

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### PROPANBITUMEN

Revision date: 12.05.2017

Product code:

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

##### 1.1. Product identifier

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

###### Use of the substance/mixture

Lubricants (High environmental release) Industrial, Sector of uses [SU]: 22; Process categories [PROC]: 1, 2, 3, 4, 8a, 8b, 9, 10, 11, 13, 17, 18, 20; Environmental release categories [ERC]: 8a, 8d

Lubricants (Low environmental release) Industrial, Sector of uses [SU]: 22; Process categories [PROC]: 1, 2, 3, 4, 8a, 8b, 9, 10, 11, 13, 17, 18, 20; Environmental release categories [ERC]: 9a, 9b

Use in Oil and Gas field drilling and production operations Industrial, Sector of uses [SU]: 22; Process categories [PROC]: 1, 2, 3, 4, 8a, 8b; Environmental release categories [ERC]: 8d

Uses in Coatings Industrial, Sector of uses [SU]: 22; Process categories [PROC]: 1, 2, 3, 4, 5, 8a, 8b, 10, 11, 13, 15, 19; Environmental release categories [ERC]: 8a, 8d

Formulation & (re)packing of substances and mixtures Industrial, Sector of uses [SU]: 3, 10; Process categories [PROC]: 1, 2, 3, 4, 5, 8a, 8b, 9, 14, 15; Environmental release categories [ERC]: 2

Rubber production and processing Industrial, Sector of uses [SU]: 3, 10, 11; Process categories [PROC]: 1, 2, 3, 4, 5, 6, 7, 8a, 8b, 9, 13, 14, 15, 21; Environmental release categories [ERC]: 4, 6d

Lubricants Industrial, Sector of uses [SU]: 3; Process categories [PROC]: 1, 2, 3, 4, 7, 8a, 8b, 9, 10, 13, 17, 18; Environmental release categories [ERC]: 4, 7

Distribution of substance Industrial, Sector of uses [SU]: 3; Process categories [PROC]: 1, 2, 3, 4, 8a, 8b, 9, 15; Environmental release categories [ERC]: 4, 5, 6a, 6b, 6c, 6d, 7

Use as a fuel Industrial, Sector of uses [SU]: 3; Process categories [PROC]: 1, 2, 3, 8a, 8b, 16; Environmental release categories [ERC]: 7

Use in Oil and Gas field drilling and production operations Industrial, Sector of uses [SU]: 3; Process categories [PROC]: 1, 2, 3, 8a, 8b; Environmental release categories [ERC]: 4

Uses in Coatings Industrial, Sector of uses [SU]: 3; Process categories [PROC]: 1, 2, 3, 4, 5, 7, 8a, 8b, 10, 13, 15; Environmental release categories [ERC]: 4

Uses in Coatings Consumer, Sector of uses [SU]: 21; Process categories [PROC]: N/A; Environmental release categories [ERC]: 8a, 8d; Product categories [PC]: 1, 4, 5, 9a, 9b, 9c, 10, 15, 18, 23, 24, 31, 34

###### Uses advised against

Any non-intended use.

##### 1.3. Details of the supplier of the safety data sheet

Company name:	BITUMINA Handel GmbH & Co. KG	
Street:	Josef-Linden-Weg 15	
Place:	D-51149 Köln	
Responsible Department:	Dr. Gans-Eichler Chemieberatung GmbH Raesfeldstr. 22 D-48149 Münster	e-mail: info@tge-consult.de Tel.: +49 (0)251/924520-60 www.tge-consult.de

##### 1.4. Emergency telephone number:

Poison emergency number Berlin: +49(0)30.19240

#### SECTION 2: Hazards identification

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

###### Regulation (EC) No. 1272/2008

This substance is not classified as hazardous in accordance with Regulation (EC) No. 1272/2008.

##### 2.2. Label elements

###### Regulation (EC) No. 1272/2008

###### Special labelling of certain mixtures

EUH210 Safety data sheet available on request.

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#### Additional advice on labelling

No information available.

#### 2.3. Other hazards

Contact with hot product may cause severe thermal burns.

Avoid contact of hot bitumen products with water. Risk of splashing of hot material.

Contact with skin and eyes causes burns. The product may spontaneously combust if sprayed when hot.

Product may release H<sub>2</sub>S. H<sub>2</sub>S is toxic, even in small concentrations. Product should be stored and transported at >50°C.

