

## Safety data sheet

This SDS is an English translation of Regulation (EU) n° 2015/830, without any country-specific legislation


**DS-210**



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

- 1.1 Product identifier:** DS-210  
**Other means of identification:**  
Non-applicable
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**  
Relevant uses: Remover for adhesive tape residues  
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:**  
DUROSTICK SA  
PATIMA KOROREMI  
193 00 ASPROPIRGOS, ATTICA - GREECE  
Phone.: 211 60 03 500-599 - Fax: 210 55 99 612  
info@durostick.gr  
www.durostick.gr
- 1.4 Emergency telephone number:**

### 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.  
Aquatic Acute 1: Hazardous to the aquatic environment, acute hazard, Category 1, H400  
Aquatic Chronic 3: Hazardous to the aquatic environment, long-term hazard, Category 3, H412  
Asp. Tox. 1: Aspiration hazard, Category 1, H304  
Eye Irrit. 2: Eye irritation, Category 2, H319  
Flam. Liq. 3: Flammable liquids, Category 3, H226  
Skin Irrit. 2: Skin irritation, Category 2, H315  
Skin Sens. 1: Sensitisation, skin, Category 1, H317  
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:**  
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. Liq. 3: H226 - Flammable liquid and vapour.  
Skin Irrit. 2: H315 - Causes skin irritation.  
Skin Sens. 1: H317 - May cause an allergic skin reaction.  
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, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P264: Wash thoroughly after handling.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P370+P378: In case of fire: Use ABC powder extinguisher to extinguish.  
P501: Dispose of contents/container according to the separated collection system used in your municipality.
- Substances that contribute to the classification**  
d-limonene; propan-2-ol

- CONTINUED ON NEXT PAGE -

## Safety data sheet

This SDS is an English translation of Regulation (EU) n° 2015/830, without any country-specific legislation

**DS-210**



### SECTION 2: HAZARDS IDENTIFICATION (continued)

#### 2.3 Other hazards:

Product fails to meet PBT/vPvB criteria

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substance:

Non-applicable

#### 3.2 Mixture:

**Chemical description:** Mixture of Solvent/s

#### Components:

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

Identification	Chemical name/Classification	Concentration
CAS: 5989-27-5 EC: 227-813-5 Index: 601-029-00-7 REACH: 01-2119529223-47-XXXX	<b>d-limonene<sup>(1)</sup></b> Self-classified	<b>50 - &lt;75 %</b>
	Regulation 1272/2008 Aquatic Acute 1: H400; Aquatic Chronic 3: H412; Asp. Tox. 1: H304; Flam. Liq. 3: H226; Skin Irrit. 2: H315; Skin Sens. 1: H317 - Danger	
CAS: 67-63-0 EC: 200-661-7 Index: 603-117-00-0 REACH: 01-2119457558-25-XXXX	<b>propan-2-ol<sup>(1)</sup></b> ATP CLP00	<b>25 - &lt;50 %</b>
	Regulation 1272/2008 Eye Irrit. 2: H319; Flam. Liq. 2: H225; STOT SE 3: H336 - Danger	
CAS: 111-76-2 EC: 203-905-0 Index: 603-014-00-0 REACH: 01-2119475108-36-XXXX	<b>2-butoxyethanol<sup>(1)</sup></b> ATP CLP00	<b>1 - &lt;2,5 %</b>
	Regulation 1272/2008 Acute Tox. 4: H302+H312+H332; Eye Irrit. 2: H319; Skin Irrit. 2: H315 - Warning	

<sup>(1)</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 11, 12 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:

Request medical assistance immediately, showing the SDS of this product. Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. In the case of loss of consciousness do not administer anything orally unless supervised by a doctor. Rinse out the mouth and throat, as they may have been affected during ingestion. Keep the person affected at rest.

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

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

- CONTINUED ON NEXT PAGE -



## SECTION 5: FIREFIGHTING MEASURES

**5.1 Extinguishing media:****Suitable extinguishing media:**

If possible use polyvalent powder fire extinguishers (ABC powder), alternatively use foam or carbon dioxide extinguishers (CO<sub>2</sub>).

