

## Do naprawy opony - Tyre puncture repair

Date of compilation: 05/03/2014

Revised: 11/10/2018

Version: 2 (Replaced 1)

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

**1.1 Product identifier:** Do naprawy opony - Tyre puncture repair

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

Relevant uses: Seals and restores pressure in a punctured tyre

Uses advised against: All uses not specified in this section or in section 7.3

**1.3 Details of the supplier of the safety data sheet:**

AUTOLAND Sp. Jawna J.Kisielewski & J. .Moranski  
Ogrodowa 37  
00-873 Warszawa - Poland  
Phone.: 0048-32-47 22 531  
autoland\_hse@autoland.pl  
http://autoland.pl

**1.4 Emergency telephone number:** Europe (+) 44 808 189 0979 code 334276, (+) 1 760 476 3961 code 334276

### SECTION 2: HAZARDS IDENTIFICATION

**2.1 Classification of the substance or mixture:**

**CLP Regulation (EC) No 1272/2008:**

Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.

Aerosol 1: Pressurised container: May burst if heated., H229

Aerosol 1: Flammable aerosols, Category 1, H222

Aquatic Chronic 1: Hazardous to the aquatic environment, long-term hazard, Category 1, H410

Eye Irrit. 2: Eye irritation, Category 2, H319

Lact.: Reproductive toxicity, effects on or via lactation, H362

STOT SE 3: Specific toxicity causing drowsiness and dizziness, single exposure, Category 3, H336

**2.2 Label elements:**

**CLP Regulation (EC) No 1272/2008:**

**Danger**



**Hazard statements:**

Aerosol 1: H229 - Pressurised container: May burst if heated

Aerosol 1: H222 - Extremely flammable aerosol

Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects

Eye Irrit. 2: H319 - Causes serious eye irritation

Lact.: H362 - May cause harm to breast-fed children

STOT SE 3: H336 - May cause drowsiness or dizziness

**Precautionary statements:**

P101: If medical advice is needed, have product container or label at hand

P102: Keep out of reach of children

P210: Keep away from heat/sparks/open flames/hot surfaces. — No smoking

P211: Do not spray on an open flame or other ignition source

P251: Pressurized container: Do not pierce or burn, even after use

P260: Do not breathe spray

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P410+P412: Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F

P501: Dispose of contents/container according to the separated collection system used in your municipality

**Supplementary information:**

EUH066: Repeated exposure may cause skin dryness or cracking

**2.3 Other hazards:**

Product fails to meet PBT/vPvB criteria

## Do naprawy opony - Tyre puncture repair

Date of compilation: 05/03/2014

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Version: 2 (Replaced 1)

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substance:







Non-applicable

#### 3.2 Mixture:

**Chemical description:** Aerosol

**Components:**

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification		Concentration
CAS: 115-10-6 EC: 204-065-8 Index: 603-019-00-8 REACH: 01-2119472128-37-XXXX	<b>Dimethyl ether<sup>(1)</sup></b> ATP CLP00		<b>25 - &lt;50 %</b>
	Regulation 1272/2008	Flam. Gas 1: H220; Press. Gas: H280 - Danger 	
CAS: 123-86-4 EC: 204-658-1 Index: 607-025-00-1 REACH: 01-2119485493-29-XXXX	<b>N-butyl acetate<sup>(2)</sup></b> ATP CLP00		<b>25 - &lt;50 %</b>
	Regulation 1272/2008	Flam. Liq. 3: H226; STOT SE 3: H336; EUH066 - Warning 	
CAS: 78-93-3 EC: 201-159-0 Index: 606-002-00-3 REACH: 01-2119457290-43-XXXX	<b>2-butanone<sup>(2)</sup></b> ATP CLP00		<b>10 - &lt;25 %</b>
	Regulation 1272/2008	Eye Irrit. 2: H319; Flam. Liq. 2: H225; STOT SE 3: H336; EUH066 - Danger 	
CAS: 67-64-1 EC: 200-662-2 Index: 606-001-00-8 REACH: 01-2119471330-49-XXXX	<b>Acetone<sup>(2)</sup></b> ATP CLP00		<b>10 - &lt;25 %</b>
	Regulation 1272/2008	Eye Irrit. 2: H319; Flam. Liq. 2: H225; STOT SE 3: H336; EUH066 - Danger 	
CAS: 85535-85-9 EC: 287-477-0 Index: 602-095-00-X REACH: 01-2119519269-33-XXXX	<b>Alkanes, C14-17, chloro<sup>(2)</sup></b> ATP ATP01		<b>2,5 - &lt;10 %</b>
	Regulation 1272/2008	Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Lact.: H362; EUH066 - Warning 	
CAS: 108-88-3 EC: 203-625-9 Index: 601-021-00-3 REACH: 01-2119471310-51-XXXX	<b>Toluene<sup>(2)</sup></b> Self-classified		<b>1 - &lt;2,5 %</b>
	Regulation 1272/2008	Asp. Tox. 1: H304; Flam. Liq. 2: H225; Repr. 2: H361fd; Skin Irrit. 2: H315; STOT RE 2: H373; STOT SE 3: H336 - Danger 	