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

##### Chemical characterization

The product does not contain dangerous substances according to REGULATION (EU) No. 453/2010, Annex II, Part A, 3.2.2. that must be mentioned in Chapter 3.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### General information

Hydrogen sulphide (H<sub>2</sub>S) can accumulate in the headspace of product storage tanks and reach potentially hazardous concentrations. Contact with hot product may cause severe thermal burns.

##### After inhalation

If there is any suspicion of inhalation of H<sub>2</sub>S (hydrogen sulphide). Rescuers must wear breathing apparatus, belt and safety rope, and follow rescue procedures. Remove casualty to fresh air as quickly as possible. Immediately begin artificial respiration if breathing has ceased. Provision of oxygen may help. Obtain medical advice for further treatment.

Obtain medical assistance if breathing remains difficult.

If casualty is unconscious and not breathing: Ensure that there is no obstruction to breathing and give artificial respiration by trained personnel. If necessary, give external cardiac massage and obtain medical advice.

If casualty is unconscious and breathing, place in the recovery position. Administer oxygen if necessary.

In case of symptoms arising from inhalation of product fumes, mists or vapour: Remove casualty to a quiet and well ventilated place if safe to do so.

Get immediate medical advice/attention.

Symptoms: irritation of the respiratory tract due to excess fume, mists or vapour exposure.

##### After contact with skin

Never use gasoline, kerosene or other solvents for washing of contaminated skin.

Do not put ice on the burn. Remove non-sticking garments carefully. DO NOT attempt to remove portions of clothing glued to burnt skin but cut round them.

For minor thermal burns, cool the burn. Hold the burned area under cold running water for at least five minutes, or until the pain subsides. Body hypothermia must be avoided.

In the event of accidental skin contact with hot product, the injured part should be immediately plunged under cold running water for at least 10 minutes. No attempt must be made to remove the bitumen adherent to the skin at the worksite.

In the case of a circumferential burn with adhesion of the bitumen, the adhering material should be split to prevent a tourniquet effect as it cools. Send patient for specialist care.

Seek medical attention in all cases of serious burns.

Symptoms: none expected at ambient temperature. Contact with hot/molten product will cause severe burns.

##### After contact with eyes

In the event of eye contact with cold product, rinse cautiously with water for several minutes.

If hot product is splashed into the eye, it should be cooled down immediately to dissipate heat, under cold running water for at least 5 minutes. Immediately obtain specialist medical assessment and treatment for the casualty.

If irritation, blurred vision or swelling occurs and persists, obtain medical advice from a specialist.

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Symptoms: Product at ambient temperature (dust): minimal redness and irritation. Contact with hot/molten product will cause severe burns.

#### **After ingestion**

Do not induce vomiting. Ask for medical advice. Symptoms: few or no symptoms expected. If any, slight nausea might occur. Symptoms: few or no symptoms expected. If any, slight nausea might occur.

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

Individuals with pre-existing lung disorders may have increased susceptibility of the effects of exposure.

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

Monitor breathing and pulse rate. Treatment should be in general symptomatic to relieve any effects.

### SECTION 5: Firefighting measures

#### **5.1. Extinguishing media**

##### **Suitable extinguishing media**

Foam (trained personnel only).  
Water fog (trained personnel only).  
Dry chemical powder.  
Carbon dioxide (CO<sub>2</sub>).  
Other inert gases (subject to regulations).  
Sand or earth.

##### **Unsuitable extinguishing media**

Do not use direct water jets on the burning product; they could cause splattering and spread the fire. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam.

#### **5.2. Special hazards arising from the substance or mixture**

Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, unidentified organic and inorganic compounds. Contact of hot product with water will result in a violent expansion as the water turns to steam. This may cause splashing of hot product, or damage to, or complete loss of the tank roof. Respiratory problems or nausea by excessive exposure to hot product fumes.

#### **5.3. Advice for firefighters**

Special protective equipment for firefighters:  
In case of a large fire or in confined or poorly ventilated spaces, wear full fire resistant protective clothing and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

### SECTION 6: Accidental release measures

#### **6.1. Personal precautions, protective equipment and emergency procedures**

For non-emergency personnel:  
Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: full body suit of chemically resistant and antistatic material.  
Work helmet with neck cloth. Antistatic non-skid safety shoes or boots, heat resistant.  
Goggles and /or face shield, if splashes or contact with eyes is possible or anticipated.  
If contact with hot product is possible or anticipated, gloves should be heat-resistant and thermally insulated.  
Work gloves (preferably gauntlets) providing adequate chemical resistance. Gloves made of PVA are not water-resistant, and are not suitable for emergency use.  
A half or full-face respirator with combined dust/organic vapour filter(s), or a Self-Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure.  
If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.

