

**Safety Data Sheet** 

(acc. to regulations 1272/2008 EC and 453/2010 EU)

Date of completion 10-10-2014

Revision date 20-01-2016

Version 4

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY

1.1. Product ID

Trade name Cold application bitumen-polymer waterproofing mastic

**TECHNONICOL No. 21 (Technomast)** 

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

Mixture: Intended for installation and repair of all roof types, installation of

protective roofing layers, waterproofing of building structures, buildings, facilities, and car bodies; for bonding of bitumen and polymer-bitumen

roll roofing.

1.3. Details of the safety data sheet provider

Manufacturer: OOO TechnoNIKOL- Construction Systems

Address: Moscow, Giliarovski ul. 47, str. 5

Phone: +7 495 925 55 75
Fax: +7 495 925 81 55
E-mail address: info@tn.ru

Supplier: UAB "Mida LT"

Address: Gamyklos g. 19, Gargždai, LT 96155

Phone: +370 46 247021 Fax: +370 46 455167

E-mail address: <u>zivile.paulauskaite@mida.lt</u>

1.4. Emergency phone number

Emergency phone: +370 5 2362052; +370 614 48004; +370 686 52411 (emergency information)

# 2. HAZARDS IDENTIFICATION

## 2.1. Substance or mixture classification

## 2.1.1. Classification according to Regulation (EC) No 1272/2008 (CLP)

Lung damage hazard upon swallowing H304 (hazard category 1) May cause respiratory irritation H335 (hazard category 3)

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

Harmful Xn; R65 Irritant Xi; R38

## 2.2. Label elements (information on the package label)

## 2.2.1. Labelling according to regulation (EC) No 1272/2008 (CLP)

**Hazard icons:** 





Signal Word: Dangerous

**Hazard statement:** H304 May be fatal if swallowed and enters airways

H335 May cause respiratory irritation



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Precautionary statement for

prevention:

P261 Avoid inhalation of vapours

P271 Use only outdoors or in a well-ventilated area

P280 Wear protective gloves/ protective clothing/ eye protection/ face

protection

P233 Keep container tightly closed

Precautionary statement for

response:

P301/310 INGESTION: Immediately call the POISON CONTROL AND

INFORMATION CENTER or contact a doctor.

P331 Do NOT induce vomiting.

**Precautionary statement for** 

storage:

P102 Keep out of reach of children P403 Store in a well-ventilated place

D501 Diamaga (diagond) of contents acfo

Precautionary statement for

removal:

P501 Dispose (discard) of contents safe

Additional information on

danger:

The mixture and dry film are flammable; high-temperature fire emits

toxic fumes of bitumen.

**Special precautions:** None

## 2.3. Other hazards

Repeated and prolonged exposure irritates the skin, eyes and respiratory tract.

The mixture and dry film are flammable. Vapours are heavier than air and may spread along floor. Vapours may form explosive mixture with air. Ensure adequate ventilation. Keep away from open flames, sparks.

Mastic contains bitumen. Bitumen fumes are generated at high temperatures that are carcinogenic (hazard category 2). Bitumen fumes may be released during a fire.

A mixture contains solvent that can cause long-term adverse effects in the aquatic environment. Spillage film can appear on the water that can lead to physical damage and can have a detrimental impact on aquatic life.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

## Mixture:

Composition: Multicomponent mixture of bitumen, butadiene-styrene polymer, fillers, organic solvents, and technological additives.

## **Dangerous components:**

CAS No./EC No.	Chemical	Concentration,	Classification	
Index No.	name	wt. %	Acc. to 67/548/EEC	According to Regulation
REACH reg. No.				No 1272/2008/EC (GHS)
64742-93-4/265-196-4	Bitumen	27.0	Xn R20- 65	Not classified
N/A			Xi R36/37/38;	
01-2119498270-36-0048			Carc. cat. 2 R 45*	
			Past.H, P, 4	
64742-94-5/265-198-5	Solvent	30.0	Xn R 65	Asp.Tox. 1 H304
649 -424 -00 -3	(petroleum)		Past. H	Past. H
01-2119510128-50-0007			Xi R37	STOT SE. 3 H335

The manufacturer declares that the contents of other components not nominated in this table, bearing the risk phrases, does not exceed the minimum allowable limits.

NOTE: Interpretation of hazard symbols, texts of risk phrases and other labels are referred to in section 16.