<sup>(1)</sup> Substance with a Union workplace exposure limit

<sup>(2)</sup> Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2015/830

To obtain more information on the hazards of the substances consult sections 8, 11, 12, 15 and 16.

### SECTION 4: FIRST AID MEASURES

#### 4.1 Description of first aid measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

##### By inhalation:

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

##### By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

##### By eye contact:

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

##### By ingestion/aspiration:

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

#### 4.2 Most important symptoms and effects, both acute and delayed:

**Do naprawy opony - Tyre puncture repair**

Date of compilation: 05/03/2014

Revised: 11/10/2018

Version: 2 (Replaced 1)

**SECTION 4: FIRST AID MEASURES (continued)**

Acute and delayed effects are indicated in sections 2 and 11.

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

Non-applicable

**SECTION 5: FIREFIGHTING MEASURES****5.1 Extinguishing media:**

If possible use polyvalent powder fire extinguishers (ABC powder), alternatively use foam or carbon dioxide extinguishers (CO<sub>2</sub>). IT IS RECOMMENDED NOT to use tap water as an extinguishing agent.

**5.2 Special hazards arising from the substance or mixture:**

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

**5.3 Advice for firefighters:**

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

**Additional provisions:**

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

**SECTION 6: ACCIDENTAL RELEASE MEASURES****6.1 Personal precautions, protective equipment and emergency procedures:**

Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inert medium. Destroy any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

**6.2 Environmental precautions:**

Avoid at all cost any type of spillage into an aqueous medium. Contain the product absorbed appropriately in hermetically sealed containers. Notify the relevant authority in case of exposure to the general public or the environment.

**6.3 Methods and material for containment and cleaning up:**

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

**6.4 Reference to other sections:**

See sections 8 and 13.

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

A.- Precautions for safe manipulation

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

Avoid the evaporation of the product as it contains flammable substances, which could form flammable vapour/air mixtures in the presence of sources of ignition. Control sources of ignition (mobile phones, sparks,...) and transfer at slow speeds to avoid the creation of electrostatic charges. Avoid splashes and pulverizations. Consult section 10 for conditions and materials that should be avoided.

C.- Technical recommendations to prevent ergonomic and toxicological risks

- CONTINUED ON NEXT PAGE -

## Do naprawy opony - Tyre puncture repair

Date of compilation: 05/03/2014

Revised: 11/10/2018

Version: 2 (Replaced 1)

### SECTION 7: HANDLING AND STORAGE (continued)

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

Due to the danger of this product for the environment it is recommended to use it within an area containing contamination control barriers in case of spillage, as well as having absorbent material in close proximity.