#### **6.2. Environmental precautions**

If necessary dike the product with dry earth, sand or similar non-combustible materials.  
Prevent product from entering sewers, rivers or other bodies of water, or underground spaces (tunnels, cellars, etc.). Solidified product may clog drains and sewers.



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#### **6.3. Methods and material for containment and cleaning up**

Stop or contain leak at the source, if this possible without risk. Avoid direct contact with released material. Stay upwind.

Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.

If possible, contain the product. Contain the product and contaminated materials with mechanical means.

Transfer recovered product and other materials to suitable tanks or containers and store /dispose according to relevant regulations.

Leaks and spillages will consist of molten hot material with risk of severe burns.

When inside buildings or confined spaces, ensure adequate ventilation.

Keep non-involved personnel away from the area of spillage. Alert emergency personnel.

Except in case of small spillages: The feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency.

Collect solidified product with suitable means. (e.g. shovels).

In case of spillage in the water, the product will cool down rapidly and become solid. The solid product is denser than water and will slowly sink to the bottom, and usually no intervention will be feasible.

Let hot product cool down naturally. If necessary, cautiously use water fog to help the cooling. Do not play direct jets of foam or water on the spilled molten product, as this may cause splattering.

Eliminate all ignition sources if safe to do so (e.g. electricity, sparks, fires, flares).

If required, notify relevant authorities according to all applicable regulations.

Additional information:

Recommended measures are based on the most likely spillage scenarios for this material.

Local conditions (wind, air temperature, wave/current direction and speed) may significantly influence the choice of appropriate actions.

For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken.

Concentration of H<sub>2</sub>S in tank headspaces may reach hazardous values, especially in case of prolonged storage. This situation is especially relevant for those operations which involve direct exposure to the vapours in the tank.

Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations.

As H<sub>2</sub>S has a density greater than ambient air, a possible exception may regard the build-up of dangerous concentrations in specific spots, like trenches, depressions or confined spaces.

In all these circumstances, however, the correct actions should be assessed on a case-by-case basis.

When the presence of dangerous amounts of H<sub>2</sub>S around the spilled product is suspected or proved, additional or special actions may be warranted, including access restrictions, use of special protection equipment, procedures and personnel training.

#### **6.4. Reference to other sections**

No information available.

## **SECTION 7: Handling and storage**

### **7.1. Precautions for safe handling**

#### **Advice on safe handling**

Ensure that all relevant regulations regarding handling and storage facilities of flammable products are followed.

Avoid contact of hot bitumen products with water. Risk of splashing of hot material.

Avoid contact with the hot product.

Product may release Hydrogen Sulphide: A specific assessment of inhalation risks from the presence of hydrogen sulphide in tank headspaces, confined spaces, product residue, tank waste and waste water, and unintentional releases should be made to help determine controls appropriate to local circumstances.

Do not breathe fumes from hot product.

Ground/bond containers, tanks and transfer/receiving equipment.

"Use adequate personal protective equipment as required. For more information regarding protective

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equipment see section ""Exposure control/personal protection"".

#### **7.2. Conditions for safe storage, including any incompatibilities**

##### **Requirements for storage rooms and vessels**

Storage installations should be designed with adequate bunds in case of leaks or spills.  
 Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations.  
 Recommended materials for containers, or container linings use mild steel, stainless steel.  
 Selfheating leading to auto ignition at the surfaces of porous or fibrous materials impregnated with oils or bitumen, can occur at temperatures as low as 100°C.  
 Oil and bitumen contamination of thermal insulation materials and the accumulation of oily rags or similar material near hot surfaces, should therefore be avoided, and lagging should be replaced where necessary by a nonabsorbent type of insulation.  
 Deposits (carbonaceous materials and iron sulphides) can develop on the internal walls and roofs of tanks in case of long term storage. These deposits may be pyrophoric and self-ignite in contact with the air.  
 Most synthetic materials are unsuitable for containers or container linings, due to low heat resistance.  
 Before entering storage tanks and commencing any operation in a confined area, check the atmosphere for oxygen content, hydrogen sulphide (H<sub>2</sub>S) and flammability.  
 Use adequate personal protective equipment as required.  
 Keep only in the original container or in a suitable container for this kind of product.  
 Storage area layout, tank design, equipment and operating procedures must comply with the relevant European, national or local legislation.  
 Hot product must never be filled into containers without first checking that the container is completely dry.