**Unsuitable extinguishing media:**

IT IS RECOMMENDED NOT to use full jet 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

Transfer in well ventilated areas, preferably through localized extraction. Fully control sources of ignition (mobile phones, sparks,...) and ventilate during cleaning operations. Avoid the existence of dangerous atmospheres inside containers, applying inertization systems where possible. Transfer at a slow speed to avoid the creation of electrostatic charges. Against the possibility of electrostatic charges: ensure a perfect equipotential connection, always use groundings, do not wear work clothes made of acrylic fibres, preferably wearing cotton clothing and conductive footwear. Comply with the essential security requirements for equipment and systems defined in Directive 2014/34/EC (ATEX 100) and with the minimum requirements for protecting the security and health of workers under the selection criteria of Directive 1999/92/EC (ATEX 137). Consult section 10 for conditions and materials that should be avoided.

## C.- Technical recommendations to prevent ergonomic and toxicological risks

- CONTINUED ON NEXT PAGE -

Safety data sheet

This SDS is an English translation of Regulation (EU) n° 2015/830, without any country-specific legislation

DS-210



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.: 5 °C
- Maximum Temp.: 30 °C
- Maximum time: 36 Months

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 (European OEL, not country-specific legislation):

Directive (EU) 2000/39, Directive 2004/37/EC, Directive (EU) 2006/15, Directive (EU) 2009/161, Directive (EU) 2017/164, Directive (EU) 2019/1831:

Identification	Occupational exposure limits		
	IOELV (8h)	20 ppm	98 mg/m <sup>3</sup>
2-butoxyethanol CAS: 111-76-2 EC: 203-905-0	IOELV (STEL)	50 ppm	246 mg/m <sup>3</sup>

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
d-limonene CAS: 5989-27-5 EC: 227-813-5	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	9,5 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	66,7 mg/m <sup>3</sup>	Non-applicable
propan-2-ol CAS: 67-63-0 EC: 200-661-7	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	888 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	500 mg/m <sup>3</sup>	Non-applicable
2-butoxyethanol CAS: 111-76-2 EC: 203-905-0	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	89 mg/kg	Non-applicable	125 mg/kg	Non-applicable
	Inhalation	1091 mg/m <sup>3</sup>	246 mg/m <sup>3</sup>	98 mg/m <sup>3</sup>	Non-applicable

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
d-limonene CAS: 5989-27-5 EC: 227-813-5	Oral	Non-applicable	Non-applicable	4,8 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	4,8 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	16,6 mg/m <sup>3</sup>	Non-applicable
propan-2-ol CAS: 67-63-0 EC: 200-661-7	Oral	Non-applicable	Non-applicable	26 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	319 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	89 mg/m <sup>3</sup>	Non-applicable
2-butoxyethanol CAS: 111-76-2 EC: 203-905-0	Oral	Non-applicable	Non-applicable	6,3 mg/kg	Non-applicable
	Dermal	89 mg/kg	Non-applicable	75 mg/kg	Non-applicable
	Inhalation	426 mg/m <sup>3</sup>	147 mg/m <sup>3</sup>	59 mg/m <sup>3</sup>	Non-applicable

PNEC:

- CONTINUED ON NEXT PAGE -

Safety data sheet

This SDS is an English translation of Regulation (EU) n° 2015/830, without any country-specific legislation

DS-210



SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification				
d-limonene CAS: 5989-27-5 EC: 227-813-5	STP	1,8 mg/L	Fresh water	0,014 mg/L
	Soil	0,763 mg/kg	Marine water	0,0014 mg/L
	Intermittent	Non-applicable	Sediment (Fresh water)	3,85 mg/kg
	Oral	0,133 g/kg	Sediment (Marine water)	0,385 mg/kg
propan-2-ol CAS: 67-63-0 EC: 200-661-7	STP	2251 mg/L	Fresh water	140,9 mg/L
	Soil	28 mg/kg	Marine water	140,9 mg/L
	Intermittent	140,9 mg/L	Sediment (Fresh water)	552 mg/kg
	Oral	0,16 g/kg	Sediment (Marine water)	552 mg/kg
2-butoxyethanol CAS: 111-76-2 EC: 203-905-0	STP	463 mg/L	Fresh water	8,8 mg/L
	Soil	2,33 mg/kg	Marine water	0,88 mg/L
	Intermittent	26,4 mg/L	Sediment (Fresh water)	34,6 mg/kg
	Oral	0,02 g/kg	Sediment (Marine water)	3,46 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 Regulation (EU) 2016/425. 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.

