Revision nr. 1

Dated 07/02/2020

First compilation

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#### **NEOPRENIC ADHESIVE FOR LAMINATES**

### Safety Data Sheet

According to Annex II to REACH - Regulation 2015/830

#### SECTION 1. Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Code: 411 00 15400-3010-1 kg 411 00 15410-3015-5 kg

Product name NEOPRENIC ADHESIVE FOR LAMINATES

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

Intended use Adhesive for wood / plastic laminate / steel

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

Name Meccanocar Italia S.r.I.
Full address Via San Francesco, 22
District and Country 56033 Capannoli (PI)

Italy

Tel. +39 0587 609433 Fax +39 0587 607145

e-mail address of the competent person

responsible for the Safety Data Sheet moreno.meini@meccanocar.it

#### 1.4. Emergency telephone number

For urgent inquiries refer to National Poisons Information Service: +44 121 507 4123

#### **SECTION 2. Hazards identification**

#### 2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2015/830.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Flammable liquid, category 2
Eye irritation, category 2
H319
Specific target organ toxicity - single exposure, category 3
Hazardous to the aquatic environment, chronic toxicity, category 2
H325
H336
H336
H336
May cause drowsiness or dizziness.
Toxic to aquatic life with long lasting effects.

#### 2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

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#### Hazard pictograms:







Signal words:

Danger

#### Hazard statements:

H225Highly flammable liquid and vapour.H319Causes serious eye irritation.H336May cause drowsiness or dizziness.

**H411** Toxic to aquatic life with long lasting effects.

**EUH066** Repeated exposure may cause skin dryness or cracking.

#### Precautionary statements:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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

P273 Avoid release to the environment.
P264 Wash hands thoroughly after handling.

P312 Call a POISON CENTRE / doctor / . . . if you feel unwell.

Contains: HYDROCARBONS, C6-C7, N-ALCANS, ISOALKANS, CYCLES, <5% N-HEXANE

ETHYL ACETATE

ACETONE

METHYL ETHYL KETONE

#### 2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

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

#### 3.2. Mixtures

Contains:

Identification x = Conc. % Classification 1272/2008 (CLP)

HYDROCARBONS, C6-C7, N-ALCANS, ISOALKANS, CYCLES,

<5% N-HEXANE

CAS 92128-66-0 47,5  $\leq$  x < 50 Flam. Liq. 2 H225, Asp. Tox. 1 H304, Skin Irrit. 2 H315, STOT SE 3 H336,

Aquatic Chronic 2 H411

EC 921-024-6 INDEX -

Reg. no. 01-2119475514-35-XXXX

**ETHYL ACETATE** 

CAS 141-78-6 27 ≤ x < 28,5 Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066

EC 205-500-4

INDEX 607-022-00-5

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#### **NEOPRENIC ADHESIVE FOR LAMINATES**

Reg. no. 01-2119475103-46-XXXX

**ACETONE** 

CAS 67-64-1 18 ≤ x < 19,5 Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066

EC 200-662-2

INDEX 606-001-00-8

Reg. no. 01-2119471330-49-XXXX

**METHYL ETHYL KETONE** 

CAS 78-93-3 4,5 ≤ x < 5 Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066

EC 201-159-0

INDEX 606-002-00-3

Reg. no. 01-2119457290-43-XXXX

**TOLUENE** 

CAS 108-88-3 0,75  $\leq$  x < 0,85 Flam. Liq. 2 H225, Repr. 2 H361d, Asp. Tox. 1 H304, STOT RE 2 H373, Skin

Irrit. 2 H315, STOT SE 3 H336, Aquatic Chronic 3 H412

EC 203-625-9

INDEX 601-021-00-3

Reg. no. 01-2119471310-51-XXXX

ZINC OXIDE

CAS 1314-13-2  $0.2 \le x < 0.25$  Aquatic Chronic 1 H410 M=1

EC 215-222-5

INDEX 030-013-00-7

Reg. no. 01-2119463881-32-XXXX

2,6-tert-butyl-paracresol

CAS 128-37-0  $0.2 \le x < 0.25$  Aquatic Chronic 1 H410 M=1

EC 204-881-4

INDEX -

Reg. no. 01-2119480433-40-XXXX

The full wording of hazard (H) phrases is given in section 16 of the sheet.

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

#### 4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately. INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

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

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available

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#### **SECTION 5. Firefighting measures**

#### 5.1. Extinguishing media

#### SUITABLE EXTINGUISHING EQUIPMENT

Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.

UNSUITABLE EXTINGUISHING EQUIPMENT

Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

#### 5.2. Special hazards arising from the substance or mixture

#### HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Excess pressure may form in containers exposed to fire at a risk of explosion. Do not breathe combustion products.

#### 5.3. Advice for firefighters

#### **GENERAL INFORMATION**

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

#### **SECTION 6. Accidental release measures**

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

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

Send away individuals who are not suitably equipped. Use explosion-proof equipment. Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site.

#### 6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

#### 6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

#### 6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

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#### **SECTION 7. Handling and storage**

#### 7.1. Precautions for safe handling

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Vapours may catch fire and an explosion may occur; vapour accumulation is therefore to be avoided by leaving windows and doors open and ensuring good cross ventilation. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. When performing transfer operations involving large containers, connect to an earthing system and wear antistatic footwear. Vigorous stirring and flow through the tubes and equipment may cause the formation and accumulation of electrostatic charges. In order to avoid the risk of fires and explosions, never use compressed air when handling. Open containers with caution as they may be pressurised. Do not eat, drink or smoke during use. Avoid leakage of the product into the environment.

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

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Store in a cool and well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

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

Information not available

#### **SECTION 8. Exposure controls/personal protection**

#### 8.1. Control parameters

#### Regulatory References:

ESP	España	LÍMITES DE EXPOSICIÓN PROFESIONAL PARA AGENTES QUÍMICOS EN ESPAÑA 2019 (INSST)
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Third edition, published 2018)
ITA	Italia	DIRETTIVA (UE) 2017/164 DELLA COMMISSIONE del 31 gennaio 2017
NOR	Norge	Fastsatt av Arbeids- og sosialdepartementet 21. august 2018 med hjemmel i lov 17. juni 2005 nr. 62 om
		arbeidsmiljø, arbeidstid, stillingsvern mv. (arbeidsmiljøloven) § 1-3, § 1-4 og § 4-5
PRT	Portugal	Ministério da Economia e do Emprego Consolida as prescrições mínimas em matéria de protecção dos trabalhadores contra os riscos para a segurança e a saúde devido à exposição a agentes químicos no
		trabalho - Diário da República, 1.ª série - N.º 111 - 11 de junho de 2018
EU	OEL EU	Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive
		2004/37/EC; Directive 2000/39/EC; Directive 91/322/EEC.
	TLV-ACGIH	ACGIH 2019

HYDROCARBONS, C	6-C7, N-ALCANS, IS	OALKANS, CYCI	LES, <5% N-HI	EXANE				
Health - Derived no-ef	fect level - DNEL / [	OMEL						
	Effects on				Effects on			
	consumers				workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic	Acute local	Acute	Chronic local	Chronic
				systemic		systemic		systemic
Oral				699 mg/kg				
				bw/d				
Inhalation				608 mg/m3				2035 mg/m3
Skin				699 mg/kg				773 mg/kg
				bw/d				bw/d