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# 4. FIRST AID MEASURES

### 4.1. Description of first aid measures

#### **General information:**

Before the rescue of victims, isolate the area from all potential sources of ignition. Ensure adequate ventilation. In all cases where there is doubt or symptoms persist, seek medical advice. If the victim has lost consciousness, never give anything to drink or put anything into his mouth.

## **Inhalation:**

Vapours can get into the respiratory tract at high temperatures and poor ventilation. Victims who inhale fumes and feel unwell should be taken to fresh air, covered warmly, if it's cool, and allowed to rest. Give artificial respiration if not breathing. If breathing is difficult, give oxygen. Turn unconscious victim on the side, turn the face down, immediately seek medical advice.

#### **Skin Contact:**

Remove contaminated clothing and footwear. Rinse skin with plenty of soap and water. Dried mastic is difficult to remove. Do not use solvents or thinners for washing the skin. Use special skin cleaning agents or special products for washing very soiled hands. If skin irritation persists, consult with a doctor. Wash soiled clothing before wear.

## **Eve Contact:**

Immediately flush eyes with running water for at least 15 min with eyelids open If you use contact lenses, remove them. Seek medical attention.

### **Ingestion:**

In case of accidental ingestion, rinse your mouth with water without causing vomiting. Immediately contact a physician. May cause lung damage if swallowed. If vomiting is natural, keep victim leaning forward.

### 4.2. Most important symptoms and effects (acute and delayed)

Potential acute and delayed effects. May cause skin, respiratory and eye irritation. Repeated or prolonged exposure may result in dry and cracked skin. Inhalation of vapours, dizziness, drowsiness. Inhalation of vapours into the lungs can cause chemical pneumonitis. Prolonged contact with the mixture of vapours may cause renal pathology. (For more information, see Chapter 11).

## 4.3. Indication of the need for any immediate medical attention and special treatment

No special antidote. The victim must be monitored for signs of poisoning, pulmonary oedema can occur after a few or even several hours.

## 5. FIRE-FIGHTING MEASURES

## 5.1. Extinguishing media:

## Suitable extinguishing agents:

Water mist, CO2, foam, extinguishing powder, sand.

## Unsuitable extinguishing media:

Water flow is not effective and extends the seat of fire.

### 5.2. Special hazards caused by the mixture

Vapours are heavier than air and may spread along floors. Forms explosive mixtures with air. The mixture and the dry film can burn. Combustion may release noxious gas. High temperatures can lead to degradation of harmful substances in products, for example, CO and CO2, SOx, smoke, bitumen fumes. Extinguishing fluids can



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pollute the environment. Extinguishing fluid leakage must be stopped and collected. Chill product packaging with water.

### 5.3. Advice for fire-fighters

Extinguish standing at maximum distance on the windward side. Wear self-contained breathing apparatus and protective fire-resistant and non-melting clothing and footwear. Chill product packaging with water, to prevent the pressure rise in packaging and the burst. Extinguishing fluids can pollute the environment. Extinguishing fluid leakage must be stopped and collected. Prevent the formation of electrostatic discharge.

#### 6. ACCIDENTAL RELEASE MEASURES

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

Wear appropriate protective equipment and protective work clothing, see Section 8. Avoid contact with clothes, skin and eyes. Do not breath vapour. Ensure good indoor ventilation. Remove any sources of ignition and sparks. Do not wear synthetic clothes. Rubber gloves and rubber shoes are unsuitable.

## 6.2. Environmental precautions

Protect the product from entering the soil, surface water and drains. In the case of spill of contaminants in the environment, inform the regional environmental protection personnel.

### 6.3. Methods and materials for containment and clean-up

Stop product leakage and prevent it from spreading. In the case of spills, cover them with inert material (sand, earth, vermiculite, etc.). Mechanically, using metal tools, collect in sealed metal containers and utilise as per requirements of Section 13. The places where the product has been spilled must be rinsed with water and detergent. Ensure good ventilation. Chill with water jet and disperse vapours.

# 7. HANDLING AND STORAGE

## 7.1. Safe handling precautions

Do not exceed the controlled exposure values for the workplace (section 8). Avoid contact with skin, eyes and clothing. Observe general hygiene requirements for the workplace, do not eat, drink or smoke. Wash thoroughly after work. Do not breathe vapour and aerosols. Information about individual protection measures is provided in Section 8.