#### 7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

Minimum Temp.: 0 °C

Maximum Temp.: 50 °C

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

#### 7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace (EH40/2005 Workplace exposure limits):

Identification		Environmental limits	
Dimethyl ether CAS: 115-10-6 EC: 204-065-8		WEL (8h)	400 ppm
		WEL (15 min)	500 ppm
N-butyl acetate CAS: 123-86-4 EC: 204-658-1		WEL (8h)	150 ppm
		WEL (15 min)	200 ppm
2-butanone CAS: 78-93-3 EC: 201-159-0		WEL (8h)	200 ppm
		WEL (15 min)	300 ppm
Acetone CAS: 67-64-1 EC: 200-662-2		WEL (8h)	500 ppm
		WEL (15 min)	1500 ppm
Toluene CAS: 108-88-3 EC: 203-625-9		WEL (8h)	50 ppm
		WEL (15 min)	100 ppm

#### DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Dimethyl ether CAS: 115-10-6 EC: 204-065-8	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	1894 mg/m <sup>3</sup>	Non-applicable
N-butyl acetate CAS: 123-86-4 EC: 204-658-1	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	960 mg/m <sup>3</sup>	960 mg/m <sup>3</sup>	480 mg/m <sup>3</sup>	480 mg/m <sup>3</sup>
2-butanone CAS: 78-93-3 EC: 201-159-0	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	1161 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	600 mg/m <sup>3</sup>	Non-applicable
Acetone CAS: 67-64-1 EC: 200-662-2	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	186 mg/kg	Non-applicable
	Inhalation	Non-applicable	2420 mg/m <sup>3</sup>	1210 mg/m <sup>3</sup>	Non-applicable
Alkanes, C14-17, chloro CAS: 85535-85-9 EC: 287-477-0	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	47.9 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	6.7 mg/m <sup>3</sup>	Non-applicable
Toluene CAS: 108-88-3 EC: 203-625-9	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	384 mg/kg	Non-applicable
	Inhalation	384 mg/m <sup>3</sup>	384 mg/m <sup>3</sup>	192 mg/m <sup>3</sup>	192 mg/m <sup>3</sup>

#### DNEL (General population):

- CONTINUED ON NEXT PAGE -

## Do naprawy opony - Tyre puncture repair

Date of compilation: 05/03/2014

Revised: 11/10/2018

Version: 2 (Replaced 1)

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Dimethyl ether CAS: 115-10-6 EC: 204-065-8	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	471 mg/m <sup>3</sup>	Non-applicable
N-butyl acetate CAS: 123-86-4 EC: 204-658-1	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	859.7 mg/m <sup>3</sup>	859.7 mg/m <sup>3</sup>	102.34 mg/m <sup>3</sup>	102.34 mg/m <sup>3</sup>
2-butanone CAS: 78-93-3 EC: 201-159-0	Oral	Non-applicable	Non-applicable	31 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	412 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	106 mg/m <sup>3</sup>	Non-applicable
Acetone CAS: 67-64-1 EC: 200-662-2	Oral	Non-applicable	Non-applicable	62 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	62 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	200 mg/m <sup>3</sup>	Non-applicable
Alkanes, C14-17, chloro CAS: 85535-85-9 EC: 287-477-0	Oral	Non-applicable	Non-applicable	0.58 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	28.75 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	2 mg/m <sup>3</sup>	Non-applicable
Toluene CAS: 108-88-3 EC: 203-625-9	Oral	Non-applicable	Non-applicable	8.13 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	226 mg/kg	Non-applicable
	Inhalation	226 mg/m <sup>3</sup>	226 mg/m <sup>3</sup>	56.5 mg/m <sup>3</sup>	56.5 mg/m <sup>3</sup>

