	SAFETY DATA SHEET	Page : 1 / 12
		Revision nr : 7.0
	PAVING GRADE BITUMEN – EURO BITUMEN 160/220 (HOT STATE)	Issue date : 15/03/2016
		Supersedes : 05/05/2015

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

1.1. Product identifier

Product form : Substance
Trade name/designation : PAVING GRADE BITUMEN – EURO BITUMEN 160/220 (HOT STATE)
EC No : 265-196-4
CAS No. : 64742-93-4
REACH registration No : 01-2119498270-36-0049
Product group : Trade product

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

1.2.1. Relevant identified uses

Main use category : Industrial use, Professional use, Consumer use
Use of the substance/mixture : Coating
Rubber products
Building and construction work

1.2.2. Uses advised against

No data available

1.3. Details of the supplier of the safety data sheet

Supplier

NIS a.d. Novi Sad
Narodnog Fronta 12
21000 Novi Sad - Serbia
T + 381 (0) 21 481 1111
Dragana.Cvetkov@nis.eu (Responsible person SDS/REACH)

Only Representative

REACH Law Ltd.
Vänrikinkuja 3 JK 21
02600 Espoo - Finland
T +358(0) 9 412 3055 - F +358 (0) 9 412 3049
sds@reachlaw.fi

Manufacturer

NIS a.d. Novi Sad
Narodnog Fronta 12
21000 Novi Sad - Serbia
T + 381 (0) 21 481 1111
Dragana.Cvetkov@nis.eu (Responsible person SDS/REACH)

1.4. Emergency telephone number

Emergency number : + 381 (0) 21 481 1111 (08-16h) + 381 (0)11 360 8440 (24 h) + 381 (0)11 266 1122 (24 h) + 381 (0)11 266 2755 (24 h)


Country	Official advisory body	Address	Emergency number
Ireland	National Poisons Information Centre Beaumont Hospital	Beaumont Hospital Beaumont Road 9 Dublin	+353 1 809 21 66 (public, 8am - 10pm, 7/7) +353 01 809 2566 (Professionals, 24/7)
United Kingdom	National Poisons Information Service (Newcastle Centre) Regional Drugs and Therapeutics Centre, Wolfson Unit	Claremont Place Newcastle-upon-Tyne NE1 4LP Newcastle	0844 892 0111 (UK only, Monday to Friday, 08.00 to 18.00 hours, healthcare professionals only)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Not classified

	SAFETY DATA SHEET	Page : 2 / 12
		Revision nr : 7.0
	PAVING GRADE BITUMEN – EURO BITUMEN 160/220 (HOT STATE)	Issue date : 15/03/2016
		Supersedes : 05/05/2015

2.2. Label elements

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

Not applicable.

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substance

Substance name : Asphalt, oxidised (paving grade bitumen, hot state) 160/220
CAS No. : 64742-93-4
EC No : 265-196-4

Substance name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Asphalt, oxidized	(CAS No.) 64742-93-4 (EC No) 265-196-4 (EC Index) - (REACH-no) 01-2119498270-36-0049	100	Not classified

Full text of H-statements: see section 16

3.2. Mixture

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

Additional advice : First aider: Pay attention to self-protection. Never give anything by mouth to an unconscious person or a person with cramps. Show this safety data sheet to the doctor in attendance. Treat symptomatically.

Inhalation : Keep at rest. Provide fresh air. In case of doubt or persistent symptoms, consult always a physician.

Skin contact : Rinse immediately with plenty of water for at least 15 minutes. In case of doubt or persistent symptoms, consult always a physician.

Eyes contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. In case of doubt or persistent symptoms, consult always a physician.

In case of ingestion : Rinse mouth. Rinse mouth immediately and drink plenty of water. Call a physician immediately.

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

Inhalation : Elevated temperatures or mechanical action may form vapours, mists or fumes which may be irritating to the eyes, nose, throat and lungs.


Skin contact : Hot product (liquid) can cause thermal burns.

Eyes contact : Hot product (liquid) can cause thermal burns.

Ingestion : According to experience not expected.

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

No data available

	SAFETY DATA SHEET	Page : 3 / 12
		Revision nr : 7.0
	PAVING GRADE BITUMEN – EURO BITUMEN 160/220 (HOT STATE)	Issue date : 15/03/2016
		Supersedes : 05/05/2015

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Water spray, Alcohol resistant foam, Carbon dioxide, Dry extinguishing powder.
Sand.
- Unsuitable extinguishing media : Strong water jet.