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Туре	Country	TWA/8h		STEL/15min		Remarks / Observations		
		mg/m3	ppm	mg/m3	ppm	Observation	ль	
VLA	ESP	734	200	1468	400			
VLEP	FRA	1400	400					
WEL	GBR	734	200	1468	400			
VLEP	ITA	734	200	1468	400			
TLV	NOR	734	200					
VLE	PRT	734	200	1468	400			
OEL	EU	734	200	1468	400			
TLV-ACGIH		1441	400					
Predicted no-effect concentration	n - PNEC							
Normal value in fresh water				0,24	mg	/I		
Normal value in marine water				0,024	mg	/I		
Normal value for fresh water sed	diment			1,15	mg	/kg		
Normal value for marine water se	ediment			0,115	mg	/kg		
Normal value of STP microorgan	nisms			650	mg	/I		
Normal value of OTT microorgan	Normal value for the food chain (secondary poisoning)							
	(secondary poison	ing)		0,2	mg	/kg		
Normal value for the food chain (		ing)		0,2 0,148	mg,			
	ompartment				mg,			
Normal value for the food chain (	ompartment							
Normal value for the food chain (	ompartment  level - DNEL / C  Effects on		Chronic local	0,148 Chronic	mg.	/kg Acute	Chronic local	Chronic
Normal value for the food chain ( Normal value for the terrestrial or Health - Derived no-effect I	ompartment  level - DNEL / D  Effects on consumers	DMEL	Chronic local	O,148  Chronic systemic 4,5 mg/kg	mg, Effects on workers	/kg	Chronic local	Chronic systemic
Normal value for the food chain ( Normal value for the terrestrial or Health - Derived no-effect I Route of exposure Oral	ompartment  level - DNEL / D  Effects on consumers	DMEL	Chronic local 367 mg/m3	O,148  Chronic systemic 4,5 mg/kg bw/d	mg, Effects on workers	/kg Acute	Chronic local	systemic 734 mg/m3
Normal value for the food chain ( Normal value for the terrestrial or  Health - Derived no-effect I  Route of exposure	ompartment  level - DNEL / D  Effects on consumers  Acute local	Acute systemic		O,148  Chronic systemic 4,5 mg/kg	mg.  Effects on workers  Acute local	Acute systemic		
Normal value for the food chain ( Normal value for the terrestrial or Health - Derived no-effect I  Route of exposure  Oral Inhalation Skin	ompartment  level - DNEL / D  Effects on consumers  Acute local	Acute systemic		0,148  Chronic systemic 4,5 mg/kg bw/d 367 mg/m3 37 mg/kg	mg.  Effects on workers  Acute local	Acute systemic		systemic  734 mg/m3 63 mg/kg
Normal value for the food chain ( Normal value for the terrestrial or Health - Derived no-effect I Route of exposure Oral Inhalation Skin  ACETONE Threshold Limit Value	ompartment  level - DNEL / D  Effects on consumers  Acute local	Acute systemic		0,148  Chronic systemic 4,5 mg/kg bw/d 367 mg/m3 37 mg/kg	mg.  Effects on workers  Acute local	Acute systemic  1468 mg/m3	734 mg/m3	systemic  734 mg/m3 63 mg/kg
Normal value for the food chain ( Normal value for the terrestrial of Health - Derived no-effect I Route of exposure Oral Inhalation	ompartment  level - DNEL / D  Effects on consumers  Acute local  734 mg/m3	Acute systemic  734 mg/m3		Chronic systemic 4,5 mg/kg bw/d 367 mg/m3 37 mg/kg bw/d	mg.  Effects on workers  Acute local	Acute systemic 1468 mg/m3	734 mg/m3	systemic  734 mg/m3 63 mg/kg
Normal value for the food chain ( Normal value for the terrestrial or Health - Derived no-effect I Route of exposure Oral Inhalation Skin  ACETONE Threshold Limit Value Type	ompartment  level - DNEL / D  Effects on consumers  Acute local  734 mg/m3	Acute systemic  734 mg/m3  TWA/8h	367 mg/m3	O,148  Chronic systemic 4,5 mg/kg bw/d 367 mg/m3 37 mg/kg bw/d  STEL/15min	mg. Effects on workers Acute local	Acute systemic  1468 mg/m3	734 mg/m3	systemic  734 mg/m3 63 mg/kg
Normal value for the food chain ( Normal value for the terrestrial or Health - Derived no-effect I Route of exposure Oral Inhalation Skin  ACETONE Threshold Limit Value	ompartment  level - DNEL / D  Effects on consumers  Acute local  734 mg/m3  Country	Acute systemic  734 mg/m3  TWA/8h  mg/m3	367 mg/m3	O,148  Chronic systemic 4,5 mg/kg bw/d 367 mg/m3 37 mg/kg bw/d  STEL/15min mg/m3	mg, Effects on workers Acute local 1468 mg/m3	Acute systemic  1468 mg/m3	734 mg/m3	systemic  734 mg/m3 63 mg/kg
Normal value for the food chain ( Normal value for the terrestrial or Health - Derived no-effect I  Route of exposure  Oral Inhalation Skin  ACETONE Threshold Limit Value Type  VLEP WEL	ompartment  level - DNEL / E  Effects on consumers Acute local  734 mg/m3  Country	Acute systemic  734 mg/m3  TWA/8h  mg/m3  1210	367 mg/m3  ppm 500	O,148  Chronic systemic 4,5 mg/kg bw/d 367 mg/m3 37 mg/kg bw/d  STEL/15min mg/m3 2420	Effects on workers Acute local  1468 mg/m3	Acute systemic  1468 mg/m3	734 mg/m3	systemic  734 mg/m3 63 mg/kg
Normal value for the food chain ( Normal value for the terrestrial of Health - Derived no-effect I Route of exposure  Oral Inhalation Skin  ACETONE Threshold Limit Value  Type  VLEP  WEL VLEP	Ompartment  Ievel - DNEL / E  Effects on consumers Acute local  734 mg/m3  Country  FRA GBR	Acute systemic  734 mg/m3  TWA/8h  mg/m3  1210  1210	367 mg/m3  ppm 500 500	O,148  Chronic systemic 4,5 mg/kg bw/d 367 mg/m3 37 mg/kg bw/d  STEL/15min mg/m3 2420	Effects on workers Acute local  1468 mg/m3	Acute systemic  1468 mg/m3	734 mg/m3	systemic  734 mg/m3 63 mg/kg
Normal value for the food chain ( Normal value for the terrestrial or Health - Derived no-effect I Route of exposure  Oral Inhalation Skin  ACETONE Threshold Limit Value Type  VLEP WEL VLEP TLV	Ompartment  Ievel - DNEL / E  Effects on consumers Acute local  734 mg/m3  Country  FRA  GBR  ITA	Acute systemic  734 mg/m3  TWA/8h  mg/m3  1210  1210  1210	ppm 500 500	O,148  Chronic systemic 4,5 mg/kg bw/d 367 mg/m3 37 mg/kg bw/d  STEL/15min mg/m3 2420	Effects on workers Acute local  1468 mg/m3	Acute systemic  1468 mg/m3	734 mg/m3	systemic  734 mg/m3 63 mg/kg
Normal value for the food chain ( Normal value for the terrestrial of Health - Derived no-effect I Route of exposure  Oral Inhalation Skin  ACETONE Threshold Limit Value Type	Country  FRA  GBR  ITA  NOR	TWA/8h mg/m3 1210 1210 1210 295	367 mg/m3  ppm 500 500 125	O,148  Chronic systemic 4,5 mg/kg bw/d 367 mg/m3 37 mg/kg bw/d  STEL/15min mg/m3 2420	Effects on workers Acute local  1468 mg/m3	Acute systemic  1468 mg/m3	734 mg/m3	systemic  734 mg/m3 63 mg/kg

#### Revision nr. 1 Meccanocar Italia S.r.l. Dated 07/02/2020 First compilation Printed on 07/02/2020 **NEOPRENIC ADHESIVE FOR LAMINATES** Page n. 7/31 Normal value in fresh water 10.6 mg/l 1.06 Normal value in marine water mg/l Normal value for fresh water sediment 30,4 mg/kg Normal value for marine water sediment 3,04 mg/kg Normal value of STP microorganisms 100 ma/l Normal value for the terrestrial compartment 29.5 mg/kg Health - Derived no-effect level - DNEL / DMEL Effects on Effects on consumers workers Route of exposure Chronic local Chronic local Chronic Acute local Acute systemic Chronic Acute local Acute systemic systemic systemic Oral 62 mg/kg bw/d 2420 mg/m3 1210 mg/m3 Inhalation 200 mg/m3 Skin 62 mg/kg 186 mg/kg bw/d bw/d METHYL ETHYL KETONE **Threshold Limit Value** Туре Country TWA/8h STEL/15min Remarks / Observations ma/m3 ma/m3 ppm ppm VLA FSP 200 600 900 300 VLEP FRA 600 200 900 300 SKIN WEL GBR 600 200 899 300 SKIN VLEP ITA 600 200 900 300 TLV NOR 220 75 VLE PRT 600 200 900 300 OEL EU 600 200 900 300 TLV-ACGIH 590 200 885 300 Predicted no-effect concentration - PNEC Normal value in fresh water 55,8 mg/l Normal value in marine water 55,8 mg/l Normal value for fresh water sediment 284.74 mg/kg Normal value for marine water sediment 284,74 mg/kg Normal value of STP microorganisms 709 mg/l 1000 Normal value for the food chain (secondary poisoning) mg/kg Normal value for the terrestrial compartment 22,5 mg/kg Health - Derived no-effect level - DNEL / DMEL Effects on Effects on consumers workers Route of exposure Acute systemic Chronic local Chronic Acute local Acute Chronic local Chronic Acute local systemic systemic systemic Oral 31 mg/kg bw/d Inhalation 600 mg/m3 106 mg/m3 Skin 412 mg/kg 1161 mg/kg bw/d bw/d

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Гуре	Country	Country TWA/8h				Remarks /	Remarks / Observations	
		mg/m3	ppm	mg/m3	ppm	Observation	ons	
VLA	ESP	192	50	384	100	SKIN		
/LEP	FRA	76,8	20	384	100	SKIN		
VEL	GBR	191	50	384	100	SKIN		
/LEP	ITA	192	50			SKIN		
ΓLV	NOR	94	25			SKIN		
/LE	PRT	192	50	384	100	SKIN		
DEL	EU	192	50	384	100	SKIN		
TLV-ACGIH		75,4	20					
Predicted no-effect concentra	ation - PNEC							
Normal value in fresh water				0,68	mg	ŋ/l		
Normal value in marine water	•			0,68	mg	ŋ/l		
Normal value for fresh water	sediment			16,39	mg	ı/kg		
Normal value for marine wate	er sediment			16,39	mg	ı/kg		
Normal value of STP microor	ganisms			13,61	mg	ı/l		
Normal value for the terrestria	al compartment			2,89	mg	ı/kg		
Health - Derived no-effe	ct level - DNEL / Effects on	DMEL			Effects on			
Route of exposure	consumers Acute local	Acute systemic	Chronic local	Chronic	workers Acute local	Acute	Chronic local	Chronic
Oral				systemic 8,13 mg/kg		systemic		systemic
	226 mg/m3	226 mg/m3	56,5 mg/m3		384 mg/m3	384 mg/m3	192 mg/m3	192 mg/m3
Oral Inhalation Skin	226 mg/m3	226 mg/m3	56,5 mg/m3	8,13 mg/kg bw/d	384 mg/m3		192 mg/m3	
inhalation Skin <b>2,6-tert-butyl-paracreso</b>	ı	226 mg/m3	56,5 mg/m3	8,13 mg/kg bw/d 56,5 mg/m3 226 mg/kg	384 mg/m3		192 mg/m3	192 mg/m3 384 mg/kg
Inhalation Skin  2,6-tert-butyl-paracreso Predicted no-effect concentra	ı	226 mg/m3	56,5 mg/m3	8,13 mg/kg bw/d 56,5 mg/m3 226 mg/kg bw/d	·	384 mg/m3	192 mg/m3	192 mg/m3 384 mg/kg
Inhalation Skin  2,6-tert-butyl-paracreso Predicted no-effect concentra Normal value in fresh water	I tion - PNEC	226 mg/m3	56,5 mg/m3	8,13 mg/kg bw/d 56,5 mg/m3 226 mg/kg bw/d	mg	384 mg/m3	192 mg/m3	192 mg/m3 384 mg/kg
Inhalation Skin  2,6-tert-butyl-paracreso Predicted no-effect concentra Normal value in fresh water Normal value in marine water	I ation - PNEC	226 mg/m3	56,5 mg/m3	8,13 mg/kg bw/d 56,5 mg/m3 226 mg/kg bw/d 0,0199 0,002	mg mg	384 mg/m3	192 mg/m3	192 mg/m3 384 mg/kg
Inhalation Skin  2,6-tert-butyl-paracreso Predicted no-effect concentra Normal value in fresh water Normal value in marine water Normal value for fresh water	Intion - PNEC	226 mg/m3	56,5 mg/m3	8,13 mg/kg bw/d 56,5 mg/m3 226 mg/kg bw/d 0,0199 0,002 9,96	mg mg mg	384 mg/m3 y/l y/l y/kg	192 mg/m3	192 mg/m3 384 mg/kg
2,6-tert-butyl-paracreso Predicted no-effect concentre Normal value in fresh water Normal value in marine water Normal value for fresh water	Intion - PNEC  sediment er sediment	226 mg/m3	56,5 mg/m3	8,13 mg/kg bw/d 56,5 mg/m3 226 mg/kg bw/d 0,0199 0,002 9,96 0,996	mç mg mg	384 mg/m3  y/l  y/l  y/kg	192 mg/m3	192 mg/m3 384 mg/kg
Inhalation Skin  2,6-tert-butyl-paracreso Predicted no-effect concentra Normal value in fresh water Normal value in marine water Normal value for fresh water Normal value for marine water	sediment er sediment ganisms		56,5 mg/m3	8,13 mg/kg bw/d 56,5 mg/m3 226 mg/kg bw/d 0,0199 0,002 9,96 0,996 0,17	mg mg mg mg	384 mg/m3  384 mg/m3  y/l  y/l  y/kg  y/kg	192 mg/m3	192 mg/m3 384 mg/kg
2,6-tert-butyl-paracreso Predicted no-effect concentra Normal value in fresh water Normal value in marine water Normal value for fresh water Normal value for marine water Normal value for marine water Normal value for marine water	sediment er sediment ganisms ain (secondary poison		56,5 mg/m3	8,13 mg/kg bw/d 56,5 mg/m3 226 mg/kg bw/d 0,0199 0,002 9,96 0,996 0,17 8,33	mg mg mg mg	384 mg/m3  y/l  y/l  y/kg  y/kg	192 mg/m3	192 mg/m3 384 mg/kg
2,6-tert-butyl-paracreso Predicted no-effect concentra Normal value in fresh water Normal value for fresh water Normal value for marine water Normal value for marine water Normal value for marine water Normal value for the start och	ation - PNEC  sediment er sediment ganisms ain (secondary poison	ning)	56,5 mg/m3	8,13 mg/kg bw/d 56,5 mg/m3 226 mg/kg bw/d 0,0199 0,002 9,96 0,996 0,17	mg mg mg mg	384 mg/m3  384 mg/m3  y/l  y/l  y/kg  y/kg	192 mg/m3	192 mg/m3 384 mg/kg
2,6-tert-butyl-paracreso Predicted no-effect concentra Normal value in fresh water Normal value for fresh water Normal value for marine water Normal value for marine water Normal value for marine water Normal value for the start och	ation - PNEC  sediment er sediment ganisms ain (secondary poison	ning)	56,5 mg/m3	8,13 mg/kg bw/d 56,5 mg/m3 226 mg/kg bw/d 0,0199 0,002 9,96 0,996 0,17 8,33	mg mg mg mg	384 mg/m3  y/l  y/l  y/kg  y/kg	192 mg/m3	192 mg/m3 384 mg/kg
Inhalation Skin  2,6-tert-butyl-paracreso Predicted no-effect concentra Normal value in fresh water Normal value in marine water Normal value for fresh water Normal value for marine water Normal value for marine water	sediment er sediment ganisms ain (secondary poisor al compartment ct level - DNEL /	ning)	56,5 mg/m3  Chronic local	8,13 mg/kg bw/d 56,5 mg/m3 226 mg/kg bw/d 0,0199 0,002 9,96 0,996 0,17 8,33 4,769	mg mg mg mg mg	384 mg/m3  y/l y/l y/l y/kg y/kg y/kg y/kg Acute	192 mg/m3  Chronic local	192 mg/m3 384 mg/kg bw/d
2,6-tert-butyl-paracreso Predicted no-effect concentra Normal value in fresh water Normal value in marine water Normal value for fresh water Normal value for marine water Normal value for marine water Normal value for the shood cha Normal value for the terrestria Health - Derived no-effe	sediment er sediment ganisms ain (secondary poison al compartment ct level - DNEL / Effects on consumers	ning)		8,13 mg/kg bw/d 56,5 mg/m3 226 mg/kg bw/d 0,0199 0,002 9,96 0,996 0,17 8,33 4,769 Chronic systemic 0,25 mg/kg	mg	384 mg/m3  y/l  y/l  y/kg  y/kg  y/kg  y/kg		192 mg/m3 384 mg/kg bw/d
2,6-tert-butyl-paracreso Predicted no-effect concentra Normal value in fresh water Normal value for fresh water Normal value for marine water Normal value for marine water Normal value for the stormal value for the food cha Normal value for the terrestria Health - Derived no-effe	sediment er sediment ganisms ain (secondary poison al compartment ct level - DNEL / Effects on consumers	ning)		8,13 mg/kg bw/d 56,5 mg/m3 226 mg/kg bw/d 0,0199 0,002 9,96 0,996 0,17 8,33 4,769	mg	384 mg/m3  y/l y/l y/l y/kg y/kg y/kg y/kg Acute		192 mg/m3 384 mg/kg bw/d