##### **Advice on storage compatibility**

Store separately from oxidising agents.

##### **Further information on storage conditions**

Empty containers may contain combustible product residues. Do not weld, solder, drill, cut or incinerate empty containers, unless they have been properly cleaned.

#### **7.3. Specific end use(s)**

Recommendation:  
 Ensure that proper housekeeping measures are in place.  
 Do not eat, drink or smoke when using this product.  
 Contaminated materials should not be allowed to accumulate in the workplaces and should never be kept inside the pockets.  
 Keep away from food and beverages.  
 Wash the hands thoroughly after handling.  
 Do not use solvents or other products with a defatting effect on the skin.

### SECTION 8: Exposure controls/personal protection

#### **8.1. Control parameters**

##### **Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
7783-06-4	Hydrogen sulphide	5	7		TWA (8 h)	WEL
		10	14		STEL (15 min)	WEL

##### **Additional advice on limit values**

Monitoring procedures should be chosen according to the indications set by national authorities or labour contracts.  
 In absence of such indications, direct exposure to bitumen fumes can be assessed with a number of methods.  
 Any comparison should be made only between data obtained with the same procedure.  
 Dermal exposure can be assessed by the dermal patch method.

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#### 8.2. Exposure controls

##### Appropriate engineering controls

Urinary biomarkers of exposure to PAHs may provide an indication of exposure to bitumen .  
 Recommended values for occupational exposure limits are not meant to replace any value set by official regulations or labour contracts.  
 Material handled at elevated temperature may cause thermal burns by contact with molten product.  
 Heated bitumen will give off fumes.  
 Reduce exposure to fume by keeping operating temperatures as low as possible taking into account occupational exposure limits and safe handling temperatures (see Section 7). Where practicable handle within an enclosed process. Alternatively local exhaust ventilation should be considered.  
 Do not enter empty storage tanks until measurements of available oxygen have been carried out.  
 Hydrogen sulphide (H<sub>2</sub>S) can accumulate in the headspace of product storage tanks and reach potentially hazardous concentrations.

##### Protective and hygiene measures

Wear suitable protective clothing , gloves and eye/face protection.  
 Use of personal protective equipment must be consistent with good occupational hygiene practices.

##### Eye/face protection

If splashing is likely, full head and face protection (protective shield and/or safety goggles) should be used.

##### Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.  
 Avoid skin contact with fumes or surfaces where fumes may have condensed .  
 Suitable gloves, coveralls, or other chemical resistant clothing should be used to protect exposed areas of skin.  
 Heat resistant gloves with long cuffs, or gauntlets.  
 Gloves must be periodically inspected and changed in case of wear, perforations or contaminations.

##### Skin protection

Wear protective clothing for operations with hot material : heat resistant coveralls (with trousers legs over boots and sleeves over cuffs of gloves), heat resistant heavy duty antiskid boots (e. g. leather).  
 Coveralls should be changed at the end of the work shift and cleaned as necessary to avoid transfer of product to clothes or underwear.  
 For loading/unloading operations: wear safety helmet with integrated full face visor and neck protection.

##### Respiratory protection

Approved respiratory protection equipment shall be used in spaces where hydrogen sulphide may accumulate: full face mask with cartridge/filter type "B" (grey for inorganic vapours including H<sub>2</sub>S) or self-contained breathing apparatus (SCBA). If worker exposure is likely to exceed workplace exposure levels, wear a respirator conforming to EN 140 with type A/P2 filter or better.

## SECTION 9: Physical and chemical properties

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

Physical state:	solid
Colour:	black
Odour:	characteristic

#### Test method

pH-Value:	not determined
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#### Changes in the physical state

Melting point:	not determined
Initial boiling point and boiling range:	> 320 °C

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Softening point: 55 °C

Flash point: >290 °C

#### Flammability

Solid: not determined

Gas: not determined

#### Explosive properties

The product is not: Explosive.

Lower explosion limits: not determined

Upper explosion limits: not determined

Ignition temperature: not determined

#### Auto-ignition temperature

ASTM E 659

Solid: > 400 °C

Gas: not determined

Decomposition temperature: not determined

#### Oxidizing properties

No information available.