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



Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	Protective gloves against minor risks			Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using CE III gloves in line with standards EN 420:2004+A1:2010 and EN ISO 374-1:2016+A1:2018

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.



D.- Ocular and facial protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.		EN 166:2002 EN ISO 4007:2018	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

E.- Body protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
	Work clothing			Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 6529:2013, EN ISO 6530:2005, EN ISO 13688:2013, EN 464:1994.
	Anti-slip work shoes		EN ISO 20347:2012	Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 20345:2012 y EN 13832-1:2007

F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

- CONTINUED ON NEXT PAGE -

## Safety data sheet

This SDS is an English translation of Regulation (EU) n° 2015/830, without any country-specific legislation

**DS-210**



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

#### 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

### 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:	Liquid
Appearance:	Transparent
Colour:	Colourless
Odour:	Characteristic
Odour threshold:	Non-applicable *

##### Volatility:

Boiling point at atmospheric pressure:	121 °C
Vapour pressure at 20 °C:	3132 Pa
Vapour pressure at 50 °C:	15771,58 Pa (15,77 kPa)
Evaporation rate at 20 °C:	Non-applicable *

##### Product description:

Density at 20 °C:	820,8 kg/m <sup>3</sup>
Relative density at 20 °C:	0,821
Dynamic viscosity at 20 °C:	1,65 cP
Kinematic viscosity at 20 °C:	2,01 cSt
Kinematic viscosity at 40 °C:	<20,5 cSt
Concentration:	Non-applicable *
pH:	Non-applicable *
Vapour density at 20 °C:	Non-applicable *
Partition coefficient n-octanol/water 20 °C:	Non-applicable *
Solubility in water at 20 °C:	
Solubility properties:	Non-applicable *
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *

##### Flammability:

Flash Point:	25 °C
Heat of combustion:	Non-applicable *
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	237 °C

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

- CONTINUED ON NEXT PAGE -

## Safety data sheet

This SDS is an English translation of Regulation (EU) n° 2015/830, without any country-specific legislation

**DS-210**



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

Lower flammability limit:	Not available
Upper flammability limit:	Not available
<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 .

##### **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, however, it contains substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met. However, it contains 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):

- CONTINUED ON NEXT PAGE -



## Safety data sheet

This SDS is an English translation of Regulation (EU) n° 2015/830, without any country-specific legislation

**DS-210**



### SECTION 11: TOXICOLOGICAL INFORMATION (continued)

- Contact with the skin: Produces skin inflammation.
- 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: d-limonene (3); propan-2-ol (3); 2-butoxyethanol (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: 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.
- 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: Prolonged contact with the skin can result in episodes of allergic contact dermatitis.
- 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, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
  - Skin: 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.
- H- Aspiration hazard:
 

The consumption of a considerable dose can cause pulmonary damage.

**Other information:**

Non-applicable

**Specific toxicology information on the substances:**

Identification	Acute toxicity		Genus
d-limonene CAS: 5989-27-5 EC: 227-813-5	LD50 oral	4400 mg/kg	Rat
	LD50 dermal	5100 mg/kg	Rabbit
	LC50 inhalation	Non-applicable	
propan-2-ol CAS: 67-63-0 EC: 200-661-7	LD50 oral	5280 mg/kg	Rat
	LD50 dermal	12800 mg/kg	Rat
	LC50 inhalation	72,6 mg/L (4 h)	Rat
2-butoxyethanol CAS: 111-76-2 EC: 203-905-0	LD50 oral	1414 mg/kg	Rat
	LD50 dermal	1060 mg/kg	Rabbit
	LC50 inhalation	11 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
d-limonene CAS: 5989-27-5 EC: 227-813-5	LC50	0.702 mg/L (96 h)	Pimephales promelas	Fish
	EC50	0.577 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	Non-applicable		
propan-2-ol CAS: 67-63-0 EC: 200-661-7	LC50	9640 mg/L (96 h)	Pimephales promelas	Fish
	EC50	13299 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	1000 mg/L (72 h)	Scenedesmus subspicatus	Algae
2-butoxyethanol CAS: 111-76-2 EC: 203-905-0	LC50	1490 mg/L (96 h)	Lepomis macrochirus	Fish
	EC50	1815 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	911 mg/L (72 h)	Pseudokirchneriella subcapitata	Algae