#### PNEC:

Identification					
Dimethyl ether CAS: 115-10-6 EC: 204-065-8	STP	160 mg/L	Fresh water	0.155 mg/L	
	Soil	0.045 mg/kg	Marine water	0.016 mg/L	
	Intermittent	1.549 mg/L	Sediment (Fresh water)	0.681 mg/kg	
	Oral	Non-applicable	Sediment (Marine water)	0.069 mg/kg	
N-butyl acetate CAS: 123-86-4 EC: 204-658-1	STP	35.6 mg/L	Fresh water	0.18 mg/L	
	Soil	0.0903 mg/kg	Marine water	0.018 mg/L	
	Intermittent	0.36 mg/L	Sediment (Fresh water)	0.981 mg/kg	
	Oral	Non-applicable	Sediment (Marine water)	0.0981 mg/kg	
2-butanone CAS: 78-93-3 EC: 201-159-0	STP	709 mg/L	Fresh water	55.8 mg/L	
	Soil	22.5 mg/kg	Marine water	55.8 mg/L	
	Intermittent	55.8 mg/L	Sediment (Fresh water)	284.74 mg/kg	
	Oral	1000 g/kg	Sediment (Marine water)	284.7 mg/kg	
Acetone CAS: 67-64-1 EC: 200-662-2	STP	100 mg/L	Fresh water	10.6 mg/L	
	Soil	29.5 mg/kg	Marine water	1.06 mg/L	
	Intermittent	21 mg/L	Sediment (Fresh water)	30.4 mg/kg	
	Oral	Non-applicable	Sediment (Marine water)	3.04 mg/kg	
Alkanes, C14-17, chloro CAS: 85535-85-9 EC: 287-477-0	STP	80 mg/L	Fresh water	0.001 mg/L	
	Soil	11.9 mg/kg	Marine water	0.0002 mg/L	
	Intermittent	Non-applicable	Sediment (Fresh water)	13 mg/kg	
	Oral	10 g/kg	Sediment (Marine water)	2.6 mg/kg	
Toluene CAS: 108-88-3 EC: 203-625-9	STP	13.61 mg/L	Fresh water	0.68 mg/L	
	Soil	2.89 mg/kg	Marine water	0.68 mg/L	
	Intermittent	0.68 mg/L	Sediment (Fresh water)	16.39 mg/kg	
	Oral	Non-applicable	Sediment (Marine water)	16.39 mg/kg	

#### 8.2 Exposure controls:

##### A.- General security and hygiene measures in the work place

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Directive 89/686/EC. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1.

All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

- CONTINUED ON NEXT PAGE -

## Do naprawy opony - Tyre puncture repair

Date of compilation: 05/03/2014

Revised: 11/10/2018

Version: 2 (Replaced 1)

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

#### B.- Respiratory protection

The use of protection equipment will be necessary if a mist forms or if the occupational exposure limits are exceeded.

#### C.- Specific protection for the hands

Non-applicable

#### D.- Ocular and facial protection

Non-applicable

#### E.- Body protection

Non-applicable

#### F.- Additional emergency measures

It is not necessary to take additional emergency measures.

#### Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

#### Volatile organic compounds:

With regard to Directive 2010/75/EU, this product has the following characteristics:

V.O.C. (Supply):	95 % weight
V.O.C. density at 20 °C:	Non-applicable
Average carbon number:	4.5
Average molecular weight:	84.87 g/mol

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

##### Appearance:

Physical state at 20 °C:	Aerosol
Appearance:	Fluid
Colour:	<input type="checkbox"/> White
Odour:	Characteristic
Odour threshold:	Non-applicable *

##### Volatility:

Boiling point at atmospheric pressure:	-25 °C (Propellant)
Vapour pressure at 20 °C:	Non-applicable *
Vapour pressure at 50 °C:	Non-applicable *
Evaporation rate at 20 °C:	Non-applicable *

##### Product description:

Density at 20 °C:	Non-applicable *
Relative density at 20 °C:	Non-applicable *
Dynamic viscosity at 20 °C:	Non-applicable *
Kinematic viscosity at 20 °C:	Non-applicable *
Kinematic viscosity at 40 °C:	Non-applicable *
Concentration:	Non-applicable *
pH:	Non-applicable *
Vapour density at 20 °C:	Non-applicable *
Partition coefficient n-octanol/water 20 °C:	Non-applicable *

\*Not relevant due to the nature of the product, not providing information property of its hazards.

- CONTINUED ON NEXT PAGE -

## Do naprawy opony - Tyre puncture repair

Date of compilation: 05/03/2014

Revised: 11/10/2018

Version: 2 (Replaced 1)

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Solubility in water at 20 °C:	Non-applicable *
Solubility properties:	Non-applicable *
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
Recipient pressure:	Non-applicable *
Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *
<b>Flammability:</b>	
Flash Point:	-41 °C (Propellant)
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	240 °C (Propellant)
Lower flammability limit:	Non-applicable *
Upper flammability limit:	Non-applicable *
<b>Explosive:</b>	
Lower explosive limit:	Non-applicable *
Upper explosive limit:	Non-applicable *
<b>9.2 Other information:</b>	
Surface tension at 20 °C:	Non-applicable *
Refraction index:	Non-applicable *

\*Not relevant due to the nature of the product, not providing information property of its hazards.