5.2. Special hazards arising from the substance or mixture

- Specific hazards : Non flammable. Combustible. Hazardous decomposition products Carbon monoxide, Sulphur oxides, Sulphuric acid, Hydrogen sulfide (H₂S), Nitrogen oxides (NO_x), Smoke.

5.3. Advice for firefighters

- Firefighting instructions : Special protective equipment for firefighters. . In case of fire: Wear self-contained breathing apparatus. Use water spray or fog for cooling exposed containers. Do not allow run-off from fire-fighting to enter drains or water courses. Dispose of waste in accordance with environmental legislation.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- For non-emergency personnel : Provide adequate ventilation. Evacuate personnel to a safe area. Use personal protective equipment as required. Concerning personal protective equipment to use, see section 8. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ensure equipment is adequately earthed.

6.1.2. For emergency responders

- For emergency responders : Ensure procedures and training for emergency decontamination and disposal are in place. Concerning personal protective equipment to use, see section 8.

6.2. Environmental precautions

- Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Stop leak if safe to do so. Dam up. Take up liquid spill into absorbent material, e.g.: sand, earth, vermiculite or powdered limestone. Collect in closed and suitable containers for disposal. After cleaning, flush traces away with water. Dispose of contaminated materials in accordance with current regulations.

6.4. Reference to other sections

- Concerning personal protective equipment to use, see section 8 . Disposal: see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling


- Hygiene measures : Keep good industrial hygiene. Wash hands and face before breaks and immediately after handling of the product. Keep work clothes separately. Take off contaminated clothing. Keep away from food, drink and animal feedingstuffs.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Do not store near or with any of the incompatible materials listed in section 10. Keep/Store only in original container. Keep container tightly closed in a cool, well-ventilated place.
- Packaging materials : Steel,. Stainless steel,. Coated steels,. metal containers.

7.3. Specific end use(s)

- No data available.

	SAFETY DATA SHEET	Page : 4 / 12
		Revision nr : 7.0
	PAVING GRADE BITUMEN – EURO BITUMEN 160/220 (HOT STATE)	Issue date : 15/03/2016
		Supersedes : 05/05/2015

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Asphalt, oxidized (64742-93-4)	
DNEL/DMEL (workers)	
Long-term - local effects, inhalation	(8h) 2,9 mg/m ³
DNEL/DMEL (general population)	
Long-term - local effects, inhalation	(24h) 0,6 mg/m ³
PNEC (additional information)	
Additional information	No data available UVCB

Additional information : Occupational Exposure Limits :. No data available


8.2. Exposure controls

Engineering control measures	: Provide adequate ventilation. Use only in area provided with appropriate exhaust ventilation. Ensure equipment is adequately earthed. Organisational measures to prevent /limit releases, dispersion and exposure. See also section 7.
Personal protection equipment	: The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Hand protection	: The selection of specific gloves for a specific application and time of use in a working area, should also take into account other factors on the working space, such as (but not limited to): other chemicals that are possibly used, physical requirements (protection against cutting/drilling, skill, thermal protection), and the instructions/specification of the supplier of gloves. (EN407)
Eye protection	: During splash contact: Face protection shield (EN166)
Body protection	: Overalls, apron and boots recommended
Respiratory protection	: In the case of vapour formation use a respirator with an approved filter. Self-contained open-circuit compressed air breathing apparatus (EN 137)
Thermal hazard protection	: Heat resistant gloves (EN407).
Environmental exposure controls	: Do not allow to enter into surface water or drains. Comply with applicable Community environmental protection legislation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: dark brown - Black.
Odour	: No data available.
Odour threshold	: No data available
pH	: Not applicable
Relative evaporation rate (butylacetate=1)	: No data available
Melting point/freezing point	: 30 - 128 °C (ASTM D36)
Freezing point	: No data available
Initial boiling point and boiling range	: > 320 °C
Flash point	: >= 220 °C (ASTM D92 / EN ISO 2592)
Auto-ignition temperature	: > 400 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non-flammable
Vapour pressure	: << 0,1 kPa (20°C)
Vapour density	: No data available

	SAFETY DATA SHEET	Page : 5 / 12
		Revision nr : 7.0
	PAVING GRADE BITUMEN – EURO BITUMEN 160/220 (HOT STATE)	Issue date : 15/03/2016
		Supersedes : 05/05/2015

Relative density	: 0,925 - 1,07 (15 °C)
Solubility	: Water: NA: Substance is complex UVCB.
Partition coefficient n-octanol/water	: NA: Substance is complex UVCB.
Kinematic viscosity	: 1000 - 16000 mm ² /s (60°C)(EN12595) >= 100 mm ² /s (100°C)(EN12595) >= 135 mm ² /s (135°C)(EN12595)
Dynamic viscosity	: No data available
Explosive properties	: Not applicable. The study does not need to be conducted because there are no chemical groups associated with explosive properties present in the molecule.
Oxidising properties	: Not applicable. The classification procedure needs not to be applied because there are no chemical groups present in the molecule which are associated with oxidising properties.
Explosive limits	: No data available

9.2. Other information

Additional information : Softening point 35 - 43 °C (EN 1427)

SECTION 10: Stability and reactivity

10.1. Reactivity

Combustible. Reference to other sections: 10.5.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

None under normal processing.