Vapour pressure: < 1 hPa  
(at 20 °C)

Density: not determined

Water solubility: not determined

#### Solubility in other solvents

not determined

Partition coefficient: not determined

Viscosity / dynamic: not determined

Viscosity / kinematic: not determined

Vapour density: not determined

Evaporation rate: not determined

#### 9.2. Other information

Odour threshold: not determined

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No information available.

#### 10.2. Chemical stability

No information available.

#### 10.3. Possibility of hazardous reactions

No information available.

#### 10.4. Conditions to avoid

Excessive heating above the maximum recommended handling and storage temperature may cause degradation of the substance and evolution of irritant vapours and fumes.

#### 10.5. Incompatible materials

Materials to avoid:

Contact with strong oxidizers (peroxides, chromates, etc.) may cause a fire hazard.

A mixture with nitrates or other strong oxidisers (e.g. chlorates, perchlorates, liquid oxygen) may create an explosive mass. Sensitivity to heat, friction or shock cannot be assessed in advance.

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#### **10.6. Hazardous decomposition products**

Combustion (incomplete) will likely generate oxides of carbon, sulphur and nitrogen, as well as additional undetermined organic compounds of the same elements.

None under normal conditions at ambient temperatures.

#### **Further information**

This substance is stable under all ordinary circumstances at ambient temperatures, and if released into the environment.

### **SECTION 11: Toxicological information**

#### **11.1. Information on toxicological effects**

##### **Acute toxicity**

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

Acute oral toxicity:

Species: Rat

Method: OECD 401

LD50: > 5000 mg/kg

Acute dermal toxicity:

Species: Rabbit

Method: OECD 402

LD50: > 2000 mg/kg

##### **Irritation and corrosivity**

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

Skin corrosion/irritation: Not an irritant. (Rabbit, Method: OECD 404)

Eye damage/irritation: Not an irritant. (Rabbit, Method: OECD 405)

##### **Sensitising effects**

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

Skin sensitisation: not sensitising. (Guinea pig, Method: OECD 406)

##### **Carcinogenic/mutagenic/toxic effects for reproduction**

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

In vivo mutagenicity/genotoxicity:

Result / evaluation: negative.

Reproductive toxicity:

Method: OECD 421; OECD 422

Result: NOAEC: > 300 mg/m<sup>3</sup>

Carcinogenicity:

Species: Mouse (dermal)

Result / evaluation: positive.

##### **STOT-single exposure**

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

No known symptoms to date.

##### **STOT-repeated exposure**

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

No known symptoms to date.

##### **Aspiration hazard**

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

No known symptoms to date.

##### **Additional information on tests**

The substance is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].



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## SECTION 12: Ecological information

### 12.1. Toxicity

The product is not: Ecotoxic.

Acute (short-term) fish toxicity:

Method: Quantitative structure-activity relationship (QSAR)

Test duration: 96 h

Species: *Oncorhynchus mykiss* (Rainbow trout)

LC50: > 1000 mg/L

Acute (short-term) toxicity to crustacea:

Method: Quantitative structure-activity relationship (QSAR)

Test duration: 48 h

Species: *Daphnia magna* (Big water flea)

LC50: > 1000 mg/L

Acute (short-term) toxicity to aquatic algae and cyanobacteria:

Method: Quantitative structure-activity relationship (QSAR)

Test duration: 3

Species: *Pseudokirchneriella subcapitata*

LC50: > 1000 mg/L

### 12.2. Persistence and degradability

Substance is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance.

### 12.3. Bioaccumulative potential

Substance is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance.

### 12.4. Mobility in soil

No information available.

### 12.5. Results of PBT and vPvB assessment

No information available.

### 12.6. Other adverse effects

No information available.

### **Further information**

Do not allow uncontrolled discharge of product into the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### **Advice on disposal**

Surplus (unused) or off-spec substance can be recovered or re-conditioned (according to specific characteristics and composition), or can be disposed of as waste.

Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended.

Contaminated or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers.

National legislation may identify a specific organization, and/or prescribe composition limits and methods for recovery or disposal.

This substance can be burned or incinerated, subject to national/local authorizations, relevant contamination limits, safety regulations and air quality legislation.

These codes can be given only as a suggestion, according to the original composition of the product, and its intended (foreseeable) use(s).

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The final user has the responsibility for the attribution of the most suitable code, according to the actual use(s) of the material, contaminations or alterations.

