

## SAFETY DATA SHEET

According to the Committee's Regulation (EU) 453/2010

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

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#### 1.1 Product identifier:

**Trade name** **Spray 47-52 /Klej Tapicer Spray 47-52/**

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

**Relevant identified uses** for gluing polyurethane and polyester sponge and other upholstery materials in different combination with one another to green and lacquered wood as well as wood-based materials.

**Uses advised against** -

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

Zakłady Chemiczne „ANSER” Sp. z o.o.  
ul. J. Conrada 7, 01-922 Warszawa  
ph.: +48 22 663 70 73, fax: +48 22 669 01 22

E-mail address of the person responsible for the safety data sheet: reach@anser.pl

#### 1.4. Emergency telephone number:

**112** (24h)

### SECTION 2: Hazards identification

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#### 2.1. Classification of the mixture

The mixture is classified as hazardous according to the Regulation of the European Council 1999/45/EC.  
F: R11; Xi: R38, R43, Xn; R48/20, Repro. Kat. 3; R62, R67, N; R51-53

#### Harmful effects for human health

It is irritating and harmful to human health. It is irritating for the skin. May cause allergy in contact with the skin. Harmful via respiratory tract; it poses a serious health hazard in result of prolonged exposure. A likely risk of fertility impairment. Vapours may cause sleepiness and dizziness.

#### Harmful effects for the environment

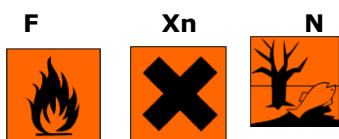
Toxic to water organisms; may cause sustained negative changes in water environment.

#### Harmful effects related to physical-and-chemical properties

Liquid highly flammable. Vapours create explosive mixtures with air. Vapours are heavier than air, they gather near surface of the ground and in lower parts of rooms. The product and its vapours may ignite from open flame, a sparkle or hot surface.

## 2.2. Elements of labelling

### Warning symbols and signs:



F – Product highly flammable    Xn – Harmful product    N – Product hazardous for the environment

### Expressions indicating the type of hazard (R):

38 – Irritating to the skin.

43 – May cause allergic reaction after contact with the skin.

48/20 - Harmful through the respiratory tract; poses a serious health hazard in result of prolonged exposure.

62 – Possible risk of fertility impairment.

67 - Vapours may cause sleepiness and dizziness.

51-53 - Toxic to water organisms; may cause sustained negative changes in water environment.

### Expressions indicating safety measures (S):

2 - Keep away from children.

23 – Do not inhale vapours or sprayed liquid.

51 – Use solely in well ventilated rooms.

36/37 – Wear appropriate protective clothes and appropriate protective gloves.

46 – In case of swallowing immediately consult the doctor – show the packaging or label.

29/35 – Do not dispose to the sewage system. Dispose of the product and its packaging in a safe manner.

### **Other:**

Contains: Low-boiling petroleum fraction treated with hydrogen.

### **2.3. Other hazards**

The substances contained in the mixture do not meet the criteria PBT and vPvB pursuant to schedule XIII of the REACH Directive.

## ***SECTION 3: Composition/information on ingredients***

<b>Name</b>	<b>Content % mass</b>	<b>Identifying numbers of substances</b>	<b>Classification acc. to Regulation (EC) 1272/2008</b>	<b>Classification acc. to directive 67/548/EEC</b>
Light petroleum treated with hydrogen (oil); Low-boiling	<60	CAS: 64742-49-0 WE: 265-151-9 Index no.: 649-328-00-1	Flam. Liq. 2; H225 Skin Irrit. 2; H315 Asp. Tox. 1; H304 Repr. 2; H361 STOT SE 3; H336	F; R11 Xn; R65 R67 Xn; R48/20 Xi; R38

petroleum fraction treated with hydrogen			STOT RE 2; H 373 Aquatic Chronic 2; H411	Repro. Cat. 3; R62 N; R51/53
Calaphony	<20	CAS: 8050-09-7, 8052-10-6, 73138-82-6 WE: 232-475-7, 232-484-6, 277-299-1 Index no.: 650-015-00-7	Skin Sens. 1; H317	R43
Acetone	<5	CAS: 67-64-1 WE: 200-662-2 Index no.: 606-001-00-8	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	F; R11, Xi; R36 R66, R67

The full wording of expressions describing hazard is given in sec. 16.