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0,5 mg/m3

5 mg/m3 83 mg/kg

bw/d

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#### **NEOPRENIC ADHESIVE FOR LAMINATES**

ZINC OXIDE Threshold Limit Value								
Туре	Country	TWA/8h		STEL/15min		Remarks Observa		
		mg/m3	ppm	mg/m3	ppm			
VLA	ESP	2		10				
VLEP	FRA	5						
TLV	NOR	5						
TLV-ACGIH		2		10				
Predicted no-effect concentration	on - PNEC							
Normal value in fresh water				2,6	mg	/I		
Normal value in marine water				0,61	mg	/I		
Normal value for fresh water se	ediment			117,8	mg	/kg		
Normal value for marine water	sediment			56,5	mg	/kg		
Normal value of STP microorga	anisms			10	mg	/I		
Normal value for the terrestrial	compartment			35,6	mg	/kg		
Health - Derived no-effect	level - DNEL / I	DMEL						
	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				0,83 mg/kg bw/d		,		
1.1.2								

2,5 mg/m3

83 mg/kg bw/d

Legend:

Skin

Inhalation

(C) = CEILING; INHAL = Inhalable Fraction; RESP = Respirable Fraction; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

#### 8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

#### HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

#### SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

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#### **NEOPRENIC ADHESIVE FOR LAMINATES**

Consider the appropriateness of providing antistatic clothing in the case of working environments in which there is a risk of explosion.

#### EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

#### RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, wear a mask with a type AX filter, whose limit of use will be defined by the manufacturer (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

#### ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

HYDROCARBONS, C6-C7, N-ALCANS, ISOALKANS, CYCLES, <5% N-HEXANE

The types of gloves to consider for this material include: chemical resistant gloves. In case of contact with the forearms, wear suitable protective gloves. Nitrile, standards CEN EN 420 and EN 374 provide general requirements and lists of types of gloves.

The types of respirators to be considered for this material include: half-face filter respirator with type A filter material, standards EN 136, 140 and 405 of the European Committee for Standardization (CEN) provide respiratory masks and EN 149 and 143 provide recommendations on the filters.

#### ETHYL ACETATE

Butyl rubber gloves (opening times> 480 minutes), Neoprene ™ rubber, nitrile rubber (opening times up to 480 minutes).

ACETONE

Protective gloves according to EN 374.

Glove material: Butyl rubber (butyl rubber) - Layer thickness> = 0.5 mm.

Breakthrough time:> 480 min.

Observe the glove manufacturer's instructions regarding penetrability and breakthrough time.

ZINC OXIDE

Protective gloves (EN 374)

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

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

Appearance liquid

Colour Not available Odour characteristic

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#### **NEOPRENIC ADHESIVE FOR LAMINATES**

Not available

Odour threshold Not available Not available Melting point / freezing point Not available > 35 °C Initial boiling point Not available Boiling range Flash point < 23 °C Evaporation rate Not available Flammability (solid, gas) Not available Lower inflammability limit Not available Upper inflammability limit Not available Lower explosive limit Not available Upper explosive limit Not available Not available Vapour pressure

Relative density 0,820-0,920 a 20°C Kg/l

Solubility

Not available

Partition coefficient: n-octanol/water

Auto-ignition temperature

Decomposition temperature

Viscosity

Lymposity

Not available

Viscosity

Not available

Oxidising properties

Not available

Not available

#### 9.2. Other information

Information not available

Vapour density

#### **SECTION 10. Stability and reactivity**

#### 10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

#### ETHYL ACETATE

It slowly decomposes to acetic acid and ethanol due to the action of light, air and water. Stable under normal conditions. Upon storage, it is slowly decomposed by water.

#### ACETONE

Decomposes under the effect of heat.

Acetone reacts in the presence of bases. The vapor forms potentially explosive mixtures with the air. Heavier than air, they proceed at floor level and can flash at a great distance when turned on. It can electrostatically charge.

METHYL ETHYL KETONE

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#### **NEOPRENIC ADHESIVE FOR LAMINATES**

Reacts with: light metals, strong oxidants. Attacks various types of plastic materials. Decomposes under the effect of heat.

TOLUENE

Avoid exposure to: light.

#### 10.2. Chemical stability

The product is stable in normal conditions of use and storage.

#### 10.3. Possibility of hazardous reactions

The vapours may also form explosive mixtures with the air.

#### ETHYL ACETATE

Risk of explosion on contact with: alkaline metals,hydrides,oleum.May react violently with: fluorine,strong oxidising agents,chlorosulphuric acid,potassium tert-butoxide.Forms explosive mixtures with: air.

#### ACETONE

Risk of explosion on contact with: bromine trifluoride,fluorine dioxide,hydrogen peroxide,nitrosyl chloride,2-methyl-1,3 butadiene,nitromethane,nitrosyl perchlorate. May react dangerously with: potassium tert-butoxide,alkaline hydroxides,bromine,bromoform,isoprene,sodium,sulphur dioxide,chromium trioxide,chromyl chloride,nitric acid,chloroform,peroxymonosulphuric acid,phosphoryl oxychloride,chromosulphuric acid,fluorine,strong oxidising agents,strong reducing agents. Develops flammable gas on contact with: nitrosyl perchlorate.

#### METHYL ETHYL KETONE

May form peroxides with: air,light,strong oxidising agents.Risk of explosion on contact with: hydrogen peroxide,nitric acid,sulphuric acid.May react dangerously with: oxidising agents,trichloromethane,alkalis.Forms explosive mixtures with: air.

