

MB48.00.00 - CONVERTER FOR SB PATINA

Revision nr.5 Dated 15/12/2021 Printed on 22/12/2022 Page n. 1 / 17 Replaced revision:4 (Dated 07/09/2021)

Safety Data Sheet

According to Annex II to REACH - Regulation 2020/878 and to Annex II to UK REACH

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

1.1. Product identifier

MB48.00.00 Code:

Product name **CONVERTER FