

SAFETY DATA SHEET

According to the European Regulation (EC) No. 1907/2006, Commission Regulation (EC) No. 2015/830

Product name: MOZAL TS, bitumen modified joint sealant

Date of issue: 2. 5. 2019

Revision date: - (Version 1.0)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**1.1 Product Identifier****MOZAL TS****Chemical name:**

Mixtures

Registration No.:

None

Index No.:

None

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

Designated uses: Grouting of joints of cement-concrete road coverings.

Uses not recommended: The product may not be used in any way other than those specified in sections 1 and 7.

1.3 Details of the supplier of the safety data sheet

Name: PARAMO, a.s.

Place of business: Přerovská 560, 530 06 Pardubice, Czech Republic

Phone: +420 466 810 111

Fax: +420 466 335 019

E-mail: paramo@paramo.cz

Website: www.paramo.cz

Person(s) responsible for this Safety Data Sheet: bl@paramo.cz

1.4 Emergency telephone number

Control Room of PARAMO, a. s.: +420 466 303 175

Toxicological Information Centre at Na Bojišti 1, 128 08 Prague 2, phone (Czech Republic only) (24 hours, 7 days a week): +420 224 919 293, 224 915 402, 224 914 575

Transport Information & Accident System (TRINS), phone: +420 476 709 826

SECTION 2: HAZARDS IDENTIFICATION**2.1 Classification of the substance or mixture**

According to 1272/2008 (CLP) the product is not classified as hazardous.

2.2 Label elements

Pictogram: None

Warning description: None

Dangerous substances: None

Standard phrases of hazard: None

Safe handling instructions:

P280 Wear protective gloves, protective clothing and eye protection.

Other requirements: None

2.3 Other hazards

The product is not persistent, bioaccumulative and toxic chemical substance or very persistent and very bioaccumulative chemical substance according to the criteria set out in Annex XIII to the EC (PBT, vPvB).

The main risk is hot bitumen burns and photodermatitis. Vapour inhalation when overheated to a higher temperature may cause mild irritation of the upper respiratory tract.

Flammable material. The risk of combustion arises when heated above flash point.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.1 Substances**

It is not a substance.

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3.2 Mixtures

Chemical characteristics

Identification numbers	Substance name	Content in % weigh	Classification according to (ES) č. 1272/2008	Note.
EC: 232-490-9 CAS: 8052-42-4 Registration number: 01-2119480172-44	Bitumen			

Full texts of H-phrases are quoted in Section 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

If the first aid treatment is to be administered, release tight clothing and keep the exposed person warm and at rest. If conscious, place the exposed person to the stabilised position and get prompt medical attention. If the exposed person is unconscious and not breathing, provide for free respiratory passages and artificial respiration. In case of cardiac arrest, apply cardiac massage and call medical assistance immediately. If unconscious but breathing, place the exposed person to the stabilised position and call medical assistance immediately.

The first aid instructions are structured according to separate exposure ways:

Inhalation: If a person has breathed in smoke produced by overheated asphalt, take him to the fresh air.

Skin contact: Areas hurt with hot asphalt must be cooled, ideally with water. The cooled asphalt must not be removed from the skin in order not to disturb created blisters. Remove the asphalt only in the event that the eyes or ears have been affected. Seek medical help.

Contact with eyes: Remove the asphalt by means of Vaseline, Vaseline oil or grease; never use solvents. Take the person to a doctor.

Ingestion: Never induce vomiting, seek medical aid.

4.2 Most important symptoms and effects, both acute and delayed

None

4.3 Indication of any immediate medical attention and special treatment needed

Ingestion and inhalation: If swallowed or inhaled, the product may cause serious damage of lungs. Do not induce vomiting. Contraindications: induced vomiting and gastric irrigation. Administration of medicinal charcoal has no effect. The affected person must be monitored at least for the period of 48 to 72 hours. Monitoring for pulmonary oedema symptoms starts six hours after the ingestion/inhalation and it continues at least for the period of 48 to 72 hours.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing means: Heavy, medium and light air-mechanical foam, type B or C fire-extinguishing powders, CO₂.