#### TOLUENE

Risk of explosion on contact with: fuming sulphuric acid,nitric acid,silver perchlorate,nitrogen dioxide,non-metal halogenates,acetic acid,organic nitrocompounds. May form explosive mixtures with: air. May react dangerously with: strong oxidising agents, strong acids, sulphur.

#### 2,6-TERT-BUTYL-PARACRESOL

If exposed to high temperatures, it can decompose, releasing toxic / flammable vapors.

#### 10.4. Conditions to avoid

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

HYDROCARBONS, C6-C7, N-ALCANS, ISOALKANS, CYCLES, <5% N-HEXANE

Avoid heat, sparks, open flames and other sources of ignition.

#### ETHYL ACETATE

Avoid exposure to: light, sources of heat, naked flames.

Ignition sources.

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#### ACETONE

Avoid exposure to: sources of heat,naked flames.

Highly flammable. Concentrated vapors are heavier than air. Forms explosive mixtures with air, even in empty and uncleaned containers. It can produce, if mixed with chlorinated hydrocarbons and exposed to light, highly irritating chlorine acetone.

METHYL ETHYL KETONE

Avoid exposure to: sources of heat.

2,6-TERT-BUTYL-PARACRESOL

Ignition sources Heat. Decomposes above 100 ° C. May decompose on contact with: strong acids.

#### 10.5. Incompatible materials

HYDROCARBONS, C6-C7, N-ALCANS, ISOALKANS, CYCLES, <5% N-HEXANE

Oxidizing agents.

#### ETHYL ACETATE

Incompatible with: acids,bases,strong oxidants,aluminium,nitrates,chlorosulphuric acid.Incompatible materials: plastic materials.

Oxidizing agents, acids, alkalis.

#### ACETONE

Incompatible with: acids,oxidising substances.

Attacks many plastics and rubbers. Condensation may form on contact with barium hydroxide, sodium hydroxide and many other alkaline materials. Avoid contact with strong oxidizing agents, alkalis and amines.

#### METHYL ETHYL KETONE

Incompatible with: strong oxidants,inorganic acids,ammonia,copper,chloroform.

2,6-TERT-BUTYL-PARACRESOL

Strong acids. Oxidizing agent. Alkaline solution.

ZINC OXIDE

Acids and basics.

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#### 10.6. Hazardous decomposition products

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

ETHYL ACETATE

Carbon oxides on combustion.

ACETONE

May develop: ketenes,irritant substances.

In case of fire the following can be released: carbon monoxide and carbon dioxide.

ZINC OXIDE

ZnO fumes can be generated during heat treatment.

#### **SECTION 11. Toxicological information**

#### 11.1. Information on toxicological effects

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

TOLUENE

WORKERS: inhalation; contact with the skin.

POPULATION: ingestion of contaminated food or water; inhalation of ambient air; contact with the skin of products containing the substance.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

TOLUENE

Toxic effect on the central and peripheral nervous system with encephalopathy and polyneuritis; irritating for the skin, conjunctiva, cornea and respiratory apparatus.

Interactive effects

TOLUENE

Certain drugs and other industrial products can interfere with the metabolism of the toluene.

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#### **NEOPRENIC ADHESIVE FOR LAMINATES**

#### ACUTE TOXICITY

LC50 (Inhalation) of the mixture:

Not classified (no significant component)

LD50 (Oral) of the mixture:

Not classified (no significant component)

LD50 (Dermal) of the mixture:

Not classified (no significant component)

METHYL ETHYL KETONE

LD50 (Oral) 2737 mg/kg Rat

LD50 (Dermal) 6480 mg/kg Rabbit

LC50 (Inhalation) 23,5 mg/l/8h Rat

TOLUENE

LD50 (Oral) 5580 mg/kg Rat

LD50 (Dermal) 12124 mg/kg Rabbit

LC50 (Inhalation) 28,1 mg/l/4h Rat

HYDROCARBONS, C6-C7, N-ALCANS, ISOALKANS, CYCLES, <5% N-HEXANE

LD50 (Oral) > 5840 mg/kg rat

LD50 (Dermal) > 2920 mg/kg rabbit

LC50 (Inhalation) > 25,2 mg/l/4h rat

HYDROCARBONS, C6-C7, N-ALCANS, ISOALKANS, CYCLES, <5% N-HEXANE

Method: The tests were not performed according to the OECD and GHS guidelines.

Reliability: 2

Species: Rat (Charles River CD; male / female)

Route of exposure: Oral

Results: LD50> 8

Method: The tests were not performed according to the OECD and GHS guidelines.

Reliability: 2

Species: Rat (Wistar; male / female) Route of exposure: Inhalation (vapors)

Results: LC50> 25.2

Method: The tests were not performed according to the OECD and GHS guidelines.

Reliability: 2

Species: Rat (Charles River CD; male / female)

Route of exposure: Dermal

Results: LD50> = 4

**NEOPRENIC ADHESIVE FOR LAMINATES** 

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#### ETHYL ACETATE

Method: Multi-Substance Rule for the Testing of Neurotoxicity 40 CFR Part 799 (58 FR 40262)

Reliability: 1

Species: Rat (Sprague-Dawley; male / female)
Route of exposure: Inhalation (vapors)

Results: Negative Method: Not indicated

Reliability: 2

Species: Rabbit (New Zealand White; male)

Route of exposure: Dermal Results: LD50> 20 000 mg / kg bw

#### ACETONE

Method: Not indicated

Reliability: 2

Species: Rat (Sprague-Dawley) Route of exposure: Oral Results: LD50 = 5800 mg / kg bw

Bibliographic reference: Acetone potentiation of acute acetonitrile toxicity, Freeman JJ, Hayes EP (1985)

#### TOLUENE

Method: Equivalent or similar to EU Method B.1

Reliability: 2

Species: Rat (Sprague-Dawley Cobb; male)

Route of exposure: Oral

Results: LD50 = 5580 mg / kg bw

Method: Equivalent or similar to OECD 403

Reliability: 2

Species: Rat (Sprague-Dawley; male / female)
Route of exposure: Inhalation (vapors)

Results: LC50 = 25.7 mg / L air

Method: Not indicated

Reliability: 2 Species: Rabbit

Route of exposure: Dermal

Results: LD50> 5000 mg / kg bw

Bibliographic reference: Range-finding toxicity data: List VII, Smyth HF, Carpenter CP, Weil CS, Pozzani UC, Streigel JA and Nycum JS (1969)

#### 2,6-TERT-BUTYL-PARACRESOL

Method: OECD 401

Reliability: 1

Species: Rat (Wistar; male / female)

Route of exposure: Oral

Results: LD50> 6000 mg / kg bw

Method: OECD 402 Reliability: 1

Species: Rat (Sprague-Dawley; male / female)

Route of exposure: Dermal Results: LD50> 2000 mg / kg bw

#### ZINC OXIDE

Method: Equivalent or similar to OECD 401

Reliability: 2

Species: Rat (Wistar; male / female)

Route of exposure: Oral

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#### **NEOPRENIC ADHESIVE FOR LAMINATES**

Results: LD50> 5 000 mg / kg bw Method: Equivalent or similar to OECD 403

Reliability: 2

Species: Rat (male / female) Route of exposure: Inhalation Results: LC50> 5 700 mg / m³ air

Method: OECD 402

Reliability: 1
Species: Rat (Wistar; male / female) Route of exposure: Dermal Results: LD50> 2 000 mg / kg bw

#### SKIN CORROSION / IRRITATION

Repeated exposure may cause skin dryness or cracking.

HYDROCARBONS, C6-C7, N-ALCANS, ISOALKANS, CYCLES, <5% N-HEXANE

Method: OECD 404 Reliability: 2

Species: Rabbit (New Zealand White; male / female)

Route of exposure: dermal

Results: Irritant, category 2 according to OECD and GHS guidelines.