*Numbers of appropriate registration:*

Light petroleum treated with hydrogen (oil) 01-2119475133-43-XXXX.

Acetone 01-2119471330-49-XXXX.

*Other numbers not available.*

#### **SECTION 4: First aid measures.**

##### **4.1. Description of first aid measures**

###### In case of exposure via respiratory tract

- Leave exposure area (or take the injured out of the exposure area).
- Assure peace and quite to the injured as well as access to fresh air.
- In case of breath arrest, give artificial respiration.
- In case of stifling, give oxygen.
- Assure medical assistance.

###### In case of exposure through contact with the skin

- Take off soiled clothing.
- Wash off with plenty of water (and soap if no irritation is visible).
- Consult the doctor in case of skin irritation.

###### In case of exposure through contact with the eyes

- Remove contact lenses.
- Do not use neutralizing preparations.
- Wash with plenty of cool water for about 15 minutes with the lids open (avoid strong water stream due to the risk of damaging the cornea mechanically)
- Consultation with an oculist is necessary.

###### In case of exposure via alimentary tract

- Do not provoke vomiting.
- Let the injured drink ca. 200 ml of liquid paraffin.
- Do not let the injured drink milk, fat or alcohol to drink.
- Assure medical assistance immediately.

#### **4.2. The most important acute and delayed symptoms and effects of exposure**

Sickness, vomiting, headaches and dizziness, dried and cracked skin, irritated eye mucosa.

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

Decision as to the rescue procedure shall be taken by the doctor after careful examination of the condition of the injured.

### ***SECTION 5: Fire-fighting measures.***

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Proceed in line with the Fire Safety Instruction, if the recipient does not have one, the persons on the site shall be notified about the failure. All persons not participating in repairing the failure shall be removed from the area at risk. Evacuation shall be ordered if needed. Minor fires shall be put out with extinguishers on hand, in case of major fires, State Fire Service and the Police shall be notified.

#### **5.1. Extinguishing media**

Appropriate extinguishing media: extinguishing powders and foams, carbon dioxide, water – dispersed jets.

Inappropriate extinguishing media: compact water jets – the risk spreading the fire.

**Minor fire:** extinguish with carbon dioxide, extinguishing powder, foam.

**Major fire:** Containers at risk of being affected by fire or high temperature shall be cooled with water from a safe distance; if possible, they shall be removed from the area at risk (risk of explosion).

#### **5.2. Special risks related to the mixture**

The product is highly flammable. Prevent leakage and extinguishing media and extinguishing water from getting to ground waters, potable water intakes and sewage system. Product of incomplete combustion may contain carbon oxides. Avoid inhaling combustion products.

#### **5.3. Information for the fire services**

The use of full protective clothing outfit and breathing apparatuses with independent oxygen inlet is recommended.

### ***SECTION 6: Proceeding in the event of accidental release to the environment***

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

For persons not belonging to the personnel giving assistance

Limit access of outsiders to the emergency area until appropriate cleaning procedures have been completed. Do not inhale vapours. Avoid contact with the skin and eyes. Use personal protection means.

For persons giving assistance

Protect containers against overheating due to the risk of explosion. Announce an absolute ban on smoking and use of sparking devices. Remove ignition sources. Use protective gloves and clothing in case of prolonged exposure and major leakage.

### **6.2. Precautions related to environment protection**

Do not let the product get to the sewage system, ground or surface waters.

### **6.3. Methods and materials preventing the spread of contamination and aimed at removing contamination**

- Protect drains.

- If possible, remove leakage (cut off liquid, place damaged packaging in a sealed protective container).

In the event of a major leakage, the spot where liquid gathers shall be protected with an embankment, collected liquid shall be pumped out. Small volumes of spilled liquid shall be covered with a layer of non-flammable absorbing material (sand, soil), collected to a closed container and delivered for recycling or neutralization to competent units. Contaminated area shall be washed with water.

### **6.4. References to other sections**

Personal protection means – section 8.

Waste shall be removed in line with the binding law provisions – section 13.

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## ***SECTION 7: Mixture handling and storage***

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

During usage observe basic principles of hygiene of work with chemical products: do not eat or drink, avoid contact with the product, inhaling dust, contaminating eyes and skin. During breaks at work wash hands. Do not use clothing contaminated with the product. Observe the principles of personal hygiene. Work clothes shall be made of natural materials. Assure effective ventilation so as not to exceed concentrations of dangerous substances above allowed limits (see section 8) and explosive concentrations of solvent vapours in the air. Announce an absolute ban on smoking and use of open fire. Do not use sparking devices.

### **7.2. Conditions of safe storage including information on any mutual nonconformities**

Store in original appropriately marked and tightly closed packaging in a warehouses, in dry, cool, shadowed and well ventilated locations, away from heat and ignition sources. Keep away from children.

Shelf life – 12 months from production date.

*Additional information n section 10.*

### **7.3. Specific end uses**

None.

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

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### **8.1. Control parameters**

Allowed concentration in working environment: no data for the product. Below data are stated for its ingredients (Regulation of the Labour and Social Policy Minister of November 29<sup>th</sup> 2002 on the highest allowed concentrations and intensities of agents hazardous for the health in work environment, Journal of Laws 2002 No 217 item 1833 as amended).

<b><i>Name of the substance</i></b>	<b><i>NDS [mg/m<sup>3</sup>]</i></b>	<b><i>NDSch [mg/m<sup>3</sup>]</i></b>	<b><i>NDSP [mg/m<sup>3</sup>]</i></b>
n-hexane	72	-	-
Acyclic hexane saturated isomers excl. n-hexane	400	1,200	-
Acetone	600	1,800	-

Hexane and its isomers are contained within low boiling petroleum fraction treated with hydrogen.

#### Recommended monitoring procedures

PN-Z-04136-3:2003 Protection of air cleanness. Hexane content checks. Determining hexane presence at work posts with gas chromatography.

PN-Z-04057-01:1979 Protection of air cleanness. Acetone content checks. Determining acetone presence at work posts with gas chromatography and enhanced samples.

The Regulation of the Minister of Health of February 2, 20011 on inspecting and measuring agents posing a health hazard in a work environment (Journal of Laws of 2011 No. 33, item 166).

<b>DNEL</b>	<b>Low-boiling petroleum fraction treated with hydrogen</b>	
	<i>employee</i>	<i>consumer</i>
Inhaling, chronic toxicity	93 mg/m <sup>3</sup>	20 mg/m <sup>3</sup>
Skin, chronic toxicity	13 mg/kg body mass/day	7 mg/kg body mass/day
Ingestion, chronic toxicity	-	6 mg/kg body mass/day

Acetone DSB: 30 mg acetone/l – in a urine sample taken on a one-of occasion at the end of a day exposure on any day.

<b>DNEL</b>	<b>Acetone</b>	
	<i>employee</i>	<i>consumer</i>
Inhaling, acute toxicity	2,420 mg/m <sup>3</sup>	-
Inhaling, chronic toxicity	1210 mg/m <sup>3</sup>	200 mg/m <sup>3</sup>
Skin, chronic toxicity	186 mg/kg body mass/day	62 mg/kg body mass/day
Ingestion, chronic toxicity	-	62 mg/kg body mass/day

<b>PNEC</b>	<b>Acetone</b>
fresh water	10.6 mg/l
sea water	1.06 mg/l
sediment fresh and sea water	30.4 mg/kg sediment
soil	29.5 mg/kg soil

waste treatment plants	100 mg/l
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## 8.2. Exposure control

### Applied technical protection measures

Information provided in section 7.

