier of the safety data sheet

Supplier:

KANDO Service GmbH
Hartleitnerstraße 3
4653 Eberstalzell
Austria
Telephone: +43 (0) 7241 213 79
E-mail: msds@kando.eu

1.4. Emergency telephone number

Vergiftungsinformationszentrale (VIZ), Stubenring 6, 1010 Wien, 24h: 01 406 43 43, Montag - Freitag: 8 bis 16 Uhr, Tel.: 01 406 68 98 (keine medizinische Auskunft) (Only available during office hours.)

SECTION 2: Hazards identification

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

Classification according to Regulation (EC) No 1272/2008 [CLP]

Hazard classes and hazard categories	Hazard statements	Classification procedure
flammable liquids *(Flam. Liq. 3)*	H226: Flammable liquid and vapour.	

* **2.2. Label elements**

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms:



GHS02
Flame

Signal word: Warning

Hazard statements for physical hazards	
H226	Flammable liquid and vapour.

Supplemental hazard information: none

Precautionary statements Prevention	
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/ .

Precautionary statements Response	
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

Precautionary statements Storage	
P403 + P235	Store in a well-ventilated place. Keep cool.

Precautionary statements Disposal	
P501	Dispose of contents/container to a collection point for hazardous or special waste, in accordance with local, regional, national and/or international regulations.

2.3. Other hazards

Other adverse effects:

This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
Contains no PBT/vPvB substances ≥ 0.1%, assessed according to REACH Annex XIII.
The mixture does not contain substances listed for endocrine disrupting properties in accordance with REACH Article 59(1) or has been determined not to contain substances with endocrine disrupting properties in a concentration equal to or greater than 0.1% in accordance with the criteria set out in Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: Composition/information on ingredients

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3.2. Mixtures

Hazardous ingredients / Hazardous impurities / Stabilisers:

Product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 8052-42-4 EC No.: 232-490-9 REACH No.: 01-2119480172-44	**Asphalt** The substance is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP]. **Additional information:** Substance with a community workplace exposure limit	≥ 25 – < 50 weight-%
EC No.: 919-857-5 REACH No.: 01-2119463258-33	**Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatics** Asp. Tox. 1 (H304), Flam. Liq. 3 (H226), STOT SE 3 (H336)  Danger **Acute Toxicity Estimate** ATE (oral) > 5,000 mg/kg ATE (dermal) > 3,160 mg/kg ATE (inhalation, vapour) > 4,951 mg/L	≥ 10 – < 50 weight-%
	Organoclay The substance is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP]. **Additional information:** Substance with a community workplace exposure limit	≥ 2.5 – < 10 weight-%
CAS No.: 108-32-7 EC No.: 203-572-1 Index No.: 607-194-00-1 REACH No.: 01-2119537232-48	**propylene carbonate** Eye Irrit. 2 (H319)  Warning **Acute Toxicity Estimate** ATE (oral) 34,600 mg/kg ATE (dermal) > 23,800 mg/kg	≥ 0.5 – < 2.5 weight-%

Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

* 4.1. Description of first aid measures

General information:
When in doubt or if symptoms are observed, get medical advice.

Following inhalation:
Remove person to fresh air and keep comfortable for breathing. When in doubt or if symptoms are observed, get medical advice.

In case of skin contact:
In general, the product is not irritating to skin. Take off contaminated clothing.

After eye contact:
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Following ingestion:
Call a physician immediately.