### SECTION 10: STABILITY AND REACTIVITY

#### 10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

#### 10.2 Chemical stability:

Chemically stable under the conditions of storage, handling and use.

#### 10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

#### 10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Risk of combustion	Avoid direct impact	Not applicable

#### 10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Avoid direct impact	Not applicable	Avoid alkalis or strong bases

#### 10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO<sub>2</sub>), carbon monoxide and other organic compounds.

### SECTION 11: TOXICOLOGICAL INFORMATION

#### 11.1 Information on toxicological effects:

The experimental information related to the toxicological properties of the product itself is not available

Contains glycols. It is recommended not to breathe the vapours for prolonged periods of time due to the possibility of effects that are hazardous to the health.

- CONTINUED ON NEXT PAGE -



## Do naprawy opony - Tyre puncture repair

Date of compilation: 05/03/2014

Revised: 11/10/2018

Version: 2 (Replaced 1)

### SECTION 11: TOXICOLOGICAL INFORMATION (continued)

#### Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

##### A- Ingestion (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met. However, it does contain substances classified as dangerous for this effect. For more information see section 3.

##### B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

##### C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous for skin contact. For more information see section 3.
- Contact with the eyes: Produces eye damage after contact.

##### D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.  
IARC: Toluene (3)
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Reproductive toxicity: May cause harm to breast-fed children

##### E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensitising effects. For more information see section 3.
- Cutaneous: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

##### F- Specific target organ toxicity (STOT) - single exposure:

Exposure in high concentration can interfere with the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion, and in serious cases, loss of consciousness.

##### G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met. However, it does contain substances which are classified as dangerous due to repetitive exposure. For more information see section 3.
- Skin: Repeated exposure may cause skin dryness or cracking

##### H- Aspiration hazard:

Based on available data, the classification criteria are not met. However, it does contain substances classified as dangerous for this effect. For more information see section 3.

#### Other information:

Non-applicable

#### Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
N-butyl acetate CAS: 123-86-4 EC: 204-658-1	LD50 oral	12789 mg/kg	Rat
	LD50 dermal	14112 mg/kg	Rabbit
	LC50 inhalation	23.4 mg/L (4 h)	Rat
2-butanone CAS: 78-93-3 EC: 201-159-0	LD50 oral	4000 mg/kg	Rat
	LD50 dermal	6400 mg/kg	Rabbit
	LC50 inhalation	23.5 mg/L (4 h)	Rat



## Do naprawy opony - Tyre puncture repair

Date of compilation: 05/03/2014

Revised: 11/10/2018

Version: 2 (Replaced 1)

### SECTION 11: TOXICOLOGICAL INFORMATION (continued)

Identification	Acute toxicity		Genus
Acetone CAS: 67-64-1 EC: 200-662-2	LD50 oral	5800 mg/kg	Rat
	LD50 dermal	7426 mg/kg	Rabbit
	LC50 inhalation	76 mg/L (4 h)	Rat
Toluene CAS: 108-88-3 EC: 203-625-9	LD50 oral	5580 mg/kg	Rat
	LD50 dermal	12124 mg/kg	Rat
	LC50 inhalation	28.1 mg/L (4 h)	Rat
Dimethyl ether CAS: 115-10-6 EC: 204-065-8	LD50 oral	Non-applicable	
	LD50 dermal	Non-applicable	
	LC50 inhalation	308.5 mg/L (4 h)	Rat

### SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

#### 12.1 Toxicity:

Identification	Acute toxicity		Species	Genus
N-butyl acetate CAS: 123-86-4 EC: 204-658-1	LC50	62 mg/L (96 h)	Leuciscus idus	Fish
	EC50	73 mg/L (24 h)	Daphnia magna	Crustacean
	EC50	675 mg/L (72 h)	Scenedesmus subspicatus	Algae
2-butanone CAS: 78-93-3 EC: 201-159-0	LC50	3220 mg/L (96 h)	Pimephales promelas	Fish
	EC50	5091 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	4300 mg/L (168 h)	Scenedesmus quadricauda	Algae
Acetone CAS: 67-64-1 EC: 200-662-2	LC50	5540 mg/L (96 h)	Oncorhynchus mykiss	Fish
	EC50	23.5 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	3400 mg/L (48 h)	Chlorella pyrenoidosa	Algae
Alkanes, C14-17, chloro CAS: 85535-85-9 EC: 287-477-0	LC50	0.1 - 1 mg/L (96 h)		Fish
	EC50	0.1 - 1 mg/L		Crustacean
	EC50	0.1 - 1 mg/L		Algae
Toluene CAS: 108-88-3 EC: 203-625-9	LC50	13 mg/L (96 h)	Carassius auratus	Fish
	EC50	11.5 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	125 mg/L (48 h)	Scenedesmus subspicatus	Algae

#### 12.2 Persistence and degradability:

Identification	Degradability		Biodegradability	
N-butyl acetate CAS: 123-86-4 EC: 204-658-1	BOD5	Non-applicable	Concentration	Non-applicable
	COD	Non-applicable	Period	5 days
	BOD5/COD	0.79	% Biodegradable	84 %
2-butanone CAS: 78-93-3 EC: 201-159-0	BOD5	2.03 g O2/g	Concentration	Non-applicable
	COD	2.31 g O2/g	Period	20 days
	BOD5/COD	0.88	% Biodegradable	89 %
Acetone CAS: 67-64-1 EC: 200-662-2	BOD5	Non-applicable	Concentration	100 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	0.96	% Biodegradable	96 %
Toluene CAS: 108-88-3 EC: 203-625-9	BOD5	2.5 g O2/g	Concentration	100 mg/L
	COD	Non-applicable	Period	14 days
	BOD5/COD	Non-applicable	% Biodegradable	100 %

#### 12.3 Bioaccumulative potential:

Identification	Bioaccumulation potential	
N-butyl acetate CAS: 123-86-4 EC: 204-658-1	BCF	4
	Pow Log	1.78
	Potential	Low

## Do naprawy opony - Tyre puncture repair

Date of compilation: 05/03/2014

Revised: 11/10/2018

Version: 2 (Replaced 1)

### SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Bioaccumulation potential	
2-butanone CAS: 78-93-3 EC: 201-159-0	BCF	3
	Pow Log	0.29
	Potential	Low
Acetone CAS: 67-64-1 EC: 200-662-2	BCF	1
	Pow Log	-0.24
	Potential	Low
Toluene CAS: 108-88-3 EC: 203-625-9	BCF	13
	Pow Log	2.73
	Potential	Low

#### 12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
Dimethyl ether CAS: 115-10-6 EC: 204-065-8	Koc	Non-applicable	Henry	Non-applicable
	Conclusion	Non-applicable	Dry soil	Non-applicable
	Surface tension	1.136E-2 N/m (25 °C)	Moist soil	Non-applicable
N-butyl acetate CAS: 123-86-4 EC: 204-658-1	Koc	Non-applicable	Henry	Non-applicable
	Conclusion	Non-applicable	Dry soil	Non-applicable
	Surface tension	2.478E-2 N/m (25 °C)	Moist soil	Non-applicable
2-butanone CAS: 78-93-3 EC: 201-159-0	Koc	30	Henry	5.77 Pa·m <sup>3</sup> /mol
	Conclusion	Very High	Dry soil	Yes
	Surface tension	2.396E-2 N/m (25 °C)	Moist soil	Yes
Acetone CAS: 67-64-1 EC: 200-662-2	Koc	1	Henry	2.93 Pa·m <sup>3</sup> /mol
	Conclusion	Very High	Dry soil	Yes
	Surface tension	2.304E-2 N/m (25 °C)	Moist soil	Yes
Toluene CAS: 108-88-3 EC: 203-625-9	Koc	178	Henry	672.8 Pa·m <sup>3</sup> /mol
	Conclusion	Moderate	Dry soil	Yes
	Surface tension	2.793E-2 N/m (25 °C)	Moist soil	Yes