- CONTINUED ON NEXT PAGE -



Safety data sheet

This SDS is an English translation of Regulation (EU) n° 2015/830, without any country-specific legislation

DS-210



SECTION 12: ECOLOGICAL INFORMATION (continued)

12.2 Persistence and degradability:

Identification	Degradability		Biodegradability	
d-limonene CAS: 5989-27-5 EC: 227-813-5	BOD5	Non-applicable	Concentration	Non-applicable
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	100 %
propan-2-ol CAS: 67-63-0 EC: 200-661-7	BOD5	1,19 g O2/g	Concentration	100 mg/L
	COD	2,23 g O2/g	Period	14 days
	BOD5/COD	0,53	% Biodegradable	86 %
2-butoxyethanol CAS: 111-76-2 EC: 203-905-0	BOD5	0,71 g O2/g	Concentration	100 mg/L
	COD	2,2 g O2/g	Period	14 days
	BOD5/COD	0,32	% Biodegradable	96 %

12.3 Bioaccumulative potential:

Identification	Bioaccumulation potential	
d-limonene CAS: 5989-27-5 EC: 227-813-5	BCF	660
	Pow Log	4.83
	Potential	High
propan-2-ol CAS: 67-63-0 EC: 200-661-7	BCF	3
	Pow Log	0.05
	Potential	Low
2-butoxyethanol CAS: 111-76-2 EC: 203-905-0	BCF	3
	Pow Log	0.83
	Potential	Low

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
d-limonene CAS: 5989-27-5 EC: 227-813-5	Koc	6324	Henry	Non-applicable
	Conclusion	Immobile	Dry soil	Non-applicable
	Surface tension	2,675E-2 N/m (25 °C)	Moist soil	Non-applicable
propan-2-ol CAS: 67-63-0 EC: 200-661-7	Koc	1.5	Henry	8,207E-1 Pa·m <sup>3</sup> /mol
	Conclusion	Very High	Dry soil	Yes
	Surface tension	2,24E-2 N/m (25 °C)	Moist soil	Yes
2-butoxyethanol CAS: 111-76-2 EC: 203-905-0	Koc	8	Henry	1,621E-1 Pa·m <sup>3</sup> /mol
	Conclusion	Very High	Dry soil	No
	Surface tension	2,729E-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)
20 01 29*	detergents containing hazardous substances	Dangerous

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

HP14 Ecotoxic, HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity, HP3 Flammable, HP13 Sensitising, HP4 Irritant — skin irritation and eye damage

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). As under 15 01 (2014/955/EC) 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.

- CONTINUED ON NEXT PAGE -

Safety data sheet

This SDS is an English translation of Regulation (EU) n° 2015/830, without any country-specific legislation

DS-210



SECTION 13: DISPOSAL CONSIDERATIONS (continued)

**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

SECTION 14: TRANSPORT INFORMATION

**Transport of dangerous goods by land:**

With regard to ADR 2021 and RID 2021:



- 14.1 UN number:** UN1993
- 14.2 UN proper shipping name:** FLAMMABLE LIQUID, N.O.S. (d-limonene)
- 14.3 Transport hazard class(es):** 3  
Labels: 3
- 14.4 Packing group:** III
- 14.5 Environmental hazards:** Yes
- 14.6 Special precautions for user**  
Special regulations: 274, 601  
Tunnel restriction code: D/E  
Physico-Chemical properties: see section 9  
Limited quantities: 5 L
- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:** Non-applicable

**Transport of dangerous goods by sea:**

With regard to IMDG 39-18:



- 14.1 UN number:** UN1993
- 14.2 UN proper shipping name:** FLAMMABLE LIQUID, N.O.S. (d-limonene)
- 14.3 Transport hazard class(es):** 3  
Labels: 3
- 14.4 Packing group:** III
- 14.5 Marine pollutant:** Yes
- 14.6 Special precautions for user**  
Special regulations: 274, 223, 955  
EmS Codes: F-E, S-E  
Physico-Chemical properties: see section 9  
Limited quantities: 5 L  
Segregation group: Non-applicable
- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:** Non-applicable

**Transport of dangerous goods by air:**

With regard to IATA/ICAO 2021:



- 14.1 UN number:** UN1993
- 14.2 UN proper shipping name:** FLAMMABLE LIQUID, N.O.S. (d-limonene)
- 14.3 Transport hazard class(es):** 3  
Labels: 3
- 14.4 Packing group:** III
- 14.5 Environmental hazards:** Yes
- 14.6 Special precautions for user**  
Physico-Chemical properties: see section 9
- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:** Non-applicable

- CONTINUED ON NEXT PAGE -

## Safety data sheet

This SDS is an English translation of Regulation (EU) n° 2015/830, without any country-specific legislation

**DS-210**



### 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

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

Article 95, REGULATION (EU) No 528/2012: propan-2-ol (Product-type 1, 2, 4)

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

#### Regulation (EC) No 648/2004 on detergents:

In accordance with this regulation the product complies with the following:

#### Labelling for contents:

Allergenic fragrances: d-limonene (LIMONENE).

#### Seveso III:

Section	Description	Lower-tier requirements	Upper-tier requirements
P5c	FLAMMABLE LIQUIDS	5000	50000
E1	ENVIRONMENTAL HAZARDS	100	200

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

Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes such as the following:

- metallic glitter intended mainly for decoration,
- artificial snow and frost,
- "whoopee" cushions,
- silly string aerosols,
- imitation excrement,
- horns for parties,
- decorative flakes and foams,
- artificial cobwebs,
- stink bombs.

Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances, suppliers shall ensure before the placing on the market that the packaging of aerosol dispensers referred to above is marked visibly, legibly and indelibly with:

'For professional users only'.

#### 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 product could be affected by sectorial legislation

- Regulation (EC) No 1223/2009 of the European Parliament and of the Council of 30 November 2009 on cosmetic products
- Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents
- Commission Regulation (EC) No 907/2006 of 20 June 2006 amending Regulation (EC) No 648/2004 of the European Parliament and of the Council on detergents, in order to adapt Annexes III and VII
- Commission Regulation (EC) No 551/2009 of 25 June 2009 amending Regulation (EC) No 648/2004 of the European Parliament and of the Council on detergents, in order to adapt Annexes V and VI thereto (surfactant derogation)

#### 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:

The SDS shall be supplied in an official language of the country where the product is placed on the market. 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.:

Non-applicable

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

- CONTINUED ON NEXT PAGE -

## Safety data sheet

This SDS is an English translation of Regulation (EU) n° 2015/830, without any country-specific legislation

**DS-210**



### SECTION 16: OTHER INFORMATION (continued)

H315: Causes skin irritation.  
H317: May cause an allergic skin reaction.  
H400: Very toxic to aquatic life.  
H412: Harmful to aquatic life with long lasting effects.  
H336: May cause drowsiness or dizziness.  
H304: May be fatal if swallowed and enters airways.  
H226: Flammable liquid and vapour.  
H319: Causes serious eye irritation.

#### 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:

Acute Tox. 4: H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled.  
Aquatic Acute 1: H400 - Very toxic to aquatic life.  
Aquatic Chronic 3: H412 - Harmful 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. Liq. 2: H225 - Highly flammable liquid and vapour.  
Flam. Liq. 3: H226 - Flammable liquid and vapour.  
Skin Irrit. 2: H315 - Causes skin irritation.  
Skin Sens. 1: H317 - May cause an allergic skin reaction.  
STOT SE 3: H336 - May cause drowsiness or dizziness.

#### Classification procedure:

Skin Irrit. 2: Calculation method  
Skin Sens. 1: Calculation method  
Aquatic Acute 1: Calculation method  
Aquatic Chronic 3: Calculation method  
STOT SE 3: Calculation method  
Asp. Tox. 1: Calculation method  
Flam. Liq. 3: Calculation method (2.6.4.3)  
Eye Irrit. 2: Calculation method

#### 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 -