10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. See also section 7.

10.5. Incompatible materials

Incompatible with strong acids and oxidizing agents. Bases, Nitrates. See also section 7 : Handling and storage.

10.6. Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. Reference to other sections: 5.2.


SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified (Based on available data, the classification criteria are not met)

Asphalt, oxidized (64742-93-4)	
LD50/oral/rat	> 5000 mg/kg
LD50/dermal/rabbit	> 2000 mg/kg
LC50/inhalation/4h/rat	94,4 mg/m ³

Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met) pH: Not applicable
Serious eye damage/eye irritation	: Not classified (Based on available data, the classification criteria are not met) pH: Not applicable
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met) NOAEC, Inhalation, Rat: 300 mg/m ³
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met)

	SAFETY DATA SHEET	Page : 6 / 12
		Revision nr : 7.0
	PAVING GRADE BITUMEN – EURO BITUMEN 160/220 (HOT STATE)	Issue date : 15/03/2016
		Supersedes : 05/05/2015

STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met)

Asphalt, oxidized (64742-93-4)	
NOAEL, subacute, Dermal, rabbit, local	200 mg/kg bw/day
NOAEL, subacute, Dermal, rabbit, systemic	2000 mg/kg bw/day
NOAEC, subchronic, Inhalation, Rat, systemic	103.9 mg/m ³
NOAEC, subchronic, Inhalation, Rat, local	10.4 mg/m ³

Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

PAVING GRADE BITUMEN – EURO BITUMEN 160/220 (HOT STATE) (64742-93-4)	
Kinematic viscosity	1000 - 16000 mm ² /s (60°C)(EN12595)

Other information : Symptoms related to the physical, chemical and toxicological characteristics.
Reference to other sections: 4.2.

SECTION 12: Ecological information

12.1. Toxicity

Environmental properties : Ecological injuries are not known or expected under normal use.

Asphalt, oxidized (64742-93-4)	
Acute (short-term) fish toxicity, LL50 (96h)	> 1000 mg/l QSAR
Chronic (long-term) fish toxicity, LL50 (28d)	> 1000 mg/l QSAR
Chronic (long-term) fish toxicity, NOEL	≥ 1000 mg/l QSAR
Acute (short-term) daphnia toxicity, LL50 (48h)	> 1000 mg/l QSAR
Chronic (long-term) daphnia toxicity, NOEL (21d)	≥ 1000 mg/l QSAR
Acute (short-term) algae toxicity, EL50 (72h)	> 1000 mg/l QSAR (Inhibition of growth rate.)
Toxicity to other organisms (Tetrahymena pyriformis), LL50 (40h)	> 1000 mg/l QSAR
Toxicity to other organisms (Tetrahymena Pyriformis), NOEL (40h)	> 1000 mg/l Inhibition of growth rate.

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential


PAVING GRADE BITUMEN – EURO BITUMEN 160/220 (HOT STATE) (64742-93-4)	
Partition coefficient n-octanol/water	NA: Substance is complex UVCB.

12.4. Mobility in soil

PAVING GRADE BITUMEN – EURO BITUMEN 160/220 (HOT STATE) (64742-93-4)	
Ecology - soil	No data available.
Asphalt, oxidized (64742-93-4)	
Surface tension	Not applicable

12.5. Results of PBT and vPvB assessment

PAVING GRADE BITUMEN – EURO BITUMEN 160/220 (HOT STATE) (64742-93-4)	
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII	
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	

	SAFETY DATA SHEET	Page : 7 / 12
		Revision nr : 7.0
	PAVING GRADE BITUMEN – EURO BITUMEN 160/220 (HOT STATE)	Issue date : 15/03/2016
		Supersedes : 05/05/2015

12.6. Other adverse effects

Additional information : No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Handle with care. Safe handling: see section 7 : Handling and storage . Dispose of contaminated materials in accordance with current regulations. Refer to manufacturer/supplier for information on recovery/recycling. Collect and dispose of waste product at an authorised disposal facility.

Additional information : Delivery to an approved waste disposal company.

Further ecological information : Do not allow to enter into surface water or drains.

List of proposed waste codes/waste designations in accordance with EWC (2001/573/EC, 75/442/EEC, 91/689/EEC) : The following Waste Codes are only suggestions:
05 01 17 - bitumen
Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN number : 3257
 UN-No : 3257
 UN-No : Not regulated
 UN-No. (ADN) : 3257
 UN-No. (RID) : 3257

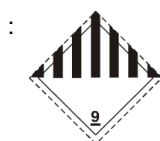
14.2. UN proper shipping name

Proper Shipping Name : ELEVATED TEMPERATURE LIQUID, N.O.S. (Asphalt, oxidized ())
 Proper Shipping Name (IMDG) : ELEVATED TEMPERATURE LIQUID, N.O.S. (Asphalt, oxidized ())
 Proper Shipping Name (IATA) : Not regulated
 Proper Shipping Name (ADN) : ELEVATED TEMPERATURE LIQUID, N.O.S. (Asphalt, oxidized ())
 Proper Shipping Name (RID) : ELEVATED TEMPERATURE LIQUID, N.O.S. (Asphalt, oxidized ())
 Transport document description (ADR) : UN 3257 ELEVATED TEMPERATURE LIQUID, N.O.S. (Asphalt, oxidized ()), 9, III, (D)
 Transport document description (IMDG) : UN 3257 ELEVATED TEMPERATURE LIQUID, N.O.S. (Asphalt, oxidized ()), 9, III
 Transport document description (ADN) : UN 3257 ELEVATED TEMPERATURE LIQUID, N.O.S. (Asphalt, oxidized ()), 9, III
 Transport document description (RID) : UN 3257 ELEVATED TEMPERATURE LIQUID, N.O.S. (Asphalt, oxidized ()), 9, III

14.3. Transport hazard class(es)


ADR

Transport hazard class(es) (ADR) : 9
 Danger labels (ADR) : 9



IMDG

Transport hazard class(es) (IMDG) : 9
 Danger labels (IMDG) : 9

	SAFETY DATA SHEET	Page : 8 / 12
		Revision nr : 7.0
	PAVING GRADE BITUMEN – EURO BITUMEN 160/220 (HOT STATE)	Issue date : 15/03/2016
		Supersedes : 05/05/2015



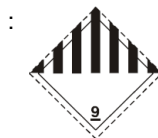
IATA

Transport hazard class(es) (IATA) : Not regulated

ADN

Transport hazard class(es) (ADN) : 9

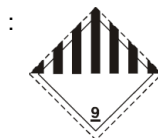
Danger labels (ADN) : 9



RID

Transport hazard class(es) (RID) : 9

Danger labels (RID) : 9



14.4. Packing group

Packing group (ADR) : III

Packing group (IMDG) : III

Packing group (IATA) : Not regulated

Packing group (ADN) : III

Packing group (RID) : III

14.5. Environmental hazards

Dangerous for the environment : No

Marine pollutant : No

Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport

Classification code (ADR) : M9

Special Provisions : 274, 643

Limited quantities (ADR) : 0

Excepted quantities (ADR) : E0

Packing instructions (ADR) : P099, IBC99

Portable tank and bulk container instructions (ADR) : T3

Portable tank and bulk container special provisions (ADR) : TP3, TP29



SAFETY DATA SHEET

Page : 9 / 12

Revision nr : 7.0

Issue date : 15/03/2016

Supersedes : 05/05/2015

PAVING GRADE BITUMEN – EURO BITUMEN 160/220 (HOT STATE)

Tank code (ADR) : LGAV
Tank special provisions (ADR) : TU35, TC7, TE6, TE14, TE24
Vehicle for tank carriage : AT
Transport category (ADR) : 3
Special provisions for carriage - Bulk (ADR) : VC3
Hazard identification number (Kemler No.) : 99
Orange plates :



tunnel restriction code : D
EAC code : 2Y

- Transport by sea

Special provisions (IMDG) : 232, 274
Limited quantities (IMDG) : 0
Excepted quantities (IMDG) : E0
Packing instructions (IMDG) : P099
IBC packing instructions (IMDG) : IBC01
Tank instructions (IMDG) : T3
Tank special provisions (IMDG) : TP3, TP29
EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-P
Stowage category (IMDG) : A
Stowage and handling (IMDG) : SW5
Flash point (IMDG) : above 100Å°C
Properties and observations (IMDG) : Any liquid which is transported at or above 100°C but below its flashpoint. May cause fire if in contact with combustible material due to extreme temperature.