4.2. Most important symptoms and effects, both acute and delayed

Call a doctor if you feel unwell.
Symptoms/effects after inhalation: Inhalation may cause irritation (coughing, shortness of breath, difficulty breathing). May cause drowsiness and dizziness. May cause headache and dizziness. Symptoms/effects after skin contact: Remove all contaminated clothing immediately. Repeated contact may cause chapped or cracked skin. IF ON SKIN: Wash with plenty of water. Symptoms/effects after eye contact: Irritating to eyes. Rinse thoroughly with clean, fresh water for at least 15 minutes, holding the eyelids apart. Consult an ophthalmologist. Symptoms/effects after ingestion: Ingestion of this product will cause damage to health. Harmful: may cause lung damage if swallowed. Call a doctor even if no immediate symptoms occur.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:
Carbon dioxide (CO2), Powder, Water spray jet, Foam

Unsuitable extinguishing media:
Water in full jet

* 5.2. Special hazards arising from the substance or mixture

Fire hazard: Heating may cause a fire or explosion.
Explosion risk.: Flammable/explosive vapour-air mixtures may be formed.
Hazardous decomposition products in the event of fire: Carbon dioxide Carbon monoxide

* 5.3. Advice for firefighters

Evacuate area.
Remove all sources of ignition.. Fight fire remotely due to the risk of explosion. Never give anything orally to an unconscious person. If you feel unwell, seek medical advice (show this label if possible).
Do not attempt to operate without suitable protective equipment. Wear a self-contained breathing apparatus and chemical protective clothing. (See section 8).
Other information: Cool endangered containers with water spray.

SECTION 6: Accidental release measures

* 6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Personal precautions:
Only qualified personnel in suitable protective equipment may intervene. Avoid contact with skin, eyes and clothing. Notify police and fire brigade as soon as possible.

6.1.2. For emergency responders

Personal protection equipment:
Do not attempt to operate without suitable protective equipment.
Ventilate affected area.

6.2. Environmental precautions

Collect spillage. In case of spillage into water or sewage system, inform the competent authorities.

6.3. Methods and material for containment and cleaning up

For containment:
Collect spillage.

For cleaning up:
This substance and its container must be disposed of safely and in accordance with local regulations.
Absorb spillage as soon as possible with inert solids such as clay or diatomaceous earth.

Other information:
Feed substances or residues in solid form to an approved facility.

*

6.4. Reference to other sections

For further information on personal protective equipment: see section 8.
For further information on disposal: see section 13.

*

6.5. Additional information

General information Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Protective measures

Advices on safe handling:
Use only outdoors or in a well-ventilated area. Eliminate all ignition sources if safe to do so. Wear personal protection equipment (refer to section 8). Avoid contact with skin, eyes and clothes. Take action to prevent static discharges.

*

7.2. Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions:
Use explosion-proof equipment. Take action to prevent static discharges.

Requirements for storage rooms and vessels:
Keep cool. Store in a dry place. Store in a closed container. Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Protect from sunlight.

Storage class (TRGS 510, Germany): 3 – Flammable liquids

7.3. Specific end use(s)

No data available

SECTION 8: Exposure controls/personal protection

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8.1. Control parameters

No data available

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8.2. Exposure controls

8.2.1. Appropriate engineering controls

Ensure good ventilation/extraction at the workplace.

8.2.2. Personal protection equipment



Eye/face protection:
Tight-fitting safety goggles (EN 166)

Skin protection:
Hand protection:
Disposable gloves, NBR (Nitrile rubber), Breakthrough time: 5 (> 240 Minuten),Thickness of the glove material: ≥ 0.38 mm

Respiratory protection:
Not required.

Other protection measures:
Do not eat, drink or smoke when using this product.

8.2.3. Environmental exposure controls
Avoid release to the environment.

SECTION 9: Physical and chemical properties

* **9.1. Information on basic physical and chemical properties**

Appearance
Physical state: Liquid
Form: Paste
Colour: black
Odour: not determined
flammability: No data available