#### 12.5 Results of PBT and vPvB assessment:

Product fails to meet PBT/vPvB criteria

#### 12.6 Other adverse effects:

Not described

### SECTION 13: DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
16 05 04*	gases in pressure containers (including halons) containing hazardous substances	Dangerous

#### Type of waste (Regulation (EU) No 1357/2014):

HP3 Flammable, HP14 Ecotoxic, HP4 Irritant — skin irritation and eye damage, HP5 Specific Target Organ Toxicity (STOT) /Aspiration Toxicity

#### Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC, The Waste Regulations 2011, 2011 No. 988). As under 15 01 (2014/955/EU) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommended disposal down the drain. See paragraph 6.2.

#### Regulations related to waste management:

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

\*\* Changes with regards to the previous version

- CONTINUED ON NEXT PAGE -

**Do naprawy opony - Tyre puncture repair**

Date of compilation: 05/03/2014

Revised: 11/10/2018

Version: 2 (Replaced 1)

**SECTION 14: TRANSPORT INFORMATION \*\***
**Transport of dangerous goods by land:**

With regard to ADR 2019 and RID 2019:



- |   |                     |
|---|---------------------|
| <b>14.1 UN number:</b>  | UN1950              |
| <b>14.2 UN proper shipping name:</b>  | AEROSOLS, flammable |
| <b>14.3 Transport hazard class(es):</b>   | 2                   |
| Labels:   | 2.1                 |
| <b>14.4 Packing group:</b>  | N/A                 |
| <b>14.5 Environmental hazards:</b>  | Yes                 |
| <b>14.6 Special precautions for user</b>  |                     |
| Special regulations:  | 190, 327, 344, 625  |
| Tunnel restriction code:  | D                   |
| Physico-Chemical properties:  | see section 9       |
| Limited quantities:   | 1 L                 |
| <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:</b> | Non-applicable      |

**Transport of dangerous goods by sea:**

With regard to IMDG 38-16:



- |   |                             |
|---|-----------------------------|
| <b>14.1 UN number:</b>  | UN1950                      |
| <b>14.2 UN proper shipping name:</b>  | AEROSOLS, flammable         |
| <b>14.3 Transport hazard class(es):</b>   | 2                           |
| Labels:   | 2.1                         |
| <b>14.4 Packing group:</b>  | N/A                         |
| <b>14.5 Environmental hazards:</b>  | Yes                         |
| <b>14.6 Special precautions for user</b>  |                             |
| Special regulations:  | 63, 959, 190, 277, 327, 344 |
| EmS Codes:  | F-D, S-U                    |
| Physico-Chemical properties:  | see section 9               |
| Limited quantities:   | 1 L                         |
| Segregation group:  | Non-applicable              |
| <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:</b> | Non-applicable              |

**Transport of dangerous goods by air:**

With regard to IATA/ICAO 2019:



- |   |                     |
|---|---------------------|
| <b>14.1 UN number:</b>  | UN1950              |
| <b>14.2 UN proper shipping name:</b>  | AEROSOLS, flammable |
| <b>14.3 Transport hazard class(es):</b>   | 2                   |
| Labels:   | 2.1                 |
| <b>14.4 Packing group:</b>  | N/A                 |
| <b>14.5 Environmental hazards:</b>  | Yes                 |
| <b>14.6 Special precautions for user</b>  |                     |
| Physico-Chemical properties:  | see section 9       |
| <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:</b> | Non-applicable      |

\*\* Changes with regards to the previous version

**SECTION 15: REGULATORY INFORMATION**
**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:**

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

- CONTINUED ON NEXT PAGE -

## Do naprawy opony - Tyre puncture repair

Date of compilation: 05/03/2014

Revised: 11/10/2018

Version: 2 (Replaced 1)

### SECTION 15: REGULATORY INFORMATION (continued)

Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: Non-applicable

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

#### Seveso III:

Section	Description	Lower-tier requirements	Upper-tier requirements
P3a	FLAMMABLE AEROSOLS	150	500
E1	ENVIRONMENTAL HAZARDS	100	200

#### Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc ....):

Contains more than 0.1 % of Toluene by weight. Shall not be placed on the market, or used, as a substance or in mixtures in a concentration equal to or greater than 0,1 % by weight where the substance or mixture is used in adhesives or spray paints intended for supply to the general public.