- Air transport


Not regulated

- Inland waterway transport

Classification code (ADN) : M9
Special provisions (ADN) : 274, 58, 643
Limited quantities (ADN) : 0
Excepted quantities (ADN) : E0
Carriage permitted (ADN) : T
Equipment required (ADN) : PP
Number of blue cones/lights (ADN) : 0

- Rail transport

Classification code (RID) : M9
Special provisions (RID) : 274, 643
Limited quantities (RID) : 0
Excepted quantities (RID) : E0
Packing instructions (RID) : P099, IBC99
Portable tank and bulk container instructions (RID) : T3

	SAFETY DATA SHEET	Page : 10 / 12
		Revision nr : 7.0
	PAVING GRADE BITUMEN – EURO BITUMEN 160/220 (HOT STATE)	Issue date : 15/03/2016
		Supersedes : 05/05/2015

Portable tank and bulk container special provisions (RID) : TP3, TP29
 Tank codes for RID tanks (RID) : LGAV
 Special provisions for RID tanks (RID) : TU35, TE6, TE14
 Transport category (RID) : 3
 Special provisions for carriage – Bulk (RID) : VC3
 Special provisions for carriage - Loading, unloading and handling (RID) : CW17, CW31
 Hazard identification number (RID) : 99

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

PAVING GRADE BITUMEN – EURO BITUMEN 160/220 (HOT STATE) is not on the REACH Candidate List

PAVING GRADE BITUMEN – EURO BITUMEN 160/220 (HOT STATE) is not on the REACH Annex XIV List

15.1.2. National regulations

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on the Canadian DSL (Domestic Substances List)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on the Korean ECL (Existing Chemicals List)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Germany

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen : Asphalt, oxidised (paving grade bitumen, hot state) 160/220 is listed


SZW-lijst van mutagene stoffen : Asphalt, oxidised (paving grade bitumen, hot state) 160/220 is listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : The substance is not listed

15.2. Chemical safety assessment

	SAFETY DATA SHEET	Page : 11 / 12
		Revision nr : 7.0
	PAVING GRADE BITUMEN – EURO BITUMEN 160/220 (HOT STATE)	Issue date : 15/03/2016
		Supersedes : 05/05/2015

For this substance a chemical safety assessment has been carried out

SECTION 16: Other information


Abbreviations and acronyms:

	DNEL = Derived No Effect Level
	DMEL = Derived Minimal Effect level
	PNEC = Predicted No Effect Concentration
	OEL-STEL = Occupational Exposure Limits - Short Term Exposure Limits (STELs)
	TWA = time weighted average
	LC50 = Median lethal concentration
	LD50 = Median lethal dose
	LL50 = Median lethal level
	EC50 = Median Effective Concentration
	EL50 = Median effective level
	ErC50 = EC50 in terms of reduction of growth rate
	ErL50 = EL50 in terms of reduction of growth rate
	NOEL = no-observed-effect level
	NOEC = No observed effect concentration
	NOELR = No observed effect loading rate
	NOAEC = No observed adverse effect concentration
	NOAEL = No observed adverse effect level
	EWC = European waste catalogue
	NA = Not applicable
	N.O.S. = Not Otherwise Specified
	VOC = Volatile organic compounds
	mg/kg BW = mg/kg bodyweight
	QSAR = Quantitative structure-activity relationship (QSAR)
	ADN = Accord Européen relatif au Transport International des Marchandises Dangereuses par voie de Navigation du Rhin ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route CLP = Classification, Labelling and Packaging Regulation according to 1272/2008/EC IATA = International Air Transport Association IMDG = International Maritime Dangerous Goods Code LEL = Lower Explosive Limit/Lower Explosion Limit UEL = Upper Explosion Limit/Upper Explosive Limit REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
	WGK = Wassergefährdungsklasse (Water Hazard Class under German Federal Water Management Act)
	ABM = Algemene beoordelingsmethodiek

Sources of key data used to compile the datasheet : European Chemicals Bureau, CSR. Safety Data Sheet: Supplier.

The contents and format of this SDS are in accordance with EEC Commission Directive 2015/830/EC, 1272/2008/EC and EEC Commission Regulation 1907/2006/EC (REACH) Annex II.

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	SAFETY DATA SHEET	Page : 12 / 12
		Revision nr : 7.0
	PAVING GRADE BITUMEN – EURO BITUMEN 160/220 (HOT STATE)	Issue date : 15/03/2016
		Supersedes : 05/05/2015

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