Properly ventilate the premises, remove any sources of sparks and fire. Prevent the formation of vapour in concentrations exceeding the flammability and explosion limits (Section 8). When transferring from one package to another, use grounding. Upon completion of work the container must be tightly closed. Wear non-electrified work clothes and footwear. To avoid fire hazards, contaminated filters, cleaning rags etc. are stored in tightly sealed metal containers or metal containers poured with water and when disposed of in landfill, they must be washed with soap and water. Alternatively, may be carried outside and dried. Every day after work dirty materials must be removed from the workplace (carried outside). Compliance with rules and regular removal of waste, contaminated filters or rags reduces the risk of fire hazard.

Carefully open and use the packaging. Do not press empty packaging, do not twist, scratch, solder, do not store near heat or flame.

## 7.2. Conditions for safe storage including any incompatibilities

Observe the labelling requirements. Keep out of reach of unauthorized persons. When packaging is opened and all the contents are not used, they must be tightly closed again, stored in an upright position and protected from spills. Store in a dry, well-ventilated area, away from heat and ignition sources. Do not store in direct sunlight. Suitable storage temperature (-20 - +30) °C.

Vapours are heavier than air and may spread along floor. Can form explosive mixtures with air. Prevent the formation of vapour in concentrations exceeding the flammability and explosion limits (Section 8). Remove any



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sources of ignition, properly ventilate the premises. Electrical equipment and tools must meet fire standards. No smoking.

Store in accordance with established safety requirements. Keep out of the reach of children.

Do not store together with strong acids, alkalis and oxidizing agents.

### 7.3. Specific end use(s)

Use according to the instructions provided on the packaging or in the technical data sheet.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

Controlled components/permissible limit values in the air at the workplace

SOLVENT (PETROLEUM) CAS 64742-94-5, EC 265-198-5, Ind. No. 649-424-00-3

(Lithuanian Hygiene Norm HN 23)

Long-term exposure limit value (LTEL): 200 mg/m<sup>3</sup> Short-term exposure limit value (STEL): 400 mg/m<sup>3</sup>

### 8.2. Exposure controls

## 8.2.1. Engineering measures:

Good indoor ventilation. Avoid spillage. Eye washing equipment must be in accessible place.

### 8.2.2. Personal protection means:

### **Respiratory protection:**

In case of insufficient ventilation, if allowable limits of environmental contamination are exceeded or there are signs of irritation, accidents or spraying, use appropriate respiratory protection: masks with filters to protect against organic gases and vapour — A1 or A2 in accordance with EN 141, filtering half-masks with valves to protect against gases — FFA1 or FFA2, according to EN 405.

### **Hand Protection:**

Wear protective nitrile, PVC or other gloves resistant to petroleum products that meet the requirements of EN 374-2. In each individual case, when choosing protective gloves, observe instructions for use, take into account other chemical products that are used, the strength of the glove, thermal protective properties, potential skin reactions. Rate the period specified in the gloves instructions time during which dangerous substances can penetrate. Do not use ordinary latex or rubber gloves.

After contact with skin, wash with soap and water. Apply skin protective creams. Do not use the cream on damaged skin.

### **Eye Protection:**

In case of risk of eye damage by the product, use close-fitting, anti-fog goggles.

## Protection of body:

Wear protective non-static working clothes and footwear. Wash hands before eating and smoking. Use silicone protective creams. Skin contact – wash with soap and water.

### General hygiene and protection measures:

Do not store together packages with food, drinks and animal feed. Remove contaminated clothing. Wash hands after work or during a break at work. Do not breathe fumes/vapour/aerosols. No smoking. Eye washing equipment must be in accessible place.



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## 9. PHYSICAL AND CHEMICAL PROPERTIES

## 9.1 Information on basic physical and chemical properties

Physical state: Viscous liquid

Colour: Black

Odour: Characteristic odour Index of hydrogen ions, (pH): Non applicable

Flammability: Flammable

Boiling point or boiling range °C: (180-210) °C (acc. to solvent)

Auto-ignition temperature (of solvent) °C 455°C

Flash point (of solvent) °C: 63°C

**Explosion limits:** 

Lower explosion limit (of solvent):

Upper explosion limit (of solvent):

5.9 Vol %

Density (20 °C):

Solvent content:

Solubility (in water):

0.8 Vol %

5.9 Vol %

0.96 g/cm³

30 % (by mass)