### Personal protection measures:

Eyes or face protection: protective glasses or goggles.

- hand protection: protective gloves resistant to organic solvents (e.g. gloves made of butyl caoutchouc or nitric rubber, vitone, chloroprene or natural caoutchouc).

- other: protective clothing from coated materials in anti-electrostatic version.

Respiratory protection: at risk of exposure use masks with organic vapours absorbers (type AX).

Thermal risks: does not apply.

### Environment exposure protection

Mixture shall not access ground waters, sewage or soil.

## **SECTION 9. Physical and chemical properties.**

### **9.1. Information about general physical and chemical properties**

- Form red (or other colour acc. to per client's requirements)  
liquid
- Odour characteristic
- Odour threshold  
Acetone 47.5 mg/m<sup>3</sup>
- pH does not apply
- Melting/solidification point  
Low-boiling petroleum fraction <-20<sup>0</sup>C  
Acetone - 94,8<sup>0</sup>C  
Calaphony 75 - 81<sup>0</sup>C
- Boiling temperature  
Low-boiling petroleum fraction 64 - 95<sup>0</sup>C  
Acetone 56.05 – 56.5<sup>0</sup>C
- Flash point <0<sup>0</sup>C
- Evaporation rate no data
- Flammability (of solid substance, gas) does not apply
- Lower explosive/combustion limit  
Low-boiling petroleum fraction 1.2% volume  
Acetone 2.5% volume
- Upper explosive/combustion limit  
Low-boiling petroleum fraction 8.3 % volume

Acetone	14.3% volume
• Vapour pressure	
Low-boiling petroleum fraction	ca. 43 kPa at 40 <sup>0</sup> C
Acetone	240 kPa at 20 <sup>0</sup> C
• Vapour density	
Low-boiling petroleum fraction	2.97 (air = 1)
• Relative density	ca. 0.75 g/cm <sup>3</sup>
• Solubility	not soluble in water, dissolves in organic solvents
• Partition coefficient: n-octanol/water	no data
• Self-ignition temperature	
Low-boiling petroleum fraction	>223 <sup>0</sup> C
Acetone	465 <sup>0</sup> C
• Decomposition temperature	no data
• Viscosity	>30 s, ISO cube with nozzle 3 mm
• Explosive properties	does not apply
• Oxidizing properties	no data

**9.2. Other information**

No data.

**SECTION 10: Stability and reactivity****10.1. Reactivity**

The product is not reactive under normal conditions.

**10.2. Chemical stability**

The product is stable under normal conditions.

**10.3. Possibility of hazardous reactions**

Unknown.

**10.4. Conditions to avoid**

High temperature, open flame, ignition sources, electric sparkle.

**10.5. Incompatible materials**

Strong oxidizers.

**10.6. Hazardous decomposition products**

Do not occur under normal conditions.

**SECTION 11: Toxicological information.****11.1. Information on toxicological effects**

Acute toxicity: no data for the product. Below data are stated for its ingredients:

Low-boiling petroleum fraction treated with hydrogen

Low toxic substance

LD50 (rat, orally) > 16,750 mg/kg  
LC50 (inhalation, rat) > 259,354 mg/m<sup>3</sup>/ 4h  
LD50 (skin, rabbit) > 3,350 mg/kg

#### Acetone

LD50 (rat, orally) 5,800 mg/kg  
LC50 (inhalation, rat) 76,000 mg/m<sup>3</sup>/4h  
LD50 (rabbit, guinea pig, skin) 7,400 mg/kg

Irritating effect: irritating for the skin.

Caustic effect: based on the data available classification criteria are not met.

Allergenic effect: may cause allergic reaction in contact with the skin.

Repeated dose toxicity: no data from the product.

Carcinogenicity: based on the data available, classification criteria are not met.

Mutagenicity: based on the data available classification criteria are not met.

Toxicity to reproduction: possible risk of fertility impairment.

#### **Information on likely routes of affecting**

Swallowing: symptoms the same as in the case of inhalation poisoning.

