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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 45/80-65

### 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 : KPMG Advisory N.V.  
 Laan van Langerhuize 1  
 1130 DS- Amstelveen, The Netherlands  
 Telephone: +31-20-65 64 500  
 E-mail: NI-fmreach@kpmg.nl

Manufacturer : NIS a.d. Novi Sad  
 Narodnog Fronta 12  
 21000 Novi Sad, Serbia

### 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 +35 318 37 99 64  
 UNITED KINGDOM  
 National Poisons Information Service  
 (Newcastle Centre) 0870 600 6266 (UK only)  
 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

CLP-Classification : Not a hazardous substance or mixture according to Regulation (EC)  
 No. 1272/2008.

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Not classified

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

Classification : The product is non-dangerous in accordance with Directive 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 : Results of PBT and vPvB assessment  
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	<= 5	Not classified
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	95 - 100	Not classified
SBS Polymer (Styrene-butadiene-styrene)	(CAS No.) 9003-55-8	<= 5	Not classified

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 off with plenty of water.  
When in doubt or if symptoms are observed, get medical advice.

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.

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- 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 : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- Extinguishing media which shall 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.  
See also section 8.  
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
Ensure that the equipment is adequately grounded.
- For emergency responders : Only qualified personnel equipped with suitable protective equipment may intervene.  
See also section 8.

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

- 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.

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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**

See also section 8 .  
 See also 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 and wash before reuse.
- 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 material :
 

- Coated steel, 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 protective 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-shield (EN166)

Body protection :
 

- Overalls, apron and boots recommended.


Thermal hazard protection :
 

- Heat resistant gloves (EN407)

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



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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/range	: No data available
Boiling point/boiling range	: > 350 °C
Flash point	: > 230 °C closed cup
Evaporation rate	: No data available
Flammability (solid, gas)	: Not applicable
Explosion limits (LEL, UEL)	: No data available
Vapour pressure	: No data available
Vapour density	: No data available
Relative density	: 1 g/cm <sup>3</sup>
Water solubility	: insoluble (20°C)
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Autoignition temperature	: No data available
Decomposition temperature	: No data available
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.
Oxidizing 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

Other information : Penetration index : 50 - 70 1/10 mm

## SECTION 10: Stability and reactivity

### 10.1. Reactivity


Reactivity : See also section 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.

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#### **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.)

Specific target organ toxicity (single exposure) : Not classified (Based on available data, the classification criteria are not met.)

Specific target organ toxicity (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, see section 4.2.

### **SECTION 12: Ecological information**

#### **12.1. Toxicity**

Toxicity : Not hazardous

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

## **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 : 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**

Waste from residues / unused products : Handle with care.  
See also section 7 :  
Handling and storage :  
Dispose according to legislation.  
Where possible recycling is preferred to disposal or incineration.  
Collect and dispose of waste product at an authorised disposal facility.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.


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

List of suggested waste codes/waste designations in accordance with the 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.

# **SECTION 14: Transport information**

## **14.1. UN number**

UN-No. : 3257 (if applicable)

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#### **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 : 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