Regulation (EU) No 98/2013 of the European Parliament and of the Council of 15 January 2013 on the marketing and use of explosives precursors: Contains Acetone. Product under the provisions of Article 9

Shall not be used in:

- ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
- tricks and jokes,
- games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

#### Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

#### Other legislation:

The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (CDG 2009), SI 2009 No 1348  
The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment (Amendment) Regulations 2011, 2011 No. 1885  
Control of Substances Hazardous to Health Regulations 2002 (as amended)

EH40/2005 Workplace exposure limits

The Waste Regulations 2011, 2011 No. 988

Council Directive 75/324/EEC of 20 May 1975 on the approximation of the laws of the Member States relating to aerosol dispensers

Commission Directive 94/1/EC of 6 January 1994 adapting some technicalities of Council Directive 75/324/EEC on the approximation of the laws of the relating Member States to aerosol dispensers

Commission Directive 2008/47/EC of 8 April 2008 amending, for the purposes of adapting to technical progress, Council Directive 75/324/EEC on the approximation of the laws of the Member States relating to aerosol dispensers

Commission Directive 2013/10/EU of 19 March 2013 amending Council Directive 75/324/EEC on the approximation of the laws of the Member States relating to aerosol dispensers in order to adapt its labelling provisions to Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures

COMMISSION DIRECTIVE (EU) 2016/2037 of 21 November 2016 amending Council Directive 75/324/EEC as regards the maximum allowable pressure of aerosol dispensers and to adapt its labelling provisions to Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures

#### 15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

### SECTION 16: OTHER INFORMATION

#### Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (Regulation (EC) No 2015/830)

#### Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:

TRANSPORT INFORMATION (SECTION 14):

- UN number
- Packing group

#### Texts of the legislative phrases mentioned in section 2:

**Do naprawy opony - Tyre puncture repair**

Date of compilation: 05/03/2014

Revised: 11/10/2018

Version: 2 (Replaced 1)

**SECTION 16: OTHER INFORMATION (continued)**

H336: May cause drowsiness or dizziness  
H362: May cause harm to breast-fed children  
H229: Pressurised container: May burst if heated  
H222: Extremely flammable aerosol  
H319: Causes serious eye irritation  
H410: Very toxic to aquatic life with long lasting effects

**Texts of the legislative phrases mentioned in section 3:**

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

**CLP Regulation (EC) No 1272/2008:**

Aquatic Acute 1: H400 - Very toxic to aquatic life  
Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects  
Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways  
Eye Irrit. 2: H319 - Causes serious eye irritation  
Flam. Gas 1: H220 - Extremely flammable gas  
Flam. Liq. 2: H225 - Highly flammable liquid and vapour  
Flam. Liq. 3: H226 - Flammable liquid and vapour  
Lact.: H362 - May cause harm to breast-fed children  
Press. Gas: H280 - Contains gas under pressure, may explode if heated  
Repr. 2: H361fd - Suspected to impair fertility. Suspected to damage the foetus  
Skin Irrit. 2: H315 - Causes skin irritation  
STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure  
STOT SE 3: H336 - May cause drowsiness or dizziness

**Advice related to training:**

Minimal training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

**Principal bibliographical sources:**

<http://echa.europa.eu>  
<http://eur-lex.europa.eu>

**Abbreviations and acronyms:**

ADR: European agreement concerning the international carriage of dangerous goods by road  
IMDG: International maritime dangerous goods code  
IATA: International Air Transport Association  
ICAO: International Civil Aviation Organisation  
COD: Chemical Oxygen Demand  
BOD5: 5-day biochemical oxygen demand  
BCF: Bioconcentration factor  
LD50: Lethal Dose 50  
LC50: Lethal Concentration 50  
EC50: Effective concentration 50  
Log-POW: Octanol-water partition coefficient  
Koc: Partition coefficient of organic carbon

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -