		Revision nr. 1
ILP	A ADESIVI SRL	Dated 16/11/2018
		First compilation
		Printed on 16/11/2018
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,	Safety Data Sheet According to Annex II to REACH - Regulation 2015/830	
SECTION 1. Identification of the	substance/mixture and of the company/u	Indertaking
1.1. Product identifier		
Code:	M8163	
Product name	VIVO	
1.2. Relevant identified uses of the substanc	o or mixture and uses advised against	
Intended use	Clear coat for marble and granite. Professional u	se only.
Uses advised against: no one in particular Uses and exhibition scenarios attached to the sub	ostance.	
1.3. Details of the supplier of the safety data	sheet	
Name Full address District and Country	ILPA ADESIVI SRL Via Ferorelli, 4 70132 BARI (BARI) ITALIA	
	Tel. + 39 0805383837	
	Fax + 39 0805377807	
e-mail address of the competent person		
responsible for the Safety Data Sheet	laboratorio@ilpa.it	
1.4. Emergency telephone number		
For urgent inquiries refer to	+ 39 0808974667 (Technical support - 8,00 - 17,00 zone) Safety Executive (HSE) Chemicals Regulation Di Road, Bootle, Merseyside. L20 7HS. Phone: +44 151 9513317	
SECTION 2. Hazards identification	on	
	~	

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:

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Flammable liquid, category 2H225Aspiration hazard, category 1H304Serious eye damage, category 1H318Specific target organ toxicity - single exposure, category 3H335Hazardous to the aquatic environment, chronic toxicity, category 3H412

Highly flammable liquid and vapour. May be fatal if swallowed and enters airways. Causes serious eye damage. May cause respiratory irritation. May cause drowsiness or dizziness. Harmful 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.

Hazard pictograms:



Hazard statements:

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Precautionary statements:

P210 P331 P305+P351+P338	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do NOT induce vomiting. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue
1 303+1 331+1 330	rinsing.
P280	Wear protective gloves/ protective clothing / eye protection / face protection.
P310	Immediately call a POISON CENTER / doctor
P370+P378	In case of fire: use carbon dioxide, foam, chemical powder to extinguish.
Contains:	HYDROCARBONS, C9, AROMATICS TITANIUM TETRABUTANOLATE
	ETHYL ACETATE
	ETHYL SILICATE

Product not intended for uses provided for by Dir. 2004/42/CE.

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%.

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SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

	•	
Identification	x = Conc. %	Classification 1272/2008 (CLP)
INERT		
CAS	42,5 ≤ x < 45	
EC		
INDEX -		
ETHYL ACETATE		
CAS 141-78-6	$27 \le x < 28,5$	Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066
EC 205-500-4		
INDEX 607-022-00-5		
Reg. no. 01-2119475103-46		
HYDROCARBONS, C9,		
AROMATICS CAS -	21 ≤ x < 22.5	Elam Lin 2 4006 App Tax 1 4004 STAT SE 2 4005 STAT SE 2 4006
CA3 -	$21 \le x < 22,3$	Flam. Liq. 3 H226, Asp. Tox. 1 H304, STOT SE 3 H335, STOT SE 3 H336, Aquatic Chronic 2 H411, EUH066
EC 918-668-5		
INDEX -		
Reg. no. 01-2119455851-35		
ETHYL SILICATE		
CAS 78-10-4	$3 \le x < 3,5$	Flam. Liq. 3 H226, Acute Tox. 4 H332, Eye Irrit. 2 H319, STOT SE 3 H335
EC 201-083-8		
INDEX 014-005-00-0		
Reg. no. 01-2119496195-28		
TITANIUM TETRABUTANOLATE		
CAS 5593-70-4	3 ≤ x < 3,5	Flam. Liq. 3 H226, Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335, STOT SE 3 H336
EC 227-006-8		
INDEX -		
Reg. no. 01-2119967423-33		

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.

PROTECTIVE MEASURES FOR THE FIRST RESCUE WORKERS: for PPE (personal protection equipment) required for first aid refer to section 8.2 of this safety data sheet.

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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

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.

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6.4. Reference to other sections

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

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 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)

No use other than specified in Section 1.2 of this safety data sheet.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

DEU ESP	Deutschland España	TRGS 900 (Fassung 31.1.2018 ber.) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte INSHT - Límites de exposición profesional para agentes químicos en España 2017
FRA	France	JORF n°0109 du 10 mai 2012 page 8773 texte n° 102
GBR	United Kingdom	EH40/2005 Workplace exposure limits
HRV	Hrvatska	NN13/09 - Ministarstvo gospodarstva, rada i poduzetništva
NLD	Nederland	Databank of the social and Economic Concil of Netherlands (SER) Values, AF 2011:18
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 2018

Туре	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	1500	400	3000	800	
MAK	DEU	1500	400	3000	800	
VLA	ESP	1460	400			
VLEP	FRA	1400	400			
WEL	GBR		200		400	

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GVI	HRV		200		400			
DEL	NLD	550		1100				
OEL	EU	734	200	1468	400			
TLV-ACGIH		1441	400					
Predicted no-effect concentr	ation - PNEC							
Normal value in fresh water				0,24	mg/	/I		
Normal value in marine wate	er			0,024	mg/	/I		
Normal value for fresh water	sediment			1,15	mg/	/kg/d		
Normal value for marine wat	er sediment			0,115	mg/	/kg/d		
Normal value for water, inter	mittent release			1,65	mg/	/		
Normal value of STP microo				650	mg/			
Normal value for the food ch	-	ina)		200	mg/			
Normal value for the terrestr				0,148	-	/kg/d		
Normal value for the atmosp				NPI		kg/d		
Health - Derived no-eff								
icalti - Derived no-em	Effects on				Effects on			
Route of exposure	consumers Acute local	Acute systemic	Chronic local	Chronic	workers Acute local	Acute	Chronic local	Chronic
Oral			VND	systemic 4,5 mg/kg		systemic		systemic
Jiai				bw/d				
		734 mg/m3	367 mg/m3	367 mg/m3	1468 mg/m3	1468 mg/m3	734 mg/m3 VND	734 mg/m 63 mg/kg
	734 mg/m3	/or hig/hio	VND	37 ma/ka				
	734 mg/m3	ro r mg/mo	VND	37 mg/kg bw/d			VIND	bw/d
Skin		70 mg/me	VND				VND	
Skin HYDROCARBONS, C9,	AROMATICS		VND					
Skin HYDROCARBONS, C9,	AROMATICS ect level - DNEL / DEffects on		VND		Effects on		VIND	
Skin HYDROCARBONS, C9, Health - Derived no-eff	AROMATICS ect level - DNEL / [VND Chronic local	bw/d Chronic	Effects on workers Acute local	Acute	Chronic local	bw/d Chronic
Skin HYDROCARBONS, C9, Health - Derived no-effe Route of exposure	AROMATICS ect level - DNEL / E Effects on consumers	DMEL		bw/d	workers	Acute systemic		bw/d
Skin HYDROCARBONS, C9, Health - Derived no-eff Route of exposure Oral	AROMATICS ect level - DNEL / E Effects on consumers	DMEL	Chronic local VND	bw/d Chronic systemic 11 mg/kg bw/d	workers		Chronic local	bw/d Chronic systemic
Skin HYDROCARBONS, C9, Health - Derived no-eff Route of exposure Dral nhalation	AROMATICS ect level - DNEL / E Effects on consumers	DMEL	Chronic local VND VND	bw/d Chronic systemic 11 mg/kg bw/d 32 mg/m3	workers		Chronic local	bw/d Chronic systemic 150 mg/m
Skin HYDROCARBONS, C9, Health - Derived no-eff Route of exposure Oral Inhalation	AROMATICS ect level - DNEL / E Effects on consumers	DMEL	Chronic local VND	bw/d Chronic systemic 11 mg/kg bw/d	workers		Chronic local	bw/d Chronic systemic
Skin HYDROCARBONS, C9, Health - Derived no-eff Route of exposure Oral nhalation Skin	AROMATICS ect level - DNEL / L Effects on consumers Acute local	DMEL	Chronic local VND VND	bw/d Chronic systemic 11 mg/kg bw/d 32 mg/m3 11 mg/kg	workers		Chronic local	bw/d Chronic systemic 150 mg/m 25 mg/kg
Skin HYDROCARBONS, C9, Health - Derived no-eff Route of exposure Oral Inhalation Skin	AROMATICS ect level - DNEL / I Effects on consumers Acute local Acute local	DMEL	Chronic local VND VND	bw/d Chronic systemic 11 mg/kg bw/d 32 mg/m3 11 mg/kg	workers		Chronic local	bw/d Chronic systemic 150 mg/m 25 mg/kg
Skin HYDROCARBONS, C9, Health - Derived no-eff Route of exposure Oral Inhalation Skin TITANIUM TETRABUTA Predicted no-effect concent	AROMATICS ect level - DNEL / I Effects on consumers Acute local Acute local	DMEL	Chronic local VND VND	bw/d Chronic systemic 11 mg/kg bw/d 32 mg/m3 11 mg/kg bw/d	workers Acute local	systemic	Chronic local	bw/d Chronic systemic 150 mg/m 25 mg/kg
Skin HYDROCARBONS, C9, Health - Derived no-eff Route of exposure Oral Inhalation Skin TITANIUM TETRABUTA Predicted no-effect concentra	AROMATICS ect level - DNEL / I Effects on consumers Acute local Acute local	DMEL	Chronic local VND VND	bw/d Chronic systemic 11 mg/kg bw/d 32 mg/m3 11 mg/kg bw/d 0,08	workers Acute local	systemic	Chronic local	bw/d Chronic systemic 150 mg/m 25 mg/kg
Skin HYDROCARBONS, C9, Health - Derived no-effe Route of exposure Oral Inhalation Skin TITANIUM TETRABUT/ Predicted no-effect concentr Normal value in fresh water Normal value in marine wate	AROMATICS ect level - DNEL / I Effects on consumers Acute local Acute local	DMEL	Chronic local VND VND	bw/d Chronic systemic 11 mg/kg bw/d 32 mg/m3 11 mg/kg bw/d 0,08 0,008	workers Acute local mg, mg,	systemic	Chronic local	bw/d Chronic systemic 150 mg/m 25 mg/kg
Skin HYDROCARBONS, C9, Health - Derived no-eff Route of exposure Oral Inhalation Skin TITANIUM TETRABUTA Predicted no-effect concentr Normal value in fresh water Normal value in marine wate	AROMATICS ect level - DNEL / I Effects on consumers Acute local Acute local	DMEL	Chronic local VND VND	bw/d Chronic systemic 11 mg/kg bw/d 32 mg/m3 11 mg/kg bw/d 0,08 0,08 0,69	workers Acute local mg, mg, mg,	systemic //	Chronic local	bw/d Chronic systemic 150 mg/m 25 mg/kg
Skin HYDROCARBONS, C9, Health - Derived no-effe Route of exposure Oral Inhalation Skin TITANIUM TETRABUT/ Predicted no-effect concente Normal value in fresh water Normal value in marine wate Normal value for fresh watel	AROMATICS ect level - DNEL / I Effects on consumers Acute local Acute local	DMEL	Chronic local VND VND	bw/d Chronic systemic 11 mg/kg bw/d 32 mg/m3 11 mg/kg bw/d 0,08 0,08 0,008 0,69 0,007	workers Acute local mg, mg, mg, mg,	systemic // // /kg/d /kg/d	Chronic local	bw/d Chronic systemic 150 mg/m 25 mg/kg
Skin HYDROCARBONS, C9, Health - Derived no-eff Route of exposure Oral Inhalation Skin TITANIUM TETRABUT/ Predicted no-effect concentr Normal value in fresh water Normal value in marine wate Normal value for fresh water	AROMATICS ect level - DNEL / I Effects on consumers Acute local Acute local	DMEL	Chronic local VND VND	bw/d Chronic systemic 11 mg/kg bw/d 32 mg/m3 11 mg/kg bw/d 0,08 0,08 0,69	workers Acute local mg, mg, mg,	systemic // // /kg/d /kg/d	Chronic local	bw/d Chronic systemic 150 mg/m 25 mg/kg
Skin HYDROCARBONS, C9, Health - Derived no-eff Route of exposure Oral Inhalation Skin TITANIUM TETRABUT/ Predicted no-effect concentr Normal value in fresh water Normal value in marine wate Normal value for fresh water Normal value for marine wate	AROMATICS ect level - DNEL / I Effects on consumers Acute local NOLATE ation - PNEC er r sediment er sediment mittent release	DMEL	Chronic local VND VND	bw/d Chronic systemic 11 mg/kg bw/d 32 mg/m3 11 mg/kg bw/d 0,08 0,08 0,008 0,69 0,007	workers Acute local mg, mg, mg, mg,	systemic	Chronic local	bw/d Chronic systemic 150 mg/m 25 mg/kg
Skin HYDROCARBONS, C9, Health - Derived no-effe Route of exposure Oral Inhalation Skin TITANIUM TETRABUT/ Predicted no-effect concentre Normal value in fresh water Normal value for fresh water Normal value for marine wate Normal value for marine wate Normal value for water, inter Normal value of STP microor	AROMATICS ect level - DNEL / I Effects on consumers Acute local Acute local A	DMEL	Chronic local VND VND	bw/d Chronic systemic 11 mg/kg bw/d 32 mg/m3 11 mg/kg bw/d 0,08 0,08 0,008 0,69 0,007 2,25	workers Acute local mg, mg, mg, mg, mg, mg, mg, mg,	systemic	Chronic local	bw/d Chronic systemic 150 mg/m 25 mg/kg
Skin HYDROCARBONS, C9, Health - Derived no-effe Route of exposure Oral Inhalation Skin TITANIUM TETRABUT/ Predicted no-effect concentr Normal value in fresh water Normal value in fresh water Normal value for fresh water Normal value for marine wat Normal value for marine wate Normal value	AROMATICS ect level - DNEL / I Effects on consumers Acute local Acute local Ac	DMEL Acute systemic	Chronic local VND VND	bw/d Chronic systemic 11 mg/kg bw/d 32 mg/m3 11 mg/kg bw/d 0,08 0,08 0,008 0,69 0,007 2,25 65	workers Acute local Market loca	systemic // // // // // // // // // /	Chronic local	bw/d Chronic systemic 150 mg/m 25 mg/kg
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Skin HYDROCARBONS, C9, Health - Derived no-effe Route of exposure Oral Inhalation Skin TITANIUM TETRABUT/ Predicted no-effect concentre Normal value in fresh water Normal value for fresh water Normal value for fresh water Normal value for marine wate Normal value of STP microo Normal value of the terrestr Health - Derived no-effect	AROMATICS ect level - DNEL / I Effects on consumers Acute local Acute local a	DMEL Acute systemic	Chronic local VND VND	bw/d Chronic systemic 11 mg/kg bw/d 32 mg/m3 11 mg/kg bw/d 0,08 0,08 0,008 0,008 0,008 0,007 2,25 65 0,017 Chronic	workers Acute local Acute local mg/ mg/ mg/ mg/ mg/ mg/ mg/ mg/ mg/ mg/	systemic visit of the systemic of the systemi	Chronic local	bw/d Chronic systemic 150 mg/m 25 mg/kg bw/d
Inhalation Skin HYDROCARBONS, C9, Health - Derived no-effe Route of exposure Oral Inhalation Skin TITANIUM TETRABUT/ Predicted no-effect concentr Normal value in fresh water Normal value in fresh water Normal value for fresh water Normal value for marine wate Normal value for marine wate Normal value for marine wate Normal value for marine marine Normal value for the terrestr Health - Derived no-effect Route of exposure Oral	AROMATICS act level - DNEL / I Effects on consumers Acute local Acute local A	DMEL Acute systemic	Chronic local VND VND VND	bw/d Chronic systemic 11 mg/kg bw/d 32 mg/m3 11 mg/kg bw/d 0,08 0,008 0,008 0,007 2,25 65 0,007 2,25 65 0,017 Chronic systemic 3,75 mg/kg	workers Acute local Acute local mg/ mg/ mg/ mg/ mg/ mg/ mg/ mg/ mg/ mg/	systemic // // // //kg/d // // //kg/d // // // // // // // // //	Chronic local VND VND	bw/d Chronic systemic 150 mg/m 25 mg/kg bw/d
Skin HYDROCARBONS, C9, Health - Derived no-effe Route of exposure Oral Inhalation Skin TITANIUM TETRABUT / Predicted no-effect concentr Normal value in fresh water Normal value in fresh water Normal value for fresh water Normal value for marine wat Normal value for marine wat Normal value for the terrestr Health - Derived no-effec Route of exposure	AROMATICS Ect level - DNEL / I Effects on consumers Acute local Acute local	DMEL Acute systemic	Chronic local VND VND VND	bw/d Chronic systemic 11 mg/kg bw/d 32 mg/m3 11 mg/kg bw/d 0,08 0,08 0,008 0,008 0,007 2,25 65 0,017 Chronic systemic	workers Acute local Acute local mg/ mg/ mg/ mg/ mg/ mg/ mg/ mg/ mg/ mg/	systemic visit of the systemic of the systemi	Chronic local VND VND	bw/d Chronic systemic 150 mg/m 25 mg/kg bw/d

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ETHYL S	SILICATE

Threshold Limit Value	Country	TWA/8h		STEL/15min				
туре	Country			STEL/15IIIII				
		mg/m3	ppm	mg/m3	ppm			
AGW	DEU	12	1,4	12	1,4			
MAK	DEU	86	10	86	10			
VLA	ESP	87	10					
VLEP	FRA	85	10					
OEL	NLD	10						
OEL	EU	44	5					
TLV-ACGIH		85	10					
Predicted no-effect concent	ration - PNEC							
Normal value in fresh water				0,19	mį	g/l		
Normal value in marine wate	er			0,019	m	g/l		
Normal value for fresh wate	r sediment			0,83	mį	g/kg/d		
Normal value for marine wa	ter sediment			0,083	m	g/kg/d		
Normal value for water, inte	rmittent release			10	m	g/l		
Normal value of STP microo	organisms			4000	m	g/l		
Normal value for the terrest	rial compartment			0,05	m	g/kg/d		
Health - Derived no-eff	ect 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	VND	NPI	VND	NPI		2,0000		5,00010
Inhalation	14 mg/m3	14 mg/m3	14 mg/m3	14 mg/m3	85 mg/m3	85 mg/m3	85 mg/m3	85 mg/m3
Skin	NPI	3 mg/kg bw/d	NPI	3 mg/kg bw/d	NPI	56 mg/kg	NPI	56 mg/kg

bw/d

nhalation	14 mg/m3	14 mg/m3	14 mg/m3	14 mg/m3	85 mg/m3	85 mg/m3	85 mg/m3	85 mg/m3
Skin	NPI	3 mg/kg bw/d	NPI	3 mg/kg bw/d	NPI	56 mg/kg bw/d	NPI	56 mg/kg bw/d

Legend:

(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.

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SKIN PROTECTION

Wear category I professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

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

EYE PROTECTION

Wear a hood visor or protective visor combined with airtight 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.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

9.2. Other information

VOC (Directive 2010/75/EC) :

53,80 % - 516,43 g/litre

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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

Decomposes slowly into acetic acid and ethanol under the effect of light, air and water.

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.

10.4. Conditions to avoid

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

ETHYL ACETATE

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

10.5. Incompatible materials

ETHYL ACETATE

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

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.

SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

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11.1. Information on toxicological effects

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

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

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

LC50 (Inhalation) of the mixture: > 20 mg/l LD50 (Oral) of the mixture: Not classified (no significant component) LD50 (Dermal) of the mixture: Not classified (no significant component)

ETHYL SILICATE

LD50 (Oral) > 2500 mg/kg rat, according to (OECD Guideline 423)

LC50 (Inhalation) 10 mg/l/1h male rats, according to (OECD Guideline 403)

ETHYL ACETATE

LD50 (Oral) 4934 mg/kg Rabbit (Equivalent to OECD 401)

LD50 (Dermal) 20000 mg/kg Rabbit (Publication Am Ind Hyg Ass J, 23, 95)

LC50 (Inhalation) 22,5 mg/l/6h Rat (40 CFR Part 799 (58 FR 40262))

HYDROCARBONS, C9, AROMATICS

LD50 (Oral) 3492 mg/kg Rat (Study report ECHA)

LD50 (Dermal) 3160 mg/kg Rabbit (Equivalent or similar to OECD Guideline 402)

LC50 (Inhalation) 6193 ppm/4h Rat (Equivalent or similar to OECD Guideline 403, GLP)

SKIN CORROSION / IRRITATION

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Repeated exposure may cause skin dryness or cracking. Does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

May cause respiratory irritation May cause drowsiness or dizziness

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Toxic for aspiration

SECTION 12. Ecological information

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

ETHYL SILICATELC50 - for Fish> 245 mg/l/96h Danio rerio, according to (EU Method C.1)EC50 - for Crustacea> 75 mg/l/48h Daphnia magna, according to (OECD Guideline 202)EC50 - for Algae / Aquatic Plants> 22 mg/l/72h Pseudokirchnerella subcapitata, according to (OECD Guideline 201)Chronic NOEC for Fish> 245 mg/l Danio rerio, according to (EU Method C.1)

ETHYL ACETATE

Loss of UVD Description M8163 - VIVO Percentation Percentation Percentation CS0 - for Fish 220 mg/V86 Pimephales prometas (US EPA method E03-05) EC50 - for Crustacea 105 mg/V8h Dapnia (RM, SDS fomitors) Chronic NOEC for Crustacea 100 mg/l Scenedesmus subspicatus (OECD Guideline 203, GLP) EC50 - for Fish 9.2 mg/V8h Daphia (RM, SDS fomitors) Chronic NOEC for Crustacea 3.2 mg/V8h Daphia (RM, SDS fomitors) Concording and Agrandability 2.6 mg/V72h Rephildoolis subceptitat (OECD Guideline 201, GLP) EC50 - for Algae / Aquatic Plants 2.6 mg/V72h Rephildoolis subceptitat (OECD Guideline 201, GLP) 12.2 Persistence and degradability ETHYL SLICATE Solubility in water 1000 - 10000 mg/l Rapidly degradable 21000 - 10000 mg/l CPHACETATE Solubility in water Solubility in water 1000 - 10000 mg/l Rapidly degradable 21.6 mg/V71 Rephildoolis subceptitat (OECD Guideline 201, GLP) ETHYL SLICATE 50000 mg/l Rapidly degradable 3.18 GCF 3.16 ETHYL ACETATE 30 Parition coeffici	ILPA	ADESIVI SRL	Revision nr. 1
M8163 - VIVO Press to 101 102118 Page 1, 101 102118 LC50 - for Fish 230 mg/196h Pimephales prometas (US EPA method EG3-05) EC60 - for Crustacea 100 mg/1 Scenedesmus subspicatis (OECD Guideline 201, GLP) HVDROCARBONS, C9, AROMATICS 2.2 mg/196h Oncorhymchus myktas (OECD Guideline 203, GLP) EC60 - for Algae / Aquatic Plants 2.2 mg/196h Oncorhymchus myktas (OECD Guideline 203, GLP) EC50 - for Algae / Aquatic Plants 2.6 mg/172h Raphidocelis subcapitatis (OECD Guideline 201, GLP) 12. Persistence and degradability ETHYL SILICATE Solubility in water 1000 - 10000 mg/1 Rapidy degradable 1000 - 10000 mg/1 Prolitation /WROFC #0(1), p63-77) HYDROCARBONS, C9, AROMATICS Rapidy degradable 1000 - 10000 mg/1 Prolitation /WROFC #0(1), p63-77) HYDROCARBONS, C9, AROMATICS Rapidy degradable 50000 mg/1 Biodergradmone 78% in 28 (DECD Guideline 301 F) 1.3 Biodergradmone 78% in 28 (DECD Guideline 301 F) 12. Biodergradmone 78% in 28 (DECD Guideline 301 F) 3.18 ECF 3.18 Biodergradmone 78% in 28 (DECD Guideline 301 F) 3.18 Biodergradmone 78% in 28 (DECD Guideline 301 F) 3.18 Bi			
Works - VIVO Page.n. 12/17 LCS0 - for Fish 230 mg/198h P/mephales promelas (US EPA method E03-05) ECS0 - for Crustacea 100 mg/1 Scenedesmus subspicatus (OECD Guideline 201, GLP) HVDROCARBONS, C9, AROMATICS 9.2 mg/198h Oncorhynchus mykias (OECD Guideline 201, GLP) ECS0 - for Fish 9.2 mg/198h Oncorhynchus mykias (OECD Guideline 201, GLP) ECS0 - for Algae / Aquatic Plants 2.8 mg/172h Rephidocelis subcapitata (OECD Guideline 201, GLP) ECS0 - for Algae / Aquatic Plants 2.8 mg/172h Rephidocelis subcapitata (OECD Guideline 201, GLP) ECS0 - for Algae / Aquatic Plants 2.8 mg/172h Rephidocelis subcapitata (OECD Guideline 201, GLP) ECS0 - for Algae / Aquatic Plants 2.8 mg/172h Rephidocelis subcapitata (OECD Guideline 201, GLP) ECS0 - for Algae / Aquatic Plants 2.8 mg/172h Rephidocelis subcapitata (OECD Guideline 201, GLP) ECS0 - for Algae / Aquatic Plants 2.8 mg/172h Rephidocelis subcapitata (OECD Guideline 201, GLP) ECS0 - for Algae / Aquatic Plants 1000 - 10000 mg/1 Rapidy degradable (Publication JWPCF 46(1), pS3-77) 10000 mg/1 HYLACETATE 2.8 backgradabon 207 F/8 in 28 d (OECD Guideline 301 F) ECS0- for Custacea 3.18 BCF 3.16 ETHYL ACETATE 3.18			
LCS0 - for Fish 2.30 mg/I/36h Pimephales promelas (US PA method E03-05) EC30 - for Crustacea 100 mg/I Scenedesmus subsplicatus (OECD Guideline 201, GLP) HVDROCARBONS, C3, AROMATICS LCS0 - for Algae / Aquato Plants 2.6 mg/I/36h Oncorhynchus mykiss (OECD Guideline 203, GLP) EC50 - for Algae / Aquato Plants 2.6 mg/I/36h Oncorhynchus mykiss (OECD Guideline 201, GLP) EC50 - for Algae / Aquato Plants 2.6 mg/I/36h Oncorhynchus mykiss (OECD Guideline 201, GLP) EC50 - for Algae / Aquato Plants 2.6 mg/I/26h Raphidoceils subcapitata (OECD Guideline 201, GLP) EC50 - for Algae / Aquato Plants 2.6 mg/I/26h Raphidoceils subcapitata (OECD Guideline 201, GLP) EC50 - for Algae / Aquato Plants 2.6 mg/I/26h Raphidoceils subcapitata (OECD Guideline 201, GLP) EC50 - for Algae / Aquato Plants 2.6 mg/I/26h Raphidoceils subcapitata (OECD Guideline 201, GLP) EC50 - for Algae / Aquato Plants 2.6 mg/I/26h Raphidoceils subcapitata (OECD Guideline 201, GLP) EC50 - for Algae / Aquato Plants 2.6 mg/I/26h Raphidoceils subcapitata (OECD Guideline 201, GLP) EC50 - for Algae / Aquato Plants 2.6 mg/I/26h Raphidoceils subcapitata (OECD Guideline 201, GLP) EC50 - for Algae / Aquato Plants 2.6 mg/I/26h Raphidoceils subcapitata (OECD Guideline 201, GLP) EC50 - for Algae / Aquato Plants - 10000 mg/I Rapidy degradable Rapidy degradable Biodegradazione /78% in 28 d (OECD Guideline 301 F) 12.3 Bioaccumulative potential ECT+YL ACETATE	M	8163 - VIVO	
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EC50 · for Crustacea 165 mg/148h Dapnia (Rif. SDS fomitore) Chronic NOEC for Crustacea 100 mg/l Scenedesmus subspicatus (OECD Guideline 201, GLP) LC50 · for fish 9.2 mg/096h Oncortynchus mykits (OECD Guideline 202, GLP) EC50 · for Algae / Aquatic Plants 2.8 mg/172h Raphidocelis subcapitata (OECD Guideline 202, GLP) EC50 · for Algae / Aquatic Plants 2.6 mg/172h Raphidocelis subcapitata (OECD Guideline 201, GLP) EC50 · for Algae / Aquatic Plants 2.6 mg/172h Raphidocelis subcapitata (OECD Guideline 201, GLP) EC50 · for Algae / Aquatic Plants 2.6 mg/172h Raphidocelis subcapitata (OECD Guideline 201, GLP) EC50 · for Algae / Aquatic Plants 2.6 mg/172h Raphidocelis subcapitata (OECD Guideline 201, GLP) EC50 · for Algae / Aquatic Plants 2.6 mg/172h Raphidocelis subcapitata (OECD Guideline 201, GLP) EC50 · for Algae / Aquatic Plants 1000 · 10000 mg/l Rapidy degradable > 10000 mg/l ETHYL SILICATE > 10000 mg/l Parition coefficient: n-octanol/water 3.18 ECF 3.16 ETHYL ACETATE 0.66 ECF 30 12.4 Mobility in soil 3.18 Information not available 100 · 10 · 10 · 10 · 10 · 10 · 10 · 10	LC50 - for Fish	230 mg/l/96h Pimephales promelas (US E	PA method E03-05)
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12.6. Other adverse effects	12.5. Results of PBT and vPvB assessment		
Information not available	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	SECTION 13. Disposal consideration	ions	

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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.

SECTION 14. Transport information

14.1. UN number

ADR / RID, IMDG, IATA: 1993

14.2. UN proper shipping name

ADR / RID:	FLAMMABLE LIQUID, N.O.S. (Contens: ethyl acetate) MIXTURE
IMDG:	FLAMMABLE LIQUID, N.O.S. (Contens: ethyl acetate) MIXTURE
IATA:	FLAMMABLE LIQUID, N.O.S. (Contens: ethyl acetate) MIXTURE

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, IATA: II

14.5. Environmental hazards

ADR / RID:	NO
IMDG:	NO
IATA:	NO

14.6. Special precautions for user

ADR / RID:	HIN - Kemler: 33	Limited Quantities: 1 L	Tunnel restriction code: (D/E)
	Special Provision: 640C		
IMDG:	EMS: F-E, <u>S-E</u>	Limited Quantities: 1 L	
IATA:	Cargo:	Maximum quantity: 60 L	Packaging instructions: 364
	Pass.:	Maximum quantity: 5 L	Packaging instructions: 353

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		l l
Special Instruct	ions: A3	
14.7. Transport in bulk according	to Annex II of Marpol and the IBC Code	
Information not relevant		
SECTION 15. Regulator	y information	
15.1. Safety, health and environr	nental regulations/legislation specific for the subst	ance or mixture
Seveso Category - Directive 2012/18	/EC: P5b FLAMMABLE LIQUIDS	
Restrictions relating to the product of	r contained substances pursuant to Annex XVII to EC F	Regulation 1907/2006
Product Point	 categories set out in Annex I to Regulation (EC) N (a) hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 type 2.14 categories 1 and 2, 2.15 types A to F; (b) hazard classes 3.1 to 3.6, 3.7 adverse effects 3.8 effects other than narcotic effects, 3.9 and 3.11 (c) hazard class 4.1; (d) hazard class 5.1. 40. Substances classified as flammable gases cat flammable solids category 1 or 2, substances 	es A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, s on sexual function and fertility or on development, 0; tegory 1 or 2, flammable liquids categories 1, 2 or 3, and mixtures which, in contact with water, emit liquids category 1 or pyrophoric solids category 1,
Substances in Candidate List (Art. 59	<u> PEACH)</u>	
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 re	porting pursuant to (EC) Reg. 649/2012:	
None		
Substances subject to the Rotterdam Convention:		
None		
Substances subject to the Stockholm Convention:		
None		
Healthcare controls		
	gent must not undergo health checks, provided that av st and that the 98/24/EC directive is respected.	ailable risk-assessment data prove that the risks related to the

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15.2. Chemical safety assessment

A chemical safety assessment has been performed for the following contained substances

ETHYL ACETATE

HYDROCARBONS, C9, AROMATICS

SECTION 16. Other information

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

Flam. Liq. 2	Flammable liquid, category 2
Flam. Liq. 3	Flammable liquid, category 3
Acute Tox. 4	Acute toxicity, category 4
Asp. Tox. 1	Aspiration hazard, category 1
Eye Dam. 1	Serious eye damage, category 1
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 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.
H226	Flammable liquid and vapour.
H332	Harmful if inhaled.
H304	May be fatal if swallowed and enters airways.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
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

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- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- **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
- 1. Regulation (EC) 1907/2006 (REACH) of the European Parliament 2. 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 7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
- Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
 Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
- 10. Regulation (EÚ) 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)
- 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

Istituto Superiore di Sanità (ISS) – Archivio Preparati Pericolosi

Codice azienda: IT00465900728 Ragione sociale: Ilpa Adesivi Srl Nome prodotto ISS: VIVO Codice prodotto ISS: M8163

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.

Training for workers:

Worker training should include content, updates and duration depending on the risk profiles assigned to the business sectors they belong

Classification according to Regulation (EC) Nr. 1272/2008

Flam. liq. 2, H325 Asp. Tox. 1, H304 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336 Aquatic Chronic 3, H412 **Classification procedure** Calculation method Calculation method Calculation method Calculation method Calculation method

Calculation method

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