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: **H86025**
Product name **VPK BIANCO 420 PLUS 25 GLOSS**

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

Identified Uses	Industrial	Professional	Consumer
Solvent-based varnishes	-	✓	-

1.3. Details of the supplier of the safety data sheet

Name **VERINLEGNO S.p.A.**
Full address **Via Luigi Galvani, 7**
District and Country **51010 Massa e Cozzile (PT)**
Italia
Tel. +39 0572 / 9271.1
Fax +39 0572 / 773608
e-mail address of the competent person responsible for the Safety Data Sheet **ambientesicurezza@verinlegno.it**

1.4. Emergency telephone number

For urgent inquiries refer to **Ing. Cialdoni Annamaria:**
+ 39 0572 927120 (dalle ore 08:00 alle ore 12.00 e dalle ore 14:00 alle ore 18:00)

National Poisons Information Service (NPIS)
Mail. director.birmingham.unit@npis.org

REACH and CLP UK CA Help Desk Health and Safety Executive (HSE)
5S.1 Redgrave Court, Merton Road, Bootle, Merseyside. L20 7HS
Mail. ukreachca@hse.gov.uk

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 3	H226	Flammable liquid and vapour.
Specific target organ toxicity - repeated exposure, category 2	H373	May cause damage to organs through prolonged or repeated exposure.
Eye irritation, category 2	H319	Causes serious eye irritation.
Skin irritation, category 2	H315	Causes skin irritation.
Specific target organ toxicity - single exposure, category 3	H335	May cause respiratory irritation.
Skin sensitization, category 1A	H317	May cause an allergic skin reaction.
Hazardous to the aquatic environment, chronic toxicity, category 3	H412	Harmful to aquatic life with long lasting effects.

SECTION 2. Hazards identification ... / >>

2.2. Label elements

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

Hazard pictograms:



Signal words: Warning

Hazard statements:

H226	Flammable liquid and vapour.
H373	May cause damage to organs through prolonged or repeated exposure.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H317	May cause an allergic skin reaction.
H412	Harmful to aquatic life with long lasting effects.
EUH208	Contains: 12-HYDROXY-N-[6-(12- HYDROXYOCTADECA NOYLAMINO)HEXYL]OCTADECANAMIDE May produce an allergic reaction.

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.
P370+P378	In case of fire: use a powder or foam extinguisher to extinguish.
P261	Avoid breathing dust / fume / gas / mist / vapours / spray.
P312	Call a POISON CENTRE / doctor if you feel unwell.

Contains: XILENE (MISCELA DI ISOMERI)
MALEIC ANHYDRIDE
(Z)-OCTADEC-9-ENYLAMINE

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%.

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification 1272/2008 (CLP)
XILENE (MISCELA DI ISOMERI)		
CAS 1330-20-7	32,5 ≤ x < 35	**Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Asp. Tox. 1 H304, STOT RE 2 H373, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Aquatic Chronic 3 H412**
EC 215-535-7		
INDEX 601-022-00-9		
Reg. no. 01-2119488216-32		
TITANIUM DIOXIDE		
CAS 13463-67-7	22,5 ≤ x < 24	
EC 236-675-5		
INDEX		
Reg. no. 01-2119489379-17		

SECTION 3. Composition/information on ingredients ... / >>

N-BUTYL ACETATE
CAS *123-86-4* 1,5 ≤ x < 2 **Flam. Liq. 3 H226, STOT SE 3 H336, EUH066**
EC *204-658-1*
INDEX *607-025-00-1*
Reg. no. *01-2119485493-29*

2-METHOXY-1-METHYLETHYL ACETATE
CAS *108-65-6* 1 ≤ x < 1,5 **Flam. Liq. 3 H226**
EC *203-603-9*
INDEX *607-195-00-7*
Reg. no. *01-2119475791-29*

TOLUENE
CAS *108-88-3* 0,9 ≤ x < 1 **Flam. Liq. 2 H225, Repr. 2 H361d, Asp. Tox. 1 H304, STOT RE 2 H373, Skin Irrit. 2 H315, STOT SE 3 H336**
EC *203-625-9*
INDEX *601-021-00-3*
Reg. no. *01-2119471310-51*

ETHYLBENZENE
CAS *100-41-4* 0,3 ≤ x < 0,35 **Flam. Liq. 2 H225, Acute Tox. 4 H332, Asp. Tox. 1 H304, STOT RE 2 H373**
EC *202-849-4*
INDEX *601-023-00-4*
Reg. no. *01-2119489370-35*

12-HYDROXY-N-[6-(12- HYDROXYOCTADECA NOYLAMINO)HEXYL]OCTADECANAMIDE
CAS *55349-01-4* 0,25 ≤ x < 0,3 **Skin Sens. 1B H317, Aquatic Chronic 4 H413**
EC *434-430-9*
INDEX
Reg. no. *01-0000018057-71-XX*

ETHYL ACETATE
CAS *141-78-6* 0,0495 ≤ x < 0,0509 **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*

(Z)-OCTADEC-9-ENYLAMINE
CAS *112-90-3* 0,0204 ≤ x < 0,0218 **Acute Tox. 4 H302, Asp. Tox. 1 H304, STOT RE 2 H373, Skin Corr. 1A H314, Eye Dam. 1 H318, STOT SE 3 H335, Aquatic Acute 1 H400 M=10, Aquatic Chronic 1 H410 M=10**
EC *204-015-5*
INDEX *612-283-00-3*

MALEIC ANHYDRIDE
CAS *108-31-6* 0,003 ≤ x < 0,0044 **Acute Tox. 4 H302, STOT RE 1 H372, Skin Corr. 1B H314, Eye Dam. 1 H318, Resp. Sens. 1 H334, Skin Sens. 1A H317, EUH071**
EC *203-571-6*
INDEX *607-096-00-9*

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 30-60 minutes, opening the eyelids fully. Get medical advice/attention.
SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.
INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.
INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

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.

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

SECTION 7. Handling and storage ... / >>

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)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

CZE	Česká Republika	Nařízení vlády č. 246/2018 Sb. Nařízení vlády, kterým se mění nařízení vlády č. 361/2007 Sb., kterým se stanoví podmínky ochrany zdraví při práci, ve znění pozdějších předpisů
DEU	Deutschland	TRGS 900 (Fassung 07.06.2018) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte
DNK	Danmark	Bekendtgørelse om ændring af bekendtgørelse om grænseværdier for stoffer og materialer1- BEK nr 655 af 31/05/2018
ESP	España	LÍMITES DE EXPOSICIÓN PROFESIONAL PARA AGENTES QUÍMICOS EN ESPAÑA 2008 NIPO: 211-08-011-5
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)
GRC	Ελλάδα	ΕΦΗΜΕΡΙΔΑ ΤΗΣ ΚΥΒΕΡΝΗΣΕΩΣ - ΤΕΥΧΟΣ ΠΡΩΤΟ Αρ. Φύλλου 152 - 21 Αυγούστου 2018
HRV	Hrvatska	Pravilnik o zaštiti radnika od izloženosti opasnim kemikalijama na radu, graničnim vrijednostima izloženosti i biološkim graničnim vrijednostima (NN 91/18)
HUN	Magyarország	A pénzügyminiszter 7/2018. (VIII. 29.) PM rendelete a munkahelyek kémiai biztonságáról szóló 25/2000. (IX. 30.) EüM–SZCSM együttes rendelet módosításáról
ITA	Italia	DIRETTIVA (UE) 2017/164 DELLA COMMISSIONE del 31 gennaio 2017
LTU	Lietuva	LIETUVOS HIGIENOS NORMA HN 23:2011 „CHEMINIŲ MEDŽIAGŲ PROFESINIO POVEIKIO RIBINIAI DYDŽIAI. MATAVIMO IR POVEIKIO VERTINIMO BENDRIEJI REIKALAVIMAI. Nr. V-695/A1-272, 2018-06-12, paskelbta TAR 2018-06-15, i. k. 2018-09988
NLD	Nederland	Regeling van de Staatssecretaris van Sociale Zaken en Werkgelegenheid van 13 juli 2018, 2018-0000118517 tot wijziging van de Arbeidsomstandighedenregeling in verband met de implementatie van Richtlijn 2017/164 in Bijlage XIII
POL	Polska	ROZPORZĄDZENIE MINISTRA RODZINY, PRACY I POLITYKI SPOŁECZNEJ z dnia 12 czerwca 2018 r
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
ROU	România	HOTĂRÂRE nr. 584 din 2 august 2018 pentru modificarea Hotărârii Guvernului nr. 1.218/2006 privind stabilirea cerinţelor minime de securitate şi sănătate în muncă pentru asigurarea protecţiei lucrătorilor împotriva riscurilor legate de prezenţa agenţilor chimici
SVK	Slovensko	Nariadenie vlády č. 33/2018 Z. z. Nariadenie vlády Slovenskej republiky, ktorým sa mení a dopĺňa nariadenie vlády Slovenskej republiky č. 355/2006 Z. z. o ochrane zamestnancov pred rizikami súvisiacimi s expozíciou chemickým faktorom pri práci v znení neskorších predpisov
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

SECTION 8. Exposure controls/personal protection ... / >>

XILENE (MISCELA DI ISOMERI)

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min			
		mg/m3	ppm	mg/m3	ppm		
TLV	CZE	200		400			
AGW	DEU	440	100	880	200	SKIN	
MAK	DEU	440	100	880	200	SKIN	
VLA	ESP	221	50	442	100	SKIN	
VLEP	FRA	221	50	442	100	SKIN	
WEL	GBR	220	50	441	100		
TLV	GRC	435	100	650	150		Regulatory reference: DGFASLI
GVI/KGVI	HRV	221	50	442	100	SKIN	
AK	HUN	221		442		SKIN	
TGG	NLD	210		442		SKIN	
NDS/NDSCh	POL	100					
NPEL	SVK	221	50	442		SKIN	
OEL	EU	221	50	442	100	SKIN	
TLV-ACGIH		434	100	651	150		

TITANIUM DIOXIDE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min			
		mg/m3	ppm	mg/m3	ppm		
TLV	DNK	6					Som Ti
VLA	ESP	10					
VLEP	FRA	10					
WEL	GBR	10				INHAL	
WEL	GBR	4				RESP	
TLV	GRC		10				
GVI/KGVI	HRV	10				INHAL	
GVI/KGVI	HRV	4				RESP	
RD	LTU	5					
NDS/NDSCh	POL	10				INHAL	
TLV	ROU	10		15			
NPEL	SVK	5					
TLV-ACGIH		10					

N-BUTYL ACETATE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
TLV	CZE	950	200,45	1200	253,2
AGW	DEU	300	62	600	124
TLV	DNK	710	150		
VLA	ESP	724	150	965	200
VLEP	FRA	710	150	940	200
WEL	GBR	724	150	966	200
TLV	GRC	710	150	950	200
GVI/KGVI	HRV	724	150	966	200
AK	HUN	950		950	
RD	LTU	500	100	700	150
TGG	NLD	150			
NDS/NDSCh	POL	240		720	
TLV	ROU	715	150	950	200
NPEL	SVK	500	100	700	150
TLV-ACGIH			50		150

SECTION 8. Exposure controls/personal protection ... / >>

2-METHOXY-1-METHYLETHYL ACETATE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min			
		mg/m3	ppm	mg/m3	ppm		
TLV	CZE	270	49,95	550	101,75	SKIN	
AGW	DEU	270	50	270	50		
MAK	DEU	270	50	270	50		
TLV	DNK	275	50			SKIN	E
VLA	ESP	275	50	550	100	SKIN	
VLEP	FRA	275	50	550	100	SKIN	
WEL	GBR	274	50	548	100	SKIN	
TLV	GRC	275	50	550	100		
GVI/KGVI	HRV	275	50	550	100	SKIN	
AK	HUN	275		550			
VLEP	ITA	275	50	550	100	SKIN	
RD	LTU	250	50	400	75	SKIN	
TGG	NLD	550					
NDS/NDSCh	POL	260		520		SKIN	
VLE	PRT	275	50	550	100	SKIN	
TLV	ROU	275	50	550	100	SKIN	
NPEL	SVK	275	50	550	100	SKIN	
OEL	EU	275	50	550	100	SKIN	

TOLUENE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min			
		mg/m3	ppm	mg/m3	ppm		
TLV	CZE	200	53,2	500	133	SKIN	
AGW	DEU	190	50	760	200	SKIN	
MAK	DEU	190	50	760	200	SKIN	
TLV	DNK	94	25			SKIN	E
VLA	ESP	192	50	384	100	SKIN	
VLEP	FRA	76,8	20	384	100	SKIN	
WEL	GBR	191	50	384	100	SKIN	
TLV	GRC	192	50	384	100		
GVI/KGVI	HRV	192	50	384	100	SKIN	
AK	HUN	190		380		SKIN	
VLEP	ITA	192	50			SKIN	
RD	LTU	192	50	384	100	SKIN	
TGG	NLD	150		384			
NDS/NDSCh	POL	100		200		SKIN	
VLE	PRT	192	50	384	100	SKIN	
TLV	ROU	192	50	384	100	SKIN	
NPEL	SVK	192	50	384	100	SKIN	
OEL	EU	192	50	384	100	SKIN	
TLV-ACGIH		75,4	20				

SECTION 8. Exposure controls/personal protection ... / >>

ETHYLBENZENE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min			
		mg/m3	ppm	mg/m3	ppm		
TLV	CZE	200	46	500	115	SKIN	
MAK	DEU	88	20	176	40	SKIN	
TLV	DNK	217	50			SKIN	E
VLA	ESP	441	100	884	200	SKIN	
VLEP	FRA	88,4	20	442	100	SKIN	
WEL	GBR	441	100	552	125	SKIN	
TLV	GRC	435	100	545	125		
GVI/KGVI	HRV	442	100	884	200	SKIN	
AK	HUN	442		884		SKIN	
VLEP	ITA	442	100	884	200	SKIN	
RD	LTU	442	100	884	200	SKIN	
TGG	NLD	215		430		SKIN	
NDS/NDSCh	POL	200		400		SKIN	
VLE	PRT	442	100	884	200	SKIN	
TLV	ROU	442	100	884	200	SKIN	
NPEL	SVK	442	100	884	200	SKIN	
OEL	EU	442	100	884	200	SKIN	
TLV-ACGIH		87	20				

ETHYL ACETATE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
TLV	CZE	700	194,6	900	250,2
AGW	DEU	730	200	1460	400
MAK	DEU	750	200	1500	400
TLV	DNK	540	150		
VLA	ESP	734	200	1468	400
VLEP	FRA	1400	400		
WEL	GBR	734	200	1468	400
TLV	GRC	734	200	1468	400
GVI/KGVI	HRV	734	200	1468	400
AK	HUN	734		1468	
VLEP	ITA	734	200	1468	400
RD	LTU	500	150	1100 (C)	300 (C)
TGG	NLD	734		1468	
NDS/NDSCh	POL	734		1468	
VLE	PRT	734	200	1468	400
TLV	ROU	400	111	500	139
NPEL	SVK	734	200	1468	400
OEL	EU	734	200	1468	400
TLV-ACGIH		1441	400		

SECTION 8. Exposure controls/personal protection ... / >>

MALEIC ANHYDRIDE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
TLV	CZE	1	0,249	2	0,498	
MAK	DEU	0,081	0,02	0,081 (C)	0,02 (C)	C = 0,05 ml/m3; 0,20 mg/m3
TLV	DNK	0,4	0,1			
VLA	ESP	0,4	0,1			
VLEP	FRA			1		
WEL	GBR	1		3		
TLV	GRC	1				
GVI/KGVI	HRV	0,41	0,1	0,8	0,2	INHAL
GVI/KGVI	HRV	0,41	0,1	0,8	0,2	SKIN
AK	HUN	0,4		0,4		
RD	LTU	1,2	0,3	2,5	0,6	
NDS/NDSCh	POL	0,5		1		SKIN
TLV	ROU	1	0,25	3	0,75	
NPEL	SVK	0,41	0,1			
TLV-ACGIH		0,01	0,0025			

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

XILENE (MISCELA DI ISOMERI)
Regulatory Reference, Ministry of Labour & Employment, Government of India (DGFASLI): TWA (8 hrs) 100 ppm - 435 mg/m3 STEL (15 min) 150 ppm - 655 mg/m3.

TITANIUM DIOXIDE
Regulatory Reference, Ministry of Labour & Employment, Government of India (DGFASLI): TWA (8 hrs) 10 mg/m3.

N-BUTYL ACETATE
Regulatory Reference, Ministry of Labour & Employment, Government of India (DGFASLI): TWA (8 hrs) 150 ppm - 710 mg/m3 STEL (15 min) 200 ppm - 950 mg/m3.

TOLUENE
Regulatory Reference, Ministry of Labour & Employment, Government of India (DGFASLI): TWA (8 hrs) 100 ppm - 375 mg/m3 STEL (15 min) 150 ppm - 560 mg/m3.

ETHYL ACETATE
Regulatory Reference, Ministry of Labour & Employment, Government of India (DGFASLI): TWA (8 hrs) 400 ppm - 1,400 mg/m3.

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.
Exposure levels must be kept as low as possible to avoid significant build-up in the organism. Manage personal protective equipment so as to guarantee maximum protection (e.g. reduction in replacement times).
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.
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, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (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

SECTION 8. Exposure controls/personal protection ... / >>

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

Properties	Value	Information
Appearance	liquid	
Colour	white	
Odour	characteristic	
Odour threshold	Not available	
pH	Not available	
Melting point / freezing point	Not available	
Initial boiling point	Not available	
Boiling range	Not available	
Flash point	23 ≤ T ≤ 60 °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	
Vapour pressure	Not available	
Vapour density	> 1	
Relative density	1,280 +/- 0,050 Kg/Lt	
Solubility	soluble in organic solvents	
Partition coefficient: n-octanol/water	Not available	
Auto-ignition temperature	Not available	
Decomposition temperature	Not available	
Viscosity	38"+/- 4" DIN 8 (20°C)	
Explosive properties	Not available	
Oxidising properties	Not available	

9.2. Other information

Total solids (250°C / 482°F)	62,91 %			
VOC (Directive 2010/75/EC) :	37,08 %	-	474,64	g/litre
VOC (volatile carbon) :	32,56 %	-	416,73	g/litre

SECTION 10. Stability and reactivity

10.1. Reactivity

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

N-BUTYL ACETATE
Decomposes on contact with: water.
2-METHOXY-1-METHYLETHYL ACETATE
Stable in normal conditions of use and storage.
With the air it may slowly develop peroxides that explode with an increase in temperature.

TOLUENE
Avoid exposure to: light.
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

SECTION 10. Stability and reactivity ... / >>

The vapours may also form explosive mixtures with the air.

XILENE (MISCELA DI ISOMERI)
May react violently with: sulphuric acid,nitric acid,perchloric acid.
May form explosive mixtures with: air.
N-BUTYL ACETATE
Risk of explosion on contact with: strong oxidising agents.May react dangerously with: alkaline hydroxides,potassium tert-butoxide.Forms explosive mixtures with: air.
2-METHOXY-1-METHYLETHYL ACETATE
May react violently with: oxidising substances,strong acids,alkaline metals.
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.
ETHYLBENZENE
Reacts violently with: strong oxidants.Attacks various types of plastic materials.May form explosive mixtures with: 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.

N-BUTYL ACETATE
Avoid exposure to: moisture,sources of heat,naked flames.
ETHYL ACETATE
Avoid exposure to: light,sources of heat,naked flames.

10.5. Incompatible materials

N-BUTYL ACETATE
Incompatible with: water,nitrates,strong oxidants,acids,alkalis,zinc.
2-METHOXY-1-METHYLETHYL ACETATE
Incompatible with: oxidising substances,strong acids,alkaline metals.
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.

ETHYLBENZENE
May develop: methane,styrene,hydrogen,ethane.

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.

11.1. Information on toxicological effects

XILENE (MISCELA DI ISOMERI)
XYLENE: toxic action on the central nervous system (encephalopathies); irritating action on skin, conjunctiva, cornea and respiratory system.

Metabolism, toxicokinetics, mechanism of action and other information

2-METHOXY-1-METHYLETHYL ACETATE
The main route of entry is the skin, whereas the respiratory route is less important due to the low vapour pressure of the product.

Information on likely routes of exposure

N-BUTYL ACETATE
WORKERS: inhalation; contact with the skin.

2-METHOXY-1-METHYLETHYL ACETATE
WORKERS: inhalation; contact with the skin.

SECTION 11. Toxicological information ... / >>

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.

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

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

N-BUTYL ACETATE
In humans, the substance's vapours cause irritation of the eyes and nose. In the event of repeated exposure, skin irritation, dermatitis (dryness and cracking of the skin) and keratitis appear.