Unsuitable extinguishing means: Water jet.

5.2 Special hazards arising from the substance or mixture

Combustion products and hazardous gases: smoke, carbon monoxide, carbon dioxide.

5.3 Advice for firefighters

Fire-fighting teams exposed to smoke or vapours must wear respiratory and eye protection. In confined spaces, the teams must use a self-contained breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Prevent any contamination of clothing/footwear with the product; prevent any contact with skin and eyes. Use suitable protective clothing; if contaminated, change the clothing immediately. All persons not taking part in rescue operations must be kept away to a sufficient distance.

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6.2 Environmental precautions

Act as quick as possible, do not allow to enter drains, underground water or watercourses and soil by enclosing the affected area (damming, closing of gulleys). Notify the relevant authorities.

6.3 Methods and material for containment and cleaning up

If the product gets spilt, mix it with chemical stoneware and process the mixture in a suitable way, or mix it with gravel, sand or soil, letting the mixture solidify; to be liquidated in approved dumpsites in accordance with the relevant waste disposal legislation.

6.4 Reference to other sections

Apart from the instruction set out in this Section, other important information is shown in section 8 - EXPOSURE CONTROLS AND SECTION 13 – DISPOSAL CONSIDERATIONS.

SECTION 7: HANDLING AND STORAGE**7.1 Precautions for safe handling**

When used directly, the bitumen is melted in heater with indirect heating and temperature control. The equipment must contain an efficient stirrer and thermometer for continuous temperature monitoring. It must not be exceeded temperature 200 ° C.

7.2 Conditions for safe storage, including any incompatibilities

It is stored cool in appropriate packing. There are precautions for storage in the heater according to ČSN 65 0201, heat by indirect heating. The recommended storage temperature is 130 ° C to 150 ° C. The contents of the tank should be circulated before use.

7.3 Specific end use(s)

Filling joints in concrete structures, roads and walks a ways, joints of cement-concrete coverings of roads, airport surfaces, bridges, parking and storage areas, generally all cement-concrete covers exposed to traffic load.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1 Control parameters**

The mixture contains substances for which exposure limits are set for the working environment.

PEL (Czech Rep., Government Regulation No. 361/2007 Sb.) hydrocarbones: 5 mg/m³

NPK-P (Czech Rep., Government Regulation No. 361/2007 Sb.) hydrocarbones: 10 mg/m³

Bitumen

DNEL inhalation/workers/long-term local influence: 2.9 mg/m³

DNEL inhalation/public/long-term local influence: 0.6 mg/m³

8.2 Exposure controls

Observe general safety and hygienic measures; do not eat, drink and smoke at work. After washing the skin with warm water and soap, treat it preventively with a regeneration cream.

Eye/face protection: Use protective goggles or safety eyewear (face shield).

Skin protection: Use protective gloves resistant against oil products and tested according to EN 374; best of all made of nitrile or neoprene rubber.

Respiratory protection: Not necessary, if the vapour concentration in air is less than the concentration limits. If the opposite is the case or aerosols are created, use emergency escape mask with A, AX (brown) filters or any other mask types suitable of protecting against organic gases and vapours.

Thermal hazard: None

Environmental exposure controls: It is necessary to prevent leakage into the environment by all available means.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on basic physical and chemical properties**

Appearance:

State: solid

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Colour:	black
Odour:	bituminous
Odour threshold value:	not determined
pH:	no determination necessary
Pour point:	not determined
Initial boiling point and boiling range:	> 308 °C
Softening point:	> 90 °C
Flash point OK:	> 240 °C
Vaporisation rate:	not determined
Upper/lower explosion or flammability limits:	not determined
Vapour pressure:	< 10 Pa at 20 °C
Vapour density:	not determined
Relative density:	1000 kg/m ³ at 15 °C
Solubility:	insoluble in water
Separation factor:	n-octanol/water: not determined
Self-ignition temperature:	> 380 °C
Decomposition temperature:	not determined
Viscosity:	750 - 4700 mPa·s150 °C
Explosive properties:	not explosive
Oxidation properties:	not oxidising

9.2 Other information

Combustion point: > 300 °C

SECTION 10: STABILITY AND REACTIVITY**10.1 Reactivity:** No reactivity danger exists.**10.2 Chemical stability:** Stable under recommended storage and handling conditions.**10.3 Possibility of hazardous reactions:** No dangerous reactions are possible.**10.4 Conditions to avoid:** Creation of concentrations within the explosion limits, presence of ignition sources and contact with a naked flame.**10.5 Incompatible materials:** Strong oxidisers.**10.6 Hazardous decomposition products:** Under normal conditions: none; if burning under deficiency of air, carbon monoxide may be formed.**SECTION 11: TOXICOLOGICAL INFORMATION****11.1 Information on toxicological effects****Acute toxicity:** Criteria for product classification are not met.Bitumenoral toxicity LD₅₀ > 5000 mg/kg (rat, OECD TG 403)dermal toxicity LD₅₀ > 2000 mg/kg (rabbit, OECD TG 401)inhalation toxicity LC₅₀ > 94.4 mg/m³ (rat, OECD TG 402)**Skin corrosion/irritation:** Criteria for product classification are not met.**Serious eye damage/irritation:** Criteria for product classification are not met.**Respiratory or skin sensitization:** Criteria for product classification are not met.**Germ cell mutagenicity:** Criteria for product classification are not met.**Carcinogenicity:** Criteria for product classification are not met.

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Reproduction toxicity: Criteria for product classification are not met.**STOT – single exposure:** Criteria for product classification are not met.**STOT – repeated exposure:** Criteria for product classification are not met.**Aspiration hazards:** Criteria for product classification are not met.**SECTION 12: ECOLOGICAL INFORMATION**

Based on acute toxicity of invertebrates and algae, the product is not classified as toxic to the environment.

12.1 Toxicity*Bitumen*

Acute toxicity for aquatic environment: fish - LL₅₀ (96 hrs) > 1000 mg/l
algae EL₅₀ (72 hrs) ≥ 1000 mg/l
invertebrates EL₅₀ (48 hrs) >1000 mg/l

Chronic toxicity for aquatic environment: invertebrates NOELR (21 days) > 1000 mg/l

Toxicity for soil microorganisms and for soil macroorganisms: LL₅₀ (40 h) > 1000 mg/l (QSAR), NOEL > 1000 mg/l**12.2 Persistence and degradability:** Not expected - the substance is not soluble in water.**12.3 Bioaccumulative potential:** Not expected**12.4 Mobility in soil:** Not expected**12.5 Results of PBT and vPvB assessment:** The product does not contain substances meeting the criteria for PBT or vPvB in accordance with Annex XIII, Regulation (EC) No 1907/2006 (REACH), as amended.**12.6 Other adverse effects:** Not expected**SECTION 13: DISPOSAL CONSIDERATIONS****13.1 Waste treatment methods****Substance disposal procedures:** Do not dispose of together with municipal waste. Do not dispose of waste through sewers. Waste, impaired product or unused/surplus product must be handed over to the person authorised for waste disposal according to the local law.