Slightly soluble

Viscosity: Flow time 10s (mastic diluted with toluene in the 2:1 ratio,

viscometer with a hole size of Ø 6mm)

Specific vapour density:

Evaporation rate:

Vapour pressure, kPa:

Oxidising properties:

Slower than ether

0.078 kPa at 20°C

Non applicable

Freezing/melting temperature, °C

Non applicable

### 9.2. Other information

No other information available

## 10. STABILITY AND REACTIVITY

## 10.1. Reactivity

No data available

## 10.2. Chemical stability

Stable under recommended storage conditions

## 10.3. Possibility of hazardous reactions

No hazardous reactions for the specified conditions of storage and use.

## 10.4. Conditions to avoid

Avoid high temperatures, direct sunlight, heat, ignition sources, sparks, and closed spaces.

## 10.5. Incompatible materials

Do not store together with oxidising materials, strong acids and alkalis.

### 10.6. Hazardous decomposition products

Hazardous decomposition products SOx, CO and CO2 (in fire), high-temperature bitumen emits harmful vapours.



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### 11. TOXICOLOGICAL INFORMATION

## 11.1. Information on toxicity

### Acute toxicity:

Inhalation of organic solvents contained in the product, if their concentration is exceeded in the workplace air, can be hazardous to health. Irritation of the upper respiratory tract and mucous membranes. Symptoms include: dizziness, headache, muscle weakness, fatigue, sleepiness, and loss of consciousness in extreme cases.

**Ingestion:** can cause the body's overall poisoning, digestive tract damage, nausea, abdominal pain (cramps) and irritate the mucous membranes. There are other symptoms such as in case of inhalation. Ingestion of solvent vapours may cause lung, aspiration damage and can be deadly.

#### **Irritation:**

Skin irritation: Prolonged or repeated contact may cause skin dryness, cracking, and dermatitis.

Eye irritation: causes eye irritation, possible pain, tearing, vision disorders.

Sensitization: No evidence of allergic reaction.

### **Carcinogenicity:**

At high temperatures can emit bitumen fumes classified as a carcinogen 2 category.

#### Reproductive toxicity:

Based on the available data, the components do not meet the criteria for classification.

## **Mutagenicity:**

Based on the available data, the components do not meet the criteria for classification

#### 11.2. Additional information

No additional information available

## 12. ECOLOGICAL INFORMATION

#### 12.1. Toxicity

Solvent contained in the mastic may be harmful to aquatic organisms and cause long-term adverse effects in the aquatic environment. Spilled product evaporates from the ground and is microbiologically degraded. Do not release the product into the environment, soil, water and sewer. More information in Section 3.

## 12.2. Persistence and degradability:

The solvent evaporates from contaminated soil and is microbiologically digested, biodegradable in water (photochemically generated hydroxyl radicals disrupt the solvent). Permissible bitumen content in discarded fluids is 15mg/l.

## 12.3. Bioaccumulative potential:

Undetermined

### 12.4. Mobility in soil:

Undetermined

## 12.5. PBT and vPvB assessment results:

Chemical safety assessment report is not provided

## 12.6. Other adverse effects

Bitumen in the mixture is insoluble in water. Solvent solubility is low. The mixture dispersed on the water surface



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can create a film that prevents oxygen from entering from the air. When the solvent evaporates, bitumen spots remain on the surface. Do not contaminate the environment; do not discharge the mixture into drains, surface waters and into the soil.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste management methods:

Mixture and packaging waste is disposed of in accordance with the rules on the disposal of harmful substances. Persons handling the waste must wear personal protective equipment.

Mixture waste code:

13 08 99 (waste petroleum products not otherwise specified)

08 04 09 (waste adhesives and sealants containing organic solvents or other hazardous chemical substances). Packaging waste code:

15 01 04 (metal packaging)

15 01 10 (packaging containing residues of hazardous substances or contaminated with them)

Waste cannot be disposed of with household garbage or discharged down the drain.

For further information, contact regional environmental agencies.

## 14. TRANSPORT INFORMATION

# ADR/RID, IMDG, JATA

**14.1. UN number** 1263

**14.2. UN proper shipping name** Cold application bitumen-polymer waterproofing mastic

TECHNONICOL No. 21 (Technomast)

**14.3.** Transport hazard class(es): 3

14.4. Packaging group:

14.5. Environmental hazards: Data not available

**14.6. Special precautionary measures for users:** Protect packages from mechanical damage and from being overturned. Keep away from heat and direct sunlight.