Other national or local legislation may require additional identification or other measures for this product, may also limit or exclude the use of generic (n.o.s.) codes.

#### Waste disposal number of waste from residues/unused products

050117 WASTES FROM PETROLEUM REFINING, NATURAL GAS PURIFICATION AND PYROLYTIC TREATMENT OF COAL; wastes from petroleum refining; Bitumen

#### Waste disposal number of used product

050117 WASTES FROM PETROLEUM REFINING, NATURAL GAS PURIFICATION AND PYROLYTIC TREATMENT OF COAL; wastes from petroleum refining; Bitumen

#### Contaminated packaging

Disposal of emptied containers: Contact the original supplier or deliver to a qualified disposal organization. Do not cut, weld, bore, burn or incinerate emptied containers, unless they have been cleaned and declared safe.

Empty containers may contain combustible product residues.

Do not re-use emptied, unclean containers for other purposes.

#### General information:

In the absence of relevant alterations to the material or presence of contaminants, disposal of this substance as surplus (unused) or off-spec material, or waste resulting from the foreseeable use(s), does not present a specific hazard, or require special handling measures other than those indicated in Sect 7.

Consult the appropriate local waste disposal expert about waste disposal. Consult the appropriate authorities about waste disposal.

## SECTION 14: Transport information

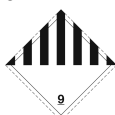
### Land transport (ADR/RID)

**14.1. UN number:** UN 3257

**14.3. Transport hazard class(es):** 9

**14.4. Packing group:** III

Hazard label: 9



Classification code: M9

Special Provisions: 274 643

Limited quantity: 0

Excepted quantity: E0

Transport category: 3

Hazard No: 99

Tunnel restriction code: D

#### Other applicable information (land transport)

Only applies for temperatures higher than 100°C.

### Inland waterways transport (ADN)

**14.1. UN number:** UN 3257

**14.2. UN proper shipping name:** Elevated temperature liquid, n.o.s. (Combination based on polyolefine waxes)

**14.3. Transport hazard class(es):** 9

**14.4. Packing group:** III

Hazard label: 9

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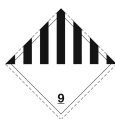
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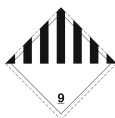
Classification code: M9  
 Special Provisions: 274 643  
 Limited quantity: 0  
 Excepted quantity: E0

#### Other applicable information (inland waterways transport)

Only applies for temperatures higher than 100°C.

#### Marine transport (IMDG)

**14.1. UN number:** UN 3257  
**14.2. UN proper shipping name:** Elevated temperature liquid, n.o.s. (Combination based on polyolefine waxes)  
**14.3. Transport hazard class(es):** 9  
**14.4. Packing group:** III  
 Hazard label: 9



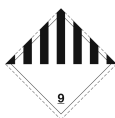
Special Provisions: 232, 274  
 Limited quantity: 0  
 Excepted quantity: E0  
 EmS: F-A, S-P

#### Other applicable information (marine transport)

Only applies for temperatures higher than 100°C.

#### Air transport (ICAO-TI/IATA-DGR)

**14.1. UN number:** UN 3257  
**14.2. UN proper shipping name:** elevated temperature liquid, n.o.s. (Combination based on polyolefine waxes)  
**14.3. Transport hazard class(es):** 9  
**14.4. Packing group:** -  
 Hazard label: 9



Limited quantity Passenger: Forbidden  
 Passenger LQ: Forbidden  
 Excepted quantity: E0  
 IATA-packing instructions - Passenger: Forbidden  
 IATA-max. quantity - Passenger: Forbidden  
 IATA-packing instructions - Cargo: Forbidden  
 IATA-max. quantity - Cargo: Forbidden

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

#### 14.6. Special precautions for user

No information available.

#### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### PROPANBITUMEN

Revision date: 12.05.2017

Product code:

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#### SECTION 15: Regulatory information

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

###### EU regulatory information

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

###### National regulatory information

Water contaminating class (D): - - not water contaminating

##### 15.2. Chemical safety assessment

For this substance a chemical safety assessment has been carried out.

#### SECTION 16: Other information

##### Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route  
(European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service  
LC50: Lethal concentration, 50%  
LD50: Lethal dose, 50%

##### Relevant H and EUH statements (number and full text)

EUH210 Safety data sheet available on request.

##### Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.