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

### 1.1. Product identifier

Trade name/designation : POLYMER MODIFIED BITUMEN 25/55-55

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

Main use category : Industrial use  
 Specific use(s) : Distribution  
 Intermediate  
 Formulation  
 Lubricants,  
 Coating,  
 Rubber products  
 Construction,  
 Drilling applications  
 Fuels

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

Company : NIS a.d. Novi Sad  
 Narodnog Fronta 12  
 21000 Novi Sad , Serbia  
 Telephone + 381 (0) 21 481 1111  
 E-mail: Dragana.Cvetkov@nis.rs (SDS/REACH)

Only Representative : REACH Law Ltd.  
 Vänrikinkuja 3 JK 21  
 02600 Espoo, Finland  
 Telephone: +358(0) 9 412 3055  
 Telefax: +358 (0) 9 412 3049  
 E-mail: sds@reachlaw.fi

Manufacturer : NIS a.d. Novi Sad  
 Narodnog Fronta 12  
 21000 Novi Sad, Serbia  
 E-mail: Dragana.Cvetkov@nis.rs (SDS/REACH)

### 1.4. Emergency telephone number

Emergency telephone : + 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)

IRELAND (REPUBLIC OF)  
 National Poisons Information Centre  
 Beaumont Hospital +353 18 37 99 64/+353 1 809 21 66

UNITED KINGDOM  
 National Poisons Information Service  
 (Newcastle Centre) 0844 892 0111 (UK only, Monday to Friday, 08.00 to 18.00 hours)  
 Regional Drugs and Therapeutics Centre,  
 Wolfson Unit

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### **2.1.1. Classification according to Regulation (EU) 1272/2008**

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

Not classified

### 2.1.2. Classification according to EU Directives 67/548/EEC or 1999/45/EC

Classification : This mixture is classified as not hazardous according to 1999/45/EC.

Not classified

## 2.2. Label elements

### 2.2.1. Labelling according to Regulation (EU) 1272/2008

Not applicable.

### 2.2.2. Labelling according to Directives (67/548 - 1999/45)

Not relevant

## 2.3. Other hazards

Other hazards : PBT/vPvB data  
This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).  
This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Substance name	Product identifier	%	Classification according to Directive 67/548/EEC
Asphalt, oxidized	(CAS No.) 64742-93-4 (EC No) 265-196-4 (EC Index) - (REACH-no) 01-2119498270-36-0049	95 - 100	Not classified
SBS Polymer (Styrene-butadiene-styrene)	(CAS No.) 9003-55-8 (EC No) 618-370-2	<= 5	Not classified

Substance name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
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Full text of R- and H-phrases: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

Inhalation : Keep at rest.  
Provide fresh air.  
When in doubt or if symptoms are observed, get medical advice.

Skin contact : Wash with plenty of water.  
When in doubt or if symptoms are observed, get medical advice.

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- Eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.  
When in doubt or if symptoms are observed, get medical advice.
- In case of ingestion : Rinse mouth.  
Rinse mouth immediately and drink plenty of water.  
Get medical advice/attention.
- 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.

#### **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.
- Eye contact : Hot product (liquid) can cause thermal burns.
- Ingestion : Ingestion is not considered a potential route of exposure.

#### **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 : Water spray, alcohol resistant foam, Carbon dioxide, Dry extinguishing powder
- Extinguishing media which must not be used for safety reasons: : Strong water jet .

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

- Fire hazard : Not combustible.
- Specific hazards : Hazardous decomposition products COx

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

- Advice for firefighters : Special protective equipment for firefighters. .  
In case of fire: Wear self-contained breathing apparatus.  
Use water spray jet to protect personnel and to cool endangered containers.  
Do not allow run-off from fire-fighting to enter drains or water courses.  
Dispose according to legislation.

### **SECTION 6: Accidental release measures**

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

- For non-emergency personnel : Provide adequate ventilation.  
Evacuate area.  
Use personal protective equipment as required.  
Personal protection equipment: see section 8  
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
Ensure that the equipment is adequately grounded.
- For emergency responders : Ensure procedures and training for emergency decontamination and disposal are in place.  
Personal protection equipment: see section 8.

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

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

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

Methods for cleaning up : Stop leak if safe to do so.  
 Dam up.  
 Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).  
 Collect in closed and suitable containers for disposal.  
 After cleaning, flush away traces with water.  
 Dispose according to legislation.

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

Personal protection equipment: see section 8 .  
 Disposal: see section 13.

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

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

Advices on general occupational hygiene : 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**

Storage : 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 : Coated steels,  
 metal containers

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

Not applicable.

## **SECTION 8: Exposure controls/personal protection**

### **8.1. Control parameters**

Exposure limit values : No data available

### **8.2. Exposure controls**

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.

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)

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.

Thermal hazard protection : Heat resistant gloves (EN407)

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Engineering control measures	: Provide adequate ventilation. Use only in area provided with appropriate exhaust ventilation. Ensure that the equipment is adequately grounded. Organisational measures to prevent/limit releases, dispersion and exposure See also section 7
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

Appearance	: viscous liquid
Colour	: dark brown
Odour	: characteristic
Odour threshold:	: No data available
Odour threshold:	: No data available
pH	: No data available
Melting point/freezing point	: 30 - 128 °C (ASTM D36)
Initial boiling point and boiling range	: > 320 °C
Flash point	: $\geq$ 250 °C (EN ISO 2592)
Evaporation rate	: No data available
Flammability (solid, gas)	: Not applicable
Upper/lower flammability or explosive limits	: No data available
Vapour pressure	: $\ll$ 0,1 kPa (20°C)
Vapour density	: No data available
Relative density	: 0,925 - 1,07 g/cm <sup>3</sup> (15°C)
Water solubility	: insoluble (20°C)
Solubility in different media	: No data available
Partition coefficient n-octanol/water	: No data available
Auto-ignition temperature	: > 400 °C
Decomposition temperature	: No data available
Viscosity	: 1000 - 16000 mm <sup>2</sup> /s (60°C)(EN12595) 1189 - 8650 mPa.s (100°C)(EN13302) 80 - 3210 mm <sup>2</sup> /s (135°C)(EN12595)
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.

### 9.2. Other information

Softening point	: $\geq$ 55 °C
Other information	: penetration @ 25°C, 25 - 55 (1 - 10mm)

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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Reactivity : Reference to other sections: 10.5

### 10.2. Chemical stability

Stability : The product is stable under storage at normal ambient temperatures.

### 10.3. Possibility of hazardous reactions

Possibility of hazardous reactions : None under normal processing.

### 10.4. Conditions to avoid

Conditions to avoid : none

### 10.5. Incompatible materials

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

### 10.6. Hazardous decomposition products

Hazardous decomposition products : Carbon oxides .

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

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

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

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met.)  
pH: No data available

Serious eye damage/eye irritation : Not classified (Based on available data, the classification criteria are not met.)  
pH: No data available

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.)

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

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

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

### **Other information**

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

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## SECTION 12: Ecological information

### 12.1. Toxicity

Toxicity : Not hazardous

<b>Asphalt, oxidized (64742-93-4)</b>	
EC50 72h algae [mg/l] (1)	56 mg/l (Species: Pseudokirchneriella subcapitata)
Additional information	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

Persistence and degradability : Taking into consideration the properties of several components, the product is estimated not to be readily biodegradable according to OECD classification.

### 12.3. Bioaccumulative potential

Bioaccumulation : May cause bioaccumulation.  
 Partition coefficient n-octanol/water : No data available

### 12.4. Mobility in soil

Mobility : No data available

### 12.5. Results of PBT and vPvB assessment

PBT/vPvB data : This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).  
 This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

### 12.6. Other adverse effects

Other information : No data available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Product waste: : Handle with care.  
 Safe handling: see section 7 :  
 Handling and storage .  
 Dispose according to legislation.  
 Refer to manufacturer/supplier for information on recovery/recycling.  
 Collect and dispose of waste product at an authorised disposal facility.

Contaminated packaging : 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 : 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.

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## SECTION 14: Transport information

### 14.1. UN number

UN number : 3257 (if applicable)

### 14.2. UN proper shipping name

Proper Shipping Name : ELEVATED TEMPERATURE LIQUID, N.O.S.(Asphalt, oxidized ())  
 Proper shipping name IATA/IMDG : ELEVATED TEMPERATURE LIQUID, N.O.S. (Asphalt, oxidised)

### 14.3. Transport hazard class(es)

#### 14.3.1. Overland transport

Class(es) : 9 - Miscellaneous dangerous substances and articles  
 Hazard identification number (Kemler No.) : 99  
 Classification code : M9  
 ADR/RID-Labels : 9 - Miscellaneous dangerous substances and articles



#### 14.3.2. Inland waterway transport (ADN)

Class (UN) : 9

#### 14.3.3. Transport by sea

Class or Division : 9 - Miscellaneous dangerous substances and articles

#### 14.3.4. Air transport

Class or Division : 9 - Miscellaneous dangerous substances and articles

### 14.4. Packing group

Packing group : III

### 14.5. Environmental hazards

Other information : No supplementary information available.

### 14.6. Special precautions for user

Special precautions for user : Polymer modified bitumen is dispatched and transported the car tanks. Tanks that are used to transport polymer modified bitumen must be satisfactory purity. It is preferred that therein the previously transported to a polymer modified bitumen. Tanks which previously transported travel bitumen, fuel oil, etc. can not be used to transport polymer modified bitumen without rinsing to remove traces of these products . Minimum temperature polymer modified bitumen when loading the tanks should be 165 °C.

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

No data available

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

Restrictions on use : Not applicable



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This product contains an ingredient according to the candidate list of Annex XIV of the REACH Regulation 1907/2006/EC. : none

#### 15.1.2. National regulations

NL : NeR (Nederlandse emissie Richtlijn) : Organic substances in vapour or gaseous form

#### 15.2. Chemical safety assessment

Chemical Safety Assessment : For this substance a chemical safety assessment has been carried out.

### SECTION 16: Other information

Key literature references and sources for data : European Chemicals Bureau : ecb.jrc.it  
CSR, SDS supplier

Safety datasheet sections which have been updated : 9,16

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

The contents and format of this SDS are in accordance with EEC Commission Directive 1999/45/EC, 67/548/EC, 1272/2008/EC

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and EEC Commission Regulation 1907/2006/EC (REACH) Annex II.

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