14.7. Bulk shipment according to MARPOL 73/78 Annex II and IBC Code: Not applicable

## 15. REGULATORY INFORMATION

## Safety, health and environmental legislation associated with a particular substance:

- EUROPEAN PARLIAMENT AND COUNCIL REGULATION (EC) No. 1272/2008 (16-12-2008) on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006;
- EUROPEAN PARLIAMENT AND COUNCIL REGULATION (EC) No. 1907/2006 (2006-12-18) concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94, Council Directive 76/769/EEC and Commission Directives 91/155 EEC, 93/105 EEC and 2000/21 EC;
- EUROPEAN COMMISSION REGULATION (EU) No. 453/2010 (20-05-2010) amending European Parliament and Council Regulation (EC) No. 1907/2006 (18-12-2006) concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH);
- European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) (ADR restructured License Agreement of 2001) 01-01-2003, technical amendments to the Annexes A and B, (version of



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#### 2005):

- Order of the Minister of Environment and the Minister of Health of the Republic of Lithuania "On the Labelling Procedures of Hazardous Chemical Substances and Preparations Classification" 19-12-2000 No. 532/742; version of 27-06-2002 order No 345/313; amendments of 04-08-2003 order No 411/V-460 and 19-09-2005 order No D1-453/V-714 and subsequent;
- Hygiene norm HN 23:2011 "Occupational Exposure Limit Values of Chemical Substances. Measurement and Impact Assessment General Requirements";
- Order of the Minister of Social Security and Labour of the Republic of Lithuania "On the Approval of Regulations for the Supply of Personal Protection Measures to Employees" No. A-1-331, of 26-11-2007;
- Order of the Minister of Environment of the Republic of Lithuania "On Amendment of Waste Management Approval Rules" No. D1-368, of 03-05-2011.

### 15.2 15.2. Chemical safety rating

Chemical safety assessment of mixture is not shown

## 16. OTHER INFORMATION

Interpretation of hazard symbols, risk phrases, hazard class texts and other marks referred to in Sections 2 and 3:

Hazard class and category code Asp.Tox. 1 Lung damage hazard in case of swallowing (category 1

hazard)

(Acc. to regulation STOT SE. 3 Specific target organ toxicity — single exposure (category 3

No 1272/2008 ) hazard)

**GHS hazard statements** H304 May be fatal if swallowed and enters airways.

(Acc. to regulation No 1272/2008) H335 May cause respiratory irritation.

ClassificationXn Harmful(According to DirectiveXi Irritant

67/548/EEC)

**Risk phrases** R37 Irritating to respiratory system

(According to Directive R65 Harmful if swallowed, can cause lung damage

67/548/EEC)

The safety data sheets are based on the EUROPEAN PARLIAMENT AND THE COUNCIL REGULATION (EC) NO. 1272/2008 (16-12-2008), EUROPEAN COMMISSION REGULATION (EU) NO. 453/2010 (2010-05-20) AND COUNCIL REGULATION (EC) NO. 1907/2006 (2006-12-18) CONCERNING THE REGISTRATION, EVALUATION, AUTHORISATION AND RESTRICTION OF CHEMICALS (REACH) for drafting safety data sheets of blends.

Data contained in this safety data sheet is available to anyone whose work is related to the waterproofing mastic. Information contained in this safety data sheet complies with the applicable legal regulations. Data corresponds to our current knowledge and is intended for the description of chemical product in the aspects of safety and health at work, and environmental safety. Information in the safety data sheet shall be complemented in case new data becomes available regarding the effect of chemical substance or preparation to health and environment, on prevention measures to reduce risks or avoid them.

The company reserves the right to amend and supplement information without further notice. Any information changes are accompanied by the provision of the safety data sheet and presentation of new versions. Information in the safety data sheet does not disclose any other specific characteristics of the product. Technical characteristics contained in this safety data sheet are not the product quality requirements and may not be regarded as a basis of any



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legal claims. By mixing any product components, each dangerous component is evaluated separately. This safety data sheet is prepared on the basis of the safety data sheets of manufacturers of ingredients, their characteristic safety rules, and online information.

Persons working with this product should be familiar with this safety data sheet before work and later instructed at least once a year.