2-METHOXY-1-METHYLETHYL ACETATE
Above 100 ppm causes irritation of the eye, nose and oropharynx mucous membranes. At 1000 ppm, disturbance of equilibrium and severe eye irritation can be noticed. Clinical and biological examinations carried out on exposed volunteers revealed no anomalies. Acetate produces greater skin and eye irritation with direct contact. No chronic effects on humans have been reported (INCR, 2010).

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

ETHYLBENZENE
As the counterparts of benzene, may have an acute effect on the central nervous system, with depression, narcosis, often preceded by dizziness and associated with headache (Ispesl). Is irritating for skin, conjunctiva and respiratory tract.

Interactive effects

N-BUTYL ACETATE
A case of acute intoxication been reported involving a 33 year old worker while cleaning a tank with a preparation containing xylenes, butyl acetate and ethylene glycol acetate. The person had irritation of the conjunctiva and upper respiratory tract, drowsiness and motor coordination disorders, which disappeared within 5 hours. The symptoms are attributed to poisoning by mixed xylenes and butyl acetate, with a possible synergistic effect responsible for the neurological effects. Cases of vacuolar keratitis are reported in workers exposed to a mixture of butyl acetate and isobutanol vapours, but with uncertainty concerning the responsibility of a particular solvent (INRC, 2011).

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

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:	>2000 mg/kg

(Z)-OCTADEC-9-ENYLAMINE

LD50 (Dermal)	888 mg/kg Rat

XILENE (MISCELA DI ISOMERI)

LD50 (Oral)	3523 mg/kg Rat
LD50 (Dermal)	4350 mg/kg Rabbit
LC50 (Inhalation)	26 mg/l/4h Rat

12-HYDROXY-N-[6-(12- HYDROXYOCTADECA NOYLAMINO)HEXYL]OCTADECANAMIDE

LD50 (Oral)	> 2000 mg/kg Ratto
LD50 (Dermal)	> 2000 mg/kg Ratto
LC50 (Inhalation)	> 4,06 mg/l/1h Ratto

TITANIUM DIOXIDE

LD50 (Oral)	> 10000 mg/kg Rat

2-METHOXY-1-METHYLETHYL ACETATE

LD50 (Oral)	8530 mg/kg Rat
LD50 (Dermal)	> 5000 mg/kg Rat

SECTION 11. Toxicological information ... / >>

TOLUENE

LD50 (Oral)	5580 mg/kg Rat
LD50 (Dermal)	12124 mg/kg Rabbit
LC50 (Inhalation)	28,1 mg/l/4h Rat

ETHYLBENZENE

LD50 (Oral)	3500 mg/kg Rat
LD50 (Dermal)	15354 mg/kg Rabbit
LC50 (Inhalation)	17,2 mg/l/4h Rat

N-BUTYL ACETATE

LD50 (Oral)	> 6400 mg/kg Rat
LD50 (Dermal)	> 5000 mg/kg Rabbit
LC50 (Inhalation)	21,1 mg/l/4h Rat

MALEIC ANHYDRIDE

LD50 (Oral)	400 mg/kg Rat
LD50 (Dermal)	610 mg/kg Rat

SKIN CORROSION / IRRITATION

Causes skin irritation

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin
May produce an allergic reaction.
Contains:
12-HYDROXY-N-[6-(12- HYDROXYOCTADECA NOYLAMINO)HEXYL]OCTADECANAMIDE

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

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".

ETHYLBENZENE
Classified in Group 2B (possible human carcinogen) by the International Agency for Research on Cancer (IARC) - (IARC, 2000).
Classified in Group D (not classifiable as a human carcinogen) by the US Environmental Protection Agency (EPA) - (US EPA file on-line 2014).