Inhaling: vapours may cause sleepiness and dizziness. Product irritating to the respiratory tract. May cause headaches and dizziness, sickness, vomiting, at higher vapour concentrations movement coordination disorders possible, disorientation, loss of consciousness.

Skin exposure: direct contact with the product causes reddening of the skin, pain, drying and cracking of the skin.

Eyes exposure: vapours may irritate the mucosa of the eyes. Liquid spurting into the eye may cause congestion of conjunctiva, irritation, stinging and pain of the eye.

**Symptoms related to physical, chemical and toxicological properties:** no data.

**Delayed, immediate and prolonged effects of short- and long-term exposure:** chronic inflammation of conjunctiva and skin, nervous system disorders. Product harmful via respiratory tract; poses a serious health risk after long-term exposure.

**Consequences of mutual effect:** no data.

**Other information:** no data.

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

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**12.1. Toxicity:** no data for the product. Below data are stated for its ingredients:

##### Low-boiling petroleum fraction treated with hydrogen

Acute toxicity for:

- fresh water invertebrates *Daphnia magna* EC50 23.35mg/l/48h
- fresh water algae *Pseudokirchnerella subcapitata* EC50 9.902 mg/l/72h

- fresh water fish *Oncorhynchus mykiss* LC50 13.37 mg/l/96h

Chronic toxicity for:

- invertebrates *Daphnia magna* NOEL 5.224 mg/l/21 days
- fish *Oncorhynchus mykiss* NOEL 2.992 mg/l/28 days

#### Acetone

Acute toxicity for :

- fresh water invertebrates *Daphnia pulex* LC50 8800 mg/l/48h
- sea water invertebrates *Artemia salina* LC50 2100 mg/l/24h
- fresh water algae *Microcystis aeruginosa* LOEC 530 mg/l/8 dni
- sea water algae *Prorocentrum minimum* NOEC 430 mg/l/96 h
- fresh water fish *Oncorhynchus mykiss* LC50 5540 mg/l 96h
- sea water fish *Alburnus alburnus* LC50 11000 mg/l/96h

Acute toxicity for :

- invertebrates *Daphnia magna* NOEC: 2212 mg/l/28days
- fish – research scientifically unjustified

#### Sediment:

Examining toxicity for sediment organisms: no data (research scientifically unjustified)

#### Overland:

Examining toxicity for invertebrates: no data (research scientifically unjustified)

Examining toxicity for plants: no data (research scientifically unjustified)

Examining toxicity for earthworms: LC50 (48 h): 100 – 1000 µg/cm<sup>2</sup>

### **12.2. Persistence and degradability**

No data for the product. Below data are stated for its ingredients:

#### Low-boiling petroleum fraction treated with hydrogen

##### **Biotic:**

Biodegradability: easily biodegradable substance 81% after 28 days.

Examining simulations of activates slimes – does not apply (UVCB substance)

##### **Abiotic:**

Hydrolysis as pH function and photolysis/photo-transformation do not occur.

#### Acetone

##### **Biotic:**

Biodegradability: easily biodegradable (OECD 301B; 90.0 ± 2.2% after 28 days).

Examining simulations of activates slimes – no data.

##### **Abiotic:**

Hydrolysis as pH function: acetone is resistant to hydrolysis (examining degradability in soil).

Identification of products biodegraded at photolysis: carbon oxide, carbon dioxide, methanol, formaldehyde

Photolysis: 18.6 – 114.4 days.

### 12.3. Bio-accumulative potential

No data for the product. Below data are stated for its ingredients:

Low-boiling petroleum fraction treated with hydrogen

Does not apply – UVCB substance.

Acetone

Bio-concentration coefficient (BCF): 3 (calculated value).

### 12.4. Mobility in soil

No data for the product. Below data are stated for its ingredients:

Low-boiling petroleum fraction treated with hydrogen

Examining adsorption/desorption – does not apply – UVCB substance.