Safety relevant basis data

Parameter	Value	at °C	① Method ② Remark
pH	*not applicable*		② insoluble in: Water
Melting point	*No data available*		
Freezing point	*No data available*		
Initial boiling point and boiling range	154 – 193 °C		② (Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclenes, <2% aromatics)
Flash point	41 °C		② (Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclenes, <2% aromatics)
Evaporation rate	*No data available*		
Auto-ignition temperature	237 °C		② May burn, but not highly flammable.
Upper/lower flammability or explosive limits	0.5 – 6 Vol-%		② Flammable/explosive vapour-air mixtures may be formed. (Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclenes, <2% aromatics)
Vapour pressure	2 hPa		② (Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclenes, <2% aromatics)
Vapour density	*No data available*		
Density	1.33 g/cm³	20 °C	
Bulk density	*not applicable*		
Water solubility	practically insoluble		
Dynamic viscosity	1,515,000 mPa* s		
Kinematic viscosity	> 60		

* **9.2. Other information**
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclenes, <2% aromatics:
Boiling point: 130 210 °C
Flash point: >36 °C
Auto-ignition temperature: >200 °C
Vapour pressure at 20 °C: 0,3 kPa

SECTION 10: Stability and reactivity

10.1. Reactivity
Heating may cause a fire or explosion.

10.2. Chemical stability
Combustible liquid.

10.3. Possibility of hazardous reactions
No further relevant information available.

10.4. Conditions to avoid
All heat sources, including direct sunlight. No naked flames, no sparks. Remove all sources of ignition. Avoid shock and friction.

*
10.5. Incompatible materials
No further relevant information available.

10.6. Hazardous decomposition products
No further relevant information available.

SECTION 11: Toxicological information

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11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatics	EC No.: 919-857-5
LD_{50} oral: >5,000 mg/kg (Ratte)	
LD_{50} dermal: >3,160 mg/kg (Kaninchen)	
LC_{50} Acute inhalation toxicity (vapour): >4,951 mg/L 4 h (Ratte)	
propylene carbonate	CAS No.: 108-32-7 EC No.: 203-572-1
LD_{50} oral: 34,600 mg/kg (Rat)	
LD_{50} dermal: >23,800 mg/kg (Rabbit)	

Skin corrosion/irritation:
Based on available data, the classification criteria are not met.

Serious eye damage/irritation:
Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation:
Based on available data, the classification criteria are not met.

Germ cell mutagenicity:
Based on available data, the classification criteria are not met.

Carcinogenicity:
Based on available data, the classification criteria are not met.

Reproductive toxicity:
Based on available data, the classification criteria are not met.

STOT-single exposure:
May cause drowsiness or dizziness. (Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclenes, <2% aromatics)

STOT-repeated exposure:
Based on available data, the classification criteria are not met.

Aspiration hazard:
Based on available data, the classification criteria are not met.

Additional information:
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclenes, <2% aromatics: Kinematic viscosity: 08, - 2,1 mm²/s bei 20 °C

11.2. Information on other hazards
No data available

SECTION 12: Ecological information

* 12.1. Toxicity

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatics	EC No.: 919-857-5
LC_{50}: >1,000 mg/L (fish)	
EC_{50}: 1,000 mg/L (crustaceans)	
EC_{50}: >1,000 mg/L 3 d (Algae/water plant)	
NOEC: 100 mg/L (Algae/water plant)	
NOEC: 0.131 mg/L (fish)	
NOEC: 0.23 mg/L (crustaceans)	
ErC_{50}: >1,000 mg/L (Algae/water plant)	
propylene carbonate	CAS No.: 108-32-7 EC No.: 203-572-1
LC_{50}: >1,000 mg/L (fish)	
EC_{50}: >900 mg/L 3 d (Algae/water plant) 201	
EC_{50}: >1,000 mg/L (crustaceans) 202	
NOEC: 900 mg/L (Algae/water plant)	

* 12.2. Persistence and degradability

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatics	EC No.: 919-857-5
Biodegradation: Yes, rapidly	
propylene carbonate	CAS No.: 108-32-7 EC No.: 203-572-1
Biodegradation: Yes, rapidly	

* 12.3. Bioaccumulative potential

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatics	EC No.: 919-857-5
Log K_{OW}: 6.7	
propylene carbonate	CAS No.: 108-32-7 EC No.: 203-572-1
Log K_{OW}: -0.41	

* 12.4. Mobility in soil

Highly volatile product (Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclenes, <2% aromatics)

* 12.5. Results of PBT and vPvB assessment

Asphalt	CAS No.: 8052-42-4 EC No.: 232-490-9
Results of PBT and vPvB assessment: —	
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatics	EC No.: 919-857-5
Results of PBT and vPvB assessment: —	
Organoclay	
Results of PBT and vPvB assessment: —	
propylene carbonate	CAS No.: 108-32-7 EC No.: 203-572-1
Results of PBT and vPvB assessment: —	

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Endocrine disrupting properties

No data available

* 12.7. Other adverse effects

Avoid release to the environment.
water hazard class 3: highly hazardous to water

SECTION 13: Disposal considerations

* **13.1. Waste treatment methods**

Dispose of waste according to applicable legislation. Do not allow to enter drains/surface water/ground water. Avoid release to the environment. Flammable vapours may form in the container. If possible without risk, clean up even small spills or leaks immediately.

13.1.1. Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

Directive 2008/98/EC (Waste Framework Directive)

HP 3	Flammable

SECTION 14: Transport information

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
*** 14.1. UN number or ID number**			
UN 1268	UN 1268	UN 1268	UN 1268
*** 14.2. UN proper shipping name**			
PETROLEUM DISTILLATES, N.O.S. or PETROLEUM PRODUCTS, N.O.S. (Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclenes, <2% aromatics)	PETROLEUM DISTILLATES, N.O.S. or PETROLEUM PRODUCTS, N.O.S. (Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclenes, <2% aromatics)	PETROLEUM DISTILLATES, N.O.S. or PETROLEUM PRODUCTS, N.O.S. (Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclenes, <2% aromatics)	PETROLEUM DISTILLATES, N.O.S. or PETROLEUM PRODUCTS, N.O.S. (Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclenes, <2% aromatics)
14.3. Transport hazard class(es)			
 3	 3	 3	 3
14.4. Packing group			
III	III	III	III
14.5. Environmental hazards			
No	No	No	No
*** 14.6. Special precautions for user**			
Special Provisions: 664 **Limited quantity (LQ):** 5L **Excepted Quantities (EQ):** E1 **Hazard identification number (Kemler No.):** 30 **Classification code:** F1 **Tunnel restriction code:** (D/E) **Remark:** ADR: Packaging instructions: P001, IBC03, LP01, R001 Special Provisions Packing together: MP19 Instructions for tankers and bulk containers: T4 Special Provisions Tankers and bulk containers: TP1, TP29	**Limited quantity (LQ):** 5 L **Excepted Quantities (EQ):** E 1 **Classification code:** F1 **Remark:** Transport authorised: T Equipment required: PP, EX, A Ventilation: VE01 Number of blue cones/ lights: 0	**Special Provisions:** 223, 955 **Limited quantity (LQ):** 5L **Excepted Quantities (EQ):** E1 **EmS-No.:** F-E, S-E **Remark:** Packaging instructions: P001, LP01 IBCs.-Packaging instructions: IBC03 Refuelling instructions: T4 Specific provisions Tank transport vehicle: TP1, TP29 Congestion category: A Immiscible Water	**Special Provisions:** A3 **Limited quantity (LQ):** Y344 10L **Excepted Quantities (EQ):** E1 **Remark:** PCA packaging instructions: 355 - Maximum net quantity: 60L CAO packaging instructions: 366 - Maximum net quantity 220L ERG-Code: 3L

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
Tank coding: LGBF Vehicle for transport in tanks: FL Transport category: 3 Special Provisions Transport - Packages: V12 Special Provisions Transport - Operation: S2 RID: Packaging instructions: P001, IBC03, LP01, R001 Special Provisions Packing together :MP 19 Instructions for tankers and bulk containers: T4 Special Provisions Tankers and bulk containers: TP1, TP29 Tank coding: LGBF Transport category: 3 Special Provisions Transport - Packages: W12 Express goods: CE4			