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

May cause respiratory irritation

STOT - REPEATED EXPOSURE

May cause damage to organs

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class Viscosity: 38"+/- 4" DIN 8 (20°C)

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

(Z)-OCTADEC-9-ENYLAMINE

LC50 - for Fish	> 0,0001 mg/l/96h
EC50 - for Crustacea	> 0,0001 mg/l/48h
EC50 - for Algae / Aquatic Plants	> 0,0001 mg/l/72h

12-HYDROXY-N-[6-(12- HYDROXYOCTADECA NOYLAMINO)HEXYL]OCTADECANAMIDE

LC50 - for Fish	> 100 mg/l/96h Oncorhyncus mykiss
EC50 - for Crustacea	> 100 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants	> 36,8 mg/l/72h

12.2. Persistence and degradability

TITANIUM DIOXIDE

Solubility in water	< 0,001 mg/l

Degradability: information not available

2-METHOXY-1-METHYLETHYL ACETATE

Solubility in water	> 10000 mg/l

Rapidly degradable

TOLUENE

Solubility in water	100 - 1000 mg/l

Rapidly degradable

ETHYLBENZENE

Solubility in water	1000 - 10000 mg/l

Rapidly degradable

ETHYL ACETATE

Solubility in water	> 10000 mg/l

Rapidly degradable

N-BUTYL ACETATE

Solubility in water	1000 - 10000 mg/l

MALEIC ANHYDRIDE

Solubility in water	> 10000 mg/l

Entirely degradable

12.3. Bioaccumulative potential

2-METHOXY-1-METHYLETHYL ACETATE

Partition coefficient: n-octanol/water	1,2

TOLUENE

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

ETHYLBENZENE

Partition coefficient: n-octanol/water	3,6

ETHYL ACETATE

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

N-BUTYL ACETATE

Partition coefficient: n-octanol/water	2,3
BCF	15,3

SECTION 12. Ecological information ... / >>

MALEIC ANHYDRIDE
Partition coefficient: n-octanol/water -2,78

12.4. Mobility in soil

N-BUTYL ACETATE
Partition coefficient: soil/water < 3

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.

SECTION 14. Transport information

14.1. UN number

ADR / RID, IMDG, IATA: 1263

14.2. UN proper shipping name

ADR / RID: PAINT
IMDG: PAINT
IATA: PAINT

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: III

14.5. Environmental hazards

ADR / RID: NO
IMDG: NO
IATA: NO

SECTION 14. Transport information ... / >>

14.6. Special precautions for user

ADR / RID:	HIN - Kemler: 30 Special Provision: -	Limited Quantities: 5 L	Tunnel restriction code: (D/E)
IMDG:	EMS: F-E, S-E	Limited Quantities: 5 L	
IATA:	Cargo: Pass.: Special Instructions:	Maximum quantity: 220 L Maximum quantity: 60 L A3, A72, A192	Packaging instructions: 366 Packaging instructions: 355

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

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product
Point 3 - 40

Contained substance
Point 48 TOLUENE
Reg. no.: 01-2119471310-51

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

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.

German regulation on the classification of substances hazardous to water (AwSV, vom 18. April 2017)
WGK 1: Low hazard to waters

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
Flam. Liq. 3	Flammable liquid, category 3
Repr. 2	Reproductive toxicity, category 2
Acute Tox. 4	Acute toxicity, category 4
STOT RE 1	Specific target organ toxicity - repeated exposure, category 1
Asp. Tox. 1	Aspiration hazard, category 1
STOT RE 2	Specific target organ toxicity - repeated exposure, category 2
Skin Corr. 1A	Skin corrosion, category 1A
Skin Corr. 1B	Skin corrosion, category 1B

SECTION 16. Other information ... / >>

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
Resp. Sens. 1	Respiratory sensitization, category 1
Skin Sens. 1A	Skin sensitization, category 1A
Skin Sens. 1B	Skin sensitization, category 1B
Aquatic Acute 1	Hazardous to the aquatic environment, acute toxicity, category 1
Aquatic Chronic 1	Hazardous to the aquatic environment, chronic toxicity, category 1
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3
Aquatic Chronic 4	Hazardous to the aquatic environment, chronic toxicity, category 4
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H361d	Suspected of damaging the unborn child.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H372	Causes damage to organs through prolonged or repeated exposure.
H304	May be fatal if swallowed and enters airways.
H373	May cause damage to organs through prolonged or repeated exposure.
H314	Causes severe skin burns and eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.
EUH066	Repeated exposure may cause skin dryness or cracking.
EUH071	Corrosive to the respiratory tract.

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%
- 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
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2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament

SECTION 16. Other information ... / >>

4. Regulation (EU) 2015/830 of the European Parliament5. 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
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- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
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- 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.

Changes to previous review:
The following sections were modified:
02 / 03 / 04 / 08 / 09 / 11 / 12 / 15 / 16.