Acetone

Examining adsorption/desorption – sorption, soil Kd: 1.5 l/kg w 20°C. Acetone may penetrate into the soil and is transported by ground waters.

### 12.5. Results of PBT and vPvB assessment

The mixture's ingredients do not fulfil PBT and vPvB criteria.

### 12.6. Other adverse effects

Toxic for water organisms; may cause sustained negative changes in water environment.

## SECTION 13: Disposal considerations

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### 13.1. Waste treatment methods

If possible, waste shall be recovered.

Do not allow the contamination of surface and ground waters. In line with the law regulation in force in Poland, waste may be collected, neutralized, recovered or recycled only by authorised companies, and it may be given only to such companies. In case of doubt, waste disposal procedures shall be discussed and agreed with the local Environment Protection Inspection unit.

**Removal of mixture:** Consider the possibility of putting to use.

**Waste code:** 08 04 09\* - Waste adhesives and sealants containing organic solvents or other hazardous substances.

**Disposal of packaging:** recycling or neutralization of packaging waste shall be done in line with the binding law regulations. Multi-use packaging shall be re-used after cleaning. Waste shall be neutralized in professional authorised incinerating plants or waste neutralization plants. Clean packaging may be disposed of as ordinary packaging waste.

**Waste code:** 15 01 10\* – Packaging containing residues of hazardous substances or contaminated with them.

The following law regulations shall be observed:

The Act of 27 April 2001 on waste (Journal of Laws of 2001 no 62 item 628 as amended).

The Environment Minister Regulation of 27 September 2001 on waste catalogue (Journal of Laws of 2001 no 112, item 1206).

The Act of 11 May 2001 on packaging and packaging waste (Journal of Laws of 2001 no 63, item 638 as amended).

#### **SECTION 14: Transport information**

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This product is subject to regulations on the transport of dangerous goods by road.

Transport by road:

<b>14.1. UN Number</b>	1133
<b>14.2. Proper UN transport name</b>	ADHESIVES CONTAINING FLAMMABLE LIQUIDS
<b>14.3. Hazard class in transport</b>	3
<b>14.4. Packaging group</b>	III
<b>14.5. Environmental risk</b>	unknown
<b>14.6. Special precautions</b>	while manipulating the cargo, use protection means in line with section 8. Protect against ignition sources, sparkles, open flame, high temperature.
<b>14.7. Bulk transport pursuant to schedule II to the convention MARPOL 73/78 and IBC code</b>	no data

#### **SECTION 15: Regulatory information.**

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

The Regulation of the Minister of Health of 21 December 2005 on essential requirements for individual protection measures (Journal of Laws of 2005 No. 259, item 2173).

The Act of 25 February 2011 on chemical substances and their mixtures (Journal of Laws of 2011 no. 63 item 322).

The Regulation of the Minister of Health of 20 April 2012 on labelling containers with hazardous substances, preparations and some chemical preparations (Journal of Laws of 2012 No. 0 item 445).

Directive 1999/45/EC of the European Parliament and Council of 31 May 1999 on harmonising the regulatory, executive and administrative provisions of Member States relating to the classification, labelling and packaging of hazardous substances and mixtures.

Regulation (EC) No 1907/2006 of the European Parliament and Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

Regulation of the European Parliament and Council (EC) no. 1272/2008 of 16 December 2008 on the classification, labelling and packaging of hazardous substances and mixtures amending and repealing directives 67/548/EEC and 1999/45/EC and amending the directive (EC) no. 1907/2006 (Official Journal EU series L 353 of 31 December 2008 as amended).

Directive of the Committee (EC) no. 790/2009 of 10 August 2009 adjusting the Directive of the European Parliament and Council (EC) no. 1272/2008 of 16 December 2008 on the classification, labelling and packaging of substances and mixtures, to the technical-and-scientific progress.

Regulation of the Committee (EC) no. 453/2010 of 20 May 2010 amending the regulation No. 1906/2006 of the European Parliament and Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

European agreement on international transport of dangerous goods by road ADR (in force since January 1, 2005) (Journal of Laws of 2005, No. 178, item 1481).