14.7. Maritime transport in bulk according to IMO instruments
not applicable

SECTION 15: Regulatory information

* **15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

15.1.1. EU legislation
Authorisations:
REACH Annex XVII (Restriction List): Does not contain any substance subject to the restrictions of Annex XVII of REACH.
REACH Annex XIV (Authorisation List): Does not contain any substance listed in REACH Annex XIV.
REACH Candidate List (SVHC): Does not contain a REACH candidate substance.
PIC Regulation (Prior Informed Consent): Does not contain any substances subject to Regulation (EU) 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals.
POPs Regulation (Persistent Organic Pollutants): Does not contain substances subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants.
Ozone Regulation (1005/2009): Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.
Regulation on explosives precursors (EU 2019/1148): Does not contain substances on the list of explosives precursors (Regulation EU 2019/1148 on the marketing and use of explosives precursors).
Drug Precursors Regulation (273/2004): Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on drug precursors)

Directive 2004/42/EC on the limitation of emissions of volatile organic compounds:
Volatile organic compounds (VOC) content in percent by weight: 150 g/L

15.1.2. National regulations
No data available

* **15.2. Chemical Safety Assessment**
No further relevant information available.

SECTION 16: Other information

* 16.1. Indication of changes

1.1.	Product identifier
2.1.	Classification of the substance or mixture
2.2.	Label elements
3.2.	Mixtures
4.1.	Description of first aid measures
5.2.	Special hazards arising from the substance or mixture
5.3.	Advice for firefighters
6.1.	Personal precautions, protective equipment and emergency procedures
6.4.	Reference to other sections
6.5.	Additional information
7.2.	Conditions for safe storage, including any incompatibilities
8.1.	Control parameters
8.2.	Exposure controls
9.1.	Information on basic physical and chemical properties
9.2.	Other information
10.5.	Incompatible materials
11.1.	Information on hazard classes as defined in Regulation (EC) No 1272/2008
12.1.	Toxicity
12.2.	Persistence and degradability
12.3.	Bioaccumulative potential
12.4.	Mobility in soil
12.5.	Results of PBT and vPvB assessment
12.7.	Other adverse effects
13.1.	Waste treatment methods
14.1.	UN number or ID number
14.2.	UN proper shipping name
14.6.	Special precautions for user
15.1.	Safety, health and environmental regulations/legislation specific for the substance or mixture
15.2.	Chemical Safety Assessment
16.1.	Indication of changes
16.2.	Abbreviations and acronyms

* 16.2. Abbreviations and acronyms

ACGIH	American Conference of Governmental Industrial Hygienists
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
DNEL	derived no-effect level
EC_{50}	Effective Concentration 50%
EN	European Standard
ES	Exposure scenario
EWC	European Waste Catalogue
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
LC_{50}	Lethal (fatal) Concentration 50%
LD_{50}	Lethal (fatal) Dose 50%
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety & Health
NOEC	No Observed Effect Concentration

PBT	persistent and bioaccumulative and toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation and Authorization of Chemicals
RID	Dangerous goods regulations for transport by rail
TRGS	Technische Regeln für Gefahrstoffe
UN	United Nations
VOC	Volatile organic compounds

16.3. Key literature references and sources for data
No data available

16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Hazard classes and hazard categories	Hazard statements	Classification procedure
flammable liquids *(Flam. Liq. 3)*	H226: Flammable liquid and vapour.	

16.5. List of relevant hazard statements and/or precautionary statements from sections 2 to 15

Hazard statements	
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

16.6. Training advice
No data available

16.7. Additional information
To the best of our knowledge, the information contained herein is accurate. However, neither the above-mentioned supplier nor its subsidiaries assume any liability with regard to the correctness or completeness of the information provided. A final determination of the suitability of individual materials is the sole responsibility of the user. All materials may involve unknown risks and should be used with caution. While certain risks are described herein, we cannot guarantee that these are the only possible risks.

* Data changed compared with the previous version.