#### METHYL ETHYL KETONE

Method: OECD 404 Reliability: 2

Species: Rabbit (New Zealand White)

Route of exposure: Dermal Results: Not irritating

#### TOLUENE

Method: EU Method B.4

Reliability: 1

Species: Rabbit (New Zealand White)

Route of exposure: Dermal

Results: Irritating

#### 2,6-TERT-BUTYL-PARACRESOL

Method: OECD 404

Reliability: 2

Species: Rabbit (New Zealand White)

Route of exposure: Dermal Results: Not irritating

#### ZINC OXIDE

Method: Not indicated

Reliability: 2

Species: Rabbit (New Zealand White)

Route of exposure: Dermal Results: Not irritating

#### SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

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#### **NEOPRENIC ADHESIVE FOR LAMINATES**

HYDROCARBONS, C6-C7, N-ALCANS, ISOALKANS, CYCLES, <5% N-HEXANE

Method: The tests were not performed following the OECD and GHS guidelines.

Reliability: 2

Species: Rabbit (New Zealand White; male / female)

Route of exposure: Ocular Results: Not irritating

ETHYL ACETATE

Method: OECD 405 Reliability: 2

Species: Rabbit (New Zealand White)

Route of exposure: Ocular Results: Not irritating

METHYL ETHYL KETONE

Method: Equivalent or similar to OECD 405

Reliability: 2

Species: Rabbit (Albino) Route of exposure: Ocular Results: Category 2, irritant

TOLUENE

Method: OECD 405

Reliability: 1

Species: Rabbit (New Zealand White)

Route of exposure: Ocular Results: Slightly irritating

2,6-tert-butyl-paracresol

Method: OECD 405

Reliability: 2 Species: Rabbit (New Zealand White)

Route of exposure: Ocular Results: Not irritating

ZINC OXIDE

Method: EU Method B.5

Reliability: 1

Species: Rabbit (New Zealand White)

Route of exposure: Ocular Results: Not irritating

#### RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

ACETONE

Method: Not indicated

Reliability: 2

Species: guinea pig (Hartley; female) Route of exposure: Dermal

Results: Not sensitizing

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#### **NEOPRENIC ADHESIVE FOR LAMINATES**

Bibliographic reference: A new protocol and criteria for quantitative determination of sensitization potencies of chemicals by guinea pig maximization test, Nakamura A, Momma J, Sekiguchi H, Noda T, Yamano T, Kaniwa MA, Kojima S, Tsuda M, Kurokawa Y (1994)

#### TOLUENE

Method: EU Method B.6

Reliability: 1

Species: guinea pig (Himalayan Albino; female)

Route of exposure: Dermal Results: Not sensitizing

Skin sensitization ETHYL ACETATE

Method: OECD 406

Reliability: 1

Species: guinea pig (Dunkin-Hartley; female)

Route of exposure: Dermal Results: Not sensitizing

#### METHYL ETHYL KETONE

Method: OECD 406

Reliability: 1

Species: guinea pig (Dunkin-Hartley; female)

Route of exposure: Dermal Results: Not sensitizing

#### ZINC OXIDE

Method: OECD 406

Reliability: 1

Species: guinea pig (Dunkin-Hartley; females)

Route of exposure: Dermal Results: Not sensitizing

#### GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

HYDROCARBONS, C6-C7, N-ALCANS, ISOALKANS, CYCLES, <5% N-HEXANE

Method: Equivalent or similar to OECD 471 - in vitro test

Reliability: 1

Species: S. typhimurium, E. coli

Results: Negative and without metabolic activation.

Bibliographic reference: Brooks, T.M. et al. The genetic toxicology of some hydrocarbon and oxygenated solvents (1988).

#### ETHYL ACETATE

Method: Equivalent or similar to OECD 471 in vitro test

Reliability: 2

Species: S. typhimurium

Results: Negative with and without metabolic activation Method: Equivalent or similar to OECD 474 in vivo test

Reliability: 2 Species: Chinese hamster (male / female)

Route of exposure: Oral Results: Negative

**NEOPRENIC ADHESIVE FOR LAMINATES** 

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### METHYL ETHYL KETONE

Method: Equivalent or similar to OECD 471 in vitro test

Reliability: 2 Species: S. typhimurium Results: Negative

Method: Equivalent or similar to OECD 474 in vivo test

Reliability: 2

Species: Mouse (CD-1; male / female) Route of exposure: Intraperitonal

Results: Negative

#### TOLUENE

Method: Equivalent or similar to EU Method B.13 / 14-in vitro test

Reliability: 2

Species: S. typhimurium

Results: Negative with and without metabolic activation

Method: Not indicated - in vivo test

Reliability: 2 Species: Rat

Route of exposure: Intraperitoneal

Results: Negative

#### ZINC OXIDE

Method: Equivalent or similar to OECD 471 in vitro test

Reliability: 2

Species: S. typhimurium

Results: Negative with and without metabolic activation

Method: OECD 474-test in vivo

Reliability: 1

Species: Mouse (NMRI; male) Route of exposure: intraperitoneal

Results: Negative

#### CARCINOGENICITY

Does not meet the classification criteria for this hazard class

#### ACETONE

Method: Not indicated

Reliability: 2

Species: Mouse (ICR; female) Route of exposure: Dermal

Results: Negative

Bibliographic reference: Mouse skin carcinogenicity tests of the flame retardants tris (2,3-dibromopropyl) phosphate, tetrakis (hydroxymethyl) phosphonium chloride, and polyvinyl bromide, Van Duuren BL, Loewengart G, Seldman I, Smith AC, Melchionne S (1974)

#### TOLUENE

Classified in Group 3 (not classifiable as a human carcinogen) by the International Agency for Research on Cancer (IARC) - (IARC, 1999). The US Environmental Protection Agency (EPA) affirms that "the data is inadequate for an assessment of the carcinogenic potential".

#### ZINC OXIDE

Method: Not indicated

Reliability: 2

Species: Mouse (Chester Beatty stock; male / female)

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#### **NEOPRENIC ADHESIVE FOR LAMINATES**

Route of exposure: Oral

Bibliographic reference: Walters M & Roe FJC, A Study of the Effects of Zinc and Tin Administered Orally to Mice Over a Prolonged Period (1965)

#### REPRODUCTIVE TOXICITY

Results: NOAEL> 22 000 mg / L

Does not meet the classification criteria for this hazard class

HYDROCARBONS, C6-C7, N-ALCANS, ISOALKANS, CYCLES, <5% N-HEXANE

Method: Equivalent or similar to OECD 416

Reliability: 1

Species: Rat (Sprague-Dawley; male / female) Route of exposure: Inhalation (vapors) Results: NOAEL (reproduction) = 9000 ppm

#### ETHYL ACETATE

Method: Equivalent or similar to OECD 416

Reliability: 1

Species: Mouse (CD-1; male / female)

Route of exposure: Oral Results: Negative

Method: Equivalent or similar to OECD 414

Reliability: 2

Species: Rat (Sprague-Dawley) Route of exposure: Inhalation

Results: Negative

Adverse effects on sexual function and fertility

#### METHYL ETHYL KETONE

Method: Equivalent or similar to OECD 416

Reliability: 2

Species: Rat (Wistar; male / female)

Route of exposure: Oral

Results: NOAEL (fertility) 10 000 mg / L

#### TOLUENE

Method: Not indicated

Reliability: 2

Species: Rat (Sprague\_Dawley; male / female)
Route of exposure: Inhalation (vapors)

Results: Negative, NOAEC (fertility) = 600 ppm

Bibliographic reference: Reproductive and developmental toxicity studies of toluene II. Effects of inhalation exposure on fertility in rats, Ono A, Sekita K, Ogawa Y, Hirose A, Suzuki S, Saito M, Naito K, Kaneko T, Furuya T, Kawashima K, Yasuhara K, Matsumoto K, Tanaka S, Inoue T and Kurokawa Y (1996)