Waste Code: O 05 01 17, in sorbent: N 15 02 02

Contaminated packaging disposal procedures: The containers with product residua must be placed on the place specified by the municipal authorities or handed over to the person authorised for waste disposal.**Waste legislation:** Directive 2008/98/EC**SECTION 14: TRANSPORT INFORMATION**

Nomenclature and labelling according to the European Agreement concerning the International Carriage of Dangerous Goods, Road (ADR)/Rail (RID)

14.1 UN Number: UN 3257**14.2 UN proper shipping name:** ELEVATED TEMPERATURE LIQUID, N.O.S. (hot bitumen)**14.3 Transport hazard class(es):** 9

Classification code: M9

Hazard identification no.: 99

Safety mark:

**14.4 Packing group:** III**14.5 Environmental hazard:** none

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14.6 Special precautions for user:

Transport category: 3

Limited quantities: 0

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code: not applicable**SECTION 15: REGULATORY INFORMATION****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

- ✓ Act No. 350/2011 Coll., on chemical substances and chemical preparations, and on amendments of some acts.
- ✓ Regulation (EU) No. 2015/830 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
- ✓ Regulation (EC) No. 1272/2008 on classification, labelling and packaging of substances and mixtures

15.2 Chemical safety assessment

The chemical safety assessment has been made for bitumen.

SECTION 16: OTHER INFORMATION**Standard safety phrases (H-phrases) used in the safety data sheet:** None**Safe handling instructions (P-phrases) used in the safety data sheet:**

P280 Wear protective gloves, protective clothing and eye protection.

Abbreviations used in the safety data sheet

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
Aquatic Chronic	Hazardous to the aquatic environment
Asp. Haz./Tox.	Aspiration hazard / toxicity
Carc.	Carcinogenicity
CAS	Chemical Abstract Service
CLP	Regulation of Classification, Labelling and Packaging
DNEL	Derived no-effect level
EC ₅₀	Half maximal effective concentration
EINECS	European Inventory of Existing Commercial Chemical Substances
EC	European Community number
Eye Dam./Irrit.	Eye Damage / Irritation
Flam. Liq	Flammable Liquid
IATA	International Air Transport Association
IBC	International regulation for Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IC ₅₀	half maximal inhibitory concentration
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
ISO	International Organization for Standardization
LC ₅₀ / LD ₅₀	Median lethal dose
LOAEC	Measures of pollutant concentration
LOAEL	Lowest-observed-adverse-effect level
Log Kow	Octanol-water partition coefficient
MARPOL	International Convention for the Prevention of Pollution from Ships
Mutag.	Mutagenicity
NOAEC	Measures of pollutant concentration
NOAEL	No-observed-adverse-effect level
NOEC	No Observed Effect Concentration
NPK	Highest admissible concentration
OECD TG	OECD Guidelines for the Testing of Chemicals
PBT	Persistent, bioaccumulative and toxic
PEL	Acceptable Exposure Limit
PNEC	Predicted no-effect concentration
ppm	parts per million

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REACH	European Union Regulation for Registration, Evaluation, Authorisation and Restriction of Chemicals
Repr.	Reproductive toxicity
RID	European treaty on the international transport of hazardous substances by rail
Skin Corr./Irrit./Sens.	Skin Corrosion/ Irritation/ Sensitisation
STOT SE	Specific target organ toxicity – single exposure
STOT RE	Specific target organ toxicity – repeated exposure
UN	The four-digit identification number of the substance or object taken from the UN Model Regulations
UVCB	Compounds of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Highly persistent and highly bioaccumulative

Other information important for the safety and health of humans

The product must not be used for any purpose other than those specified in sections 1 and 7 without the manufacturer's / importer's specific consent. The user is responsible for compliance with all relevant health protection regulations.

Training

The user is obliged to get acquainted with the safety precautions relating to the product handling / treatment and complete applicable trainings at the workplace before he/she starts to work with the product.

Information on changes

- ✓ New SDS.

Statement: The Safety Data Sheet has been prepared in accordance with REACH Regulation (EC) No 1907/2006. It contains the data that are needed to ensure safety and health at work and environmental protection. These data do not replace the quality specification and cannot be considered as a guarantee of the suitability and usability of this product for a specific application. These data correspond to the current state of knowledge and experience and are in accordance with our valid legal regulations. The customer is responsible for compliance with the applicable regional legislation