The Act of 19 August 2011 on transport of dangerous goods by road (Journal of Laws of 2011 no. 227, item 1367 as amended).

The Act of April 16, 2004 on building products (Journal of Laws of 2004 No 92 item 881).

The Regulation of the Infrastructure Minister of August 11, 2004 on the systems of conformity assessment and requirements which notified units participating in conformity assessment should meet and the method of marking building products with the CE mark products (Journal of Laws of 2004 No 195 item 2011).

The Regulation of the Minister of Health of June 11, 2012 on the categories of hazardous substances and mixtures, whose packaging shall be equipped with locks preventing children from opening it and warning information sensed by touch (Journal of Laws of 2005 No. 0, item 688).

Regulation of European Chemicals Agency of 16 June 2014 (ECHA/PR/13/40) concerning substances of very high concern (SVHC)

## **15.2. Chemical safety assessment**

The producer of the mixture did not provide the evaluation of chemical safety.

## ***SECTION 16: Other information.***

### Updates

Sections: 1, 8, 15.

### The explanation of abbreviations and acronyms used in the safety data sheet

PBT – Persistent, Bio-accumulative, Toxic.

vPvB – very Persistent and very Bio-accumulative.

Flam. Liq. 2 – Easily flammable liquid substance of category 2.

H225 – Highly flammable liquid and vapours.

Skin Irrit. 2 – Irritating effect to the skin of category 2.

H315 – Irritating effect to the skin.

Asp. Tox. 1 – Risk caused by aspiration.

H304 – Swallowing and entering the body via respiratory tract may cause death.

Repr. 2 – Harmful effect to fertility of category 2.

H361 – It is suspected to negatively affect fertility or foetus.

STOT SE 3 - Toxic effect on target organs – single exposure STOT single exposure of category 3.

H336 – May cause sleepiness or dizziness.

STOT RE 2 – Toxic effect on target organs – repeated exposure STOT single exposure of category 2.

H373 - May damage organs in result of prolonged or repeated exposure.

Aquatic Chronic 2 – Posing threat for water environment of category 2

H411 – Toxic effect to water organisms with long-term consequences.

Skin Sens. 1 – Allergic to the skin.

H317 - May cause allergenic effect of the skin.

Eye Irrit. 2 – Irritating effect to the eyes of category 2.

H319 – Irritating effect to the eyes.

R11 – Product highly flammable.

R65 – Harmful; may damage lungs in result of swallowing.

Xi – Irritating product.

Repro. Kat. 3 – Harmful effect to reproductivity of category 3.

R36 – Irritating effect to the eyes.

R66 – Repeated exposure may cause drying or cracking of the skin.

NDS – Highest allowed concentration.

NDSch – Highest allowed momentary concentration.

NDSP – Highest allowed cap concentration.

DN(M)EL – Level not causing changes.

DSB – Allowed concentration in biological material.

PNEC – Predicted concentration not causing effect.

LD50 - Lethal Dose 50% when you observe the death of 50% of the animals tested.

LC50 - Lethal Concentration 50% when you observe the death of 50% of the animals tested.

EC50 - Concentration at which you observe 50% decrease of growth or its tempo.

NOEL – The level at which you do not observe any harmful changes.

LOEC – The lowest concentration causing a noticeable result.

NOEC – The highest concentration of the substance at which you do not observe any adverse effects.

UVCB – Substances of unknown or altered composition, complex reaction products or biological materials.

OECD – Organisation of Economic Cooperation and Development.

BCF –Bio-concentration

Kd – Dispersion coefficient.

References to key literature and sources

Safety data sheet of the mixture's ingredients. Data base of the European Commission Joint Research Centre.

Legal regulations.

Recommendations with regard to employee trainings

Prior to commencement of work, the employee shall be trained from within the scope of Work Safety and Hygiene regarding the handling of chemicals and appropriate on the job training. Persons dealing with the transport of hazardous substances shall receive Work Safety and Hygiene training as well as the general on the job training.