#### ZINC OXIDE

Method: Equivalent or similar to OECD 416

Reliability: 2

Species: Rat (Sprague-Dawley; male / female)

Route of exposure: Oral

Results: LOAEL (fertility) 7.5 mg / kg bw / day

Adverse effects on development of the offspring

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#### ACETONE

Method: Equivalent or similar to OECD 414

Reliability: 1

Species: Rat (Sprague-Dawley)
Route of exposure: Inhalation (vapors)

Results: Negative, NOAEC (development) = 2200 ppm

#### METHYL ETHYL KETONE

Method: Equivalent or similar to OECD 414

Reliability: 1

Species: Rat (Sprague-Dawley) Route of exposure: Inhalation

Results: NOAEC (development) ca. 1 002 ppm

#### TOLUENE

Method: Not indicated

Reliability: 2

Species: Rat (Wistar)

Route of exposure: Inhalation (vapors)

Results: Negative, NOAEC (development) = 600 ppm

Bibliographic reference: Postnatal development and behavior of Wistar rats after prenatal toluene exposure, Thiel R and Chahoud I (1997)

#### ZINC OXIDE

Method: OECD 414 Reliability: 1

Species: Rat (Wistar)

Route of exposure: Inhalation (aerosol)
Results: NOAEC (development) 7.5 mg / m³ air

#### STOT - SINGLE EXPOSURE

May cause drowsiness or dizziness

HYDROCARBONS, C6-C7, N-ALCANS, ISOALKANS, CYCLES, <5% N-HEXANE

Based on the available data, the substance can cause damage to organs through single exposure and is therefore classified in this hazard class.

#### ETHYL ACETATE

Based on available data and through expert judgment, the substance is classified in the target organ toxicity class for single exposure.

#### ACETONE

Based on available data and through expert judgment, the substance is classified in the target organ toxicity class for single exposure.

#### METHYL ETHYL KETONE

Based on available data and through expert judgment, the substance is classified in the target organ toxicity class for single exposure.

#### TOLUENE

Based on available data and through expert judgment, the substance is classified in the target prgani toxicity class for single exposure.

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2,6-tert-butyl-paracresol

Based on available data and through expert judgment, the substance is not classified in the target organ toxicity class for single exposure.

ZINC OXIDE

Based on available data and through expert judgment, the substance is not classified in the target organ toxicity class for single exposure.

Target organ
ETHYL ACETATE

Central nervous system.

ACETONE

Narcotic effects

METHYL ETHYL KETONE

Central nervous system.

TOLUENE

Central nervous system

Route of exposure ETHYL ACETATE

Inhalation.

ACETONE

Inhalation

TOLUENE

Inhalation

#### STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

HYDROCARBONS, C6-C7, N-ALCANS, ISOALKANS, CYCLES, <5% N-HEXANE

Based on available data and through expert judgment, the substance is not classified in the target organ toxicity class for repeated exposure.

ETHYL ACETATE

Method: Equivalent or similar to EPA OTS 795.2600

Reliability: 2

Species: Rat (Sprague-Dawley; male / female)

Route of exposure: Oral

Results: NOAEL 900 mg / kg bw / day

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Method: EPA OTS 798.2450

Reliability: 1

Species: Rat (Crl: CD®BR; male / female)

Route of exposure: Inhalation Results: LOEC 350 ppm

#### ACETONE

Method: Equivalent or similar to OECD 408

Reliability: 1

Species: Rat (Fischer 344; male / female)

Route of exposure: Oral

Results: Negative, NOAEL = 10000 ppm

Method: Not indicated

Reliability: 2

Species: Rat (Sprague-Dawley; male) Route of exposure: Inhalation

Results: Negative, NOAEC = 19000 ppm

Bibliographic reference: Evaluation of toluene and acetone inhalant abuse. II. Model development and toxicology, Bruckner JV, Peterson RG (1981)

Method: Not indicated

Reliability: 2

Species: Not indicated Route of exposure: Dermal

Results: Negative

Bibliographic reference: Pathology of aging female SENCAR mice used as controls in skin two-stage carcinogenesis studies, Ward J, Quander RD, Wenk

M, Spangler E (1986)

#### METHYL ETHYL KETONE

Method: Equivalent or similar to OECD 413

Reliability: 1

Species: Rat (Fischer 344; male / female) Route of exposure: Inhalation (vapors)

Results: NOAEC 5 041 ppm

#### TOLUENE

Method: Equivalent or similar to EU Method B.26

Reliability: 1 Species: Rat (Fischer 344; male / female)

Route of exposure: Oral

Results: NOAEL = 625 mg / kg bw / day

Method: EU Method B.29

Reliability: 1

Species: Rat (F344 / N: male / female) Route of exposure: Inhalation (vapors)

Results: NOAEC = 625 ppm

#### 2,6-tert-butyl-paracresol

Method: Not indicated

Reliability: 1

Species: Pig (Goland x Italian Duroc boar; male / female)

Route of exposure: Oral

Results: Negative, NOAEL> = 61 mg / kg bw / day

#### ZINC OXIDE

Method: OECD 408 Reliability: 2

Species: Rat (Sprague-Dawley; male / female)

Route of exposure: Oral

Results: NOAEL 31.52 mg / kg bw

Method: OECD 413

Reliability: 1

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Species: Rat (Wistar; male)

Route of exposure: Inhalation (aerosol) Results: NOAEL 1.5 mg/m³ air

Method: OECD 410 Reliability: 2

Species: Rat (Sprague-Dawley; male / female)

Route of exposure: Dermal Results: LOAEL 75 mg / kg bw / day

Target organ

HYDROCARBONS, C6-C7, N-ALCANS, ISOALKANS, CYCLES, <5% N-HEXANE

Central nervous system

TOLUENE

Neurological

Route of exposure

HYDROCARBONS, C6-C7, N-ALCANS, ISOALKANS, CYCLES, <5% N-HEXANE

Inhalation

TOLUENE

Inhalation

#### **ASPIRATION HAZARD**

Does not meet the classification criteria for this hazard class

HYDROCARBONS, C6-C7, N-ALCANS, ISOALKANS, CYCLES, <5% N-HEXANE

Dryness

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

This product is dangerous for the environment and is toxic for aquatic organisms. In the long term, it have negative effects on acquatic environment. **12.1. Toxicity** 

ZINC OXIDE

LC50 - for Fish 1,1 mg/l/96h Oncorhynchus mykiss EC50 - for Crustacea 1,7 mg/l/48h Daphnia magna

EC50 - for Algae / Aquatic Plants 0,14 mg/l/72h Pseudokirchnerella subcapitata

Chronic NOEC for Fish 0,53 mg/l
Chronic NOEC for Algae / Aquatic Plants 0,024 mg/l

**TOLUENE** 

 LC50 - for Fish
 5,5 mg/l/96h

 EC50 - for Crustacea
 3,78 mg/l/48h

 EC50 - for Algae / Aquatic Plants
 134 mg/l/72h

 EC10 for Algae / Aquatic Plants
 10 mg/l/72h

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#### **NEOPRENIC ADHESIVE FOR LAMINATES**

Chronic NOEC for Algae / Aquatic Plants

10 mg/l

HYDROCARBONS, C6-C7, N-ALCANS, ISOALKANS, CYCLES, <5% N-HEXANE

LC50 - for Fish 11,4 mg/l/96h fish

EC50 - for Crustacea 3 mg/l/48h daphnia magna EC50 - for Algae / Aquatic Plants > 30 mg/l/72h algae

2,6-tert-butyl-paracresol

LC50 - for Fish 0,199 mg/l/96h
EC50 - for Crustacea 0,48 mg/l/48h
EC10 for Algae / Aquatic Plants 0,24 mg/l/72h
Chronic NOEC for Crustacea 0,15 mg/l
Chronic NOEC for Algae / Aquatic Plants 0,24 mg/l

#### 12.2. Persistence and degradability

HYDROCARBONS, C6-C7, N-ALCANS, ISOALKANS, CYCLES, <5% N-HEXANE

Easily degradable in water, 98% in 28 days (OECD 301)

ETHÝL ACETATE

Rapidly degradable, 60% in 10 days.

ACETÓNE

Easily degradable in water, 90.9% in 28 days.

METHYL ETHYL KETONE

Rapidly degradable in water, 60% in 14 days.

TOLUÉNE

Easily degradable in water.

ZINC OXIDE

Solubility in water 2,9 mg/l

NOT rapidly degradable

ETHYL ACETATE

Solubility in water > 10000 mg/l

Rapidly degradable

METHYL ETHYL KETONE

Solubility in water > 10000 mg/l

Rapidly degradable

**TOLUENE** 

Solubility in water 100 - 1000 mg/l

Rapidly degradable

**ACETONE** 

Rapidly degradable

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#### **NEOPRENIC ADHESIVE FOR LAMINATES**

12.3. Bioaccumulative potential

ZINC OXIDE

BCF > 175

**ETHYL ACETATE** 

Partition coefficient: n-octanol/water 0,68 BCF 30

METHYL ETHYL KETONE

Partition coefficient: n-octanol/water 0,3

**TOLUENE** 

Partition coefficient: n-octanol/water 2,73 BCF 90

**ACETONE** 

Partition coefficient: n-octanol/water -0,23
BCF 3

12.4. Mobility in soil

Information not available

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

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

#### 12.6. Other adverse effects

Information not available

#### **SECTION 13. Disposal considerations**

#### 13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

#### HYDROCARBONS, C6-C7, N-ALCANS, ISOALKANS, CYCLES, <5% N-HEXANE

The product is suitable for combustion in a closed controlled burner for the value or disposal of the fuel by supervised incineration at very high temperatures to prevent the formation of undesirable combustion products.

Empty drums must be completely drained and safely stored until they are properly reconditioned or disposed of. Empty containers must be recycled, recovered or disposed of through an appropriately qualified or authorized contractor and in accordance with government regulations. DO NOT PRESSURIZE, CUT, WELD, BRAZE, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY OR OTHER IGNITION SOURCES. MAY EXPLODE AND CAUSE INJURY OR DEATH.

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#### **NEOPRENIC ADHESIVE FOR LAMINATES**

#### ETHYL ACETATE

Dispose of as hazardous waste. Recover or recycle if possible. Otherwise incineration. Dispose according to local regulations.

Disposal of the container: empty the container completely. Empty containers may contain highly flammable residues. Do not cut, grind, puncture, weld or dispose of containers unless adequate precautions have been taken against this hazard. Do not remove the container labels until they are cleaned. Send to drum recovery or metal recovery.

#### ACETONE

Incinerate as hazardous waste according to applicable local, state and federal regulations. Do not throw in household waste.

#### 2,6-TERT-BUTYL-PARACRESOL

Avoid release to the environment. Dispose of safely according to local / national regulations.

#### ZINC OXIDE

The assignment of a waste code number, according to the European Waste Catalog, should be done in agreement with the regional waste disposal company.

#### **SECTION 14. Transport information**

#### 14.1. UN number

ADR / RID, IMDG,

1133

IATA:

#### 14.2. UN proper shipping name

ADR / RID: ADHESIVES
IMDG: ADHESIVES
IATA: ADHESIVES

#### 14.3. Transport hazard class(es)

ADR / RID:

Class: 3

Label: 3

IMDG:

Class: 3

Label: 3

IATA:

Class: 3

Label: 3



#### 14.4. Packing group

ADR / RID, IMDG,

Ш

IATA:

#### 14.5. Environmental hazards

ADR / RID: NO IMDG: NO IATA: NO

#### 14.6. Special precautions for user

ADR / RID:

HIN - Kemler: 30

Limited Quantities: 5 Tunnel restriction

#### Revision nr. 1 Meccanocar Italia S.r.l. Dated 07/02/2020 First compilation Printed on 07/02/2020 **NEOPRENIC ADHESIVE FOR LAMINATES** Page n. 29/31 L code: (D/E) Special Provision: -IMDG: EMS: F-E, S-D Limited Quantities: 5 IATA: Cargo: Maximum Packaging quantity: 220 instructions: 366 Pass.: Packaging Maximum quantity: 60 L instructions: 355 **Special Instructions:** АЗ 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code Information not relevant **SECTION 15. Regulatory information** 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture Seveso Category - Directive 2012/18/EC: P5c-E2 Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006 Product Point 3 - 40 Contained substance TOLUENE Reg. no.: Point 48 01-2119471310-51-XXXX Substances in Candidate List (Art. 59 REACH) On the basis of available data, the product does not contain any SVHC in percentage greater than 0,1%. Substances subject to authorisation (Annex XIV REACH) None Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012: None Substances subject to the Rotterdam Convention: None Substances subject to the Stockholm Convention: None

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#### Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

#### 15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

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

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Flam. Liq. 2 Flammable liquid, category 2

Repr. 2 Reproductive toxicity, category 2

Asp. Tox. 1 Aspiration hazard, category 1

STOT RE 2 Specific target organ toxicity - repeated exposure, category 2

Eye Irrit. 2 Eye irritation, category 2
Skin Irrit. 2 Skin irritation, category 2

STOT SE 3 Specific target organ toxicity - single exposure, category 3

Aquatic Chronic 1 Hazardous to the aquatic environment, chronic toxicity, category 1

Aquatic Chronic 2 Hazardous to the aquatic environment, chronic toxicity, category 2

Aquatic Chronic 3 Hazardous to the aquatic environment, chronic toxicity, category 3

H225 Highly flammable liquid and vapour.
 H361d Suspected of damaging the unborn child.
 H304 May be fatal if swallowed and enters airways.

H373 May cause damage to organs through prolonged or repeated exposure.

H319 Causes serious eye irritation.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H410 Very toxic to aquatic life with long lasting effects.
 H411 Toxic to aquatic life with long lasting effects.
 H412 Harmful to aquatic life with long lasting effects.

**EUH066** Repeated exposure may cause skin dryness or cracking.

#### LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%

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#### **NEOPRENIC ADHESIVE FOR LAMINATES**

- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

#### GENERAL BIBLIOGRAPHY

- Regulation (EC) 1907/2006 (REACH) of the European Parliament
   Regulation (EC) 1272/2008 (CLP) of the European Parliament
- 3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
- 4. Regulation (EU) 2015/830 of the European Parliament
- 5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
- 6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
- Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
- 8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
- 9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
- 10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
- 11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
- 12. Regulation (EU) 2016/1179 (IX Atp. CLP) 13. Regulation (EU) 2017/776 (X Atp. CLP)
- 14. Regulation (EU) 2018/669 (XI Atp. CLP)
- 15. Regulation (EU) 2018/1480 (XIII Atp. CLP)
- 16. Regulation (EU) 2019/521 (XII Atp. CLP)
- The Merck Index. 10th Edition
- Handling Chemical Safety
- INRS Fiche Toxicologique (toxicological sheet)
- Patty Industrial Hygiene and Toxicology
- N.I. Sax Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals Ministry of Health and ISS (Istituto Superiore di Sanità) Italy

#### Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control: therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

Product's classification is based on the calculation methods set out in Annex I of the CLP Regulation, unless otherwise indicated in sections 11 and 12. The data for evaluation of chemical-physical properties are reported in section 9.

#### Changes to previous review:

The following sections were modified:

01 / 02 / 03 / 04 / 06 / 07 / 08 / 09 / 10 / 11 / 12 / 13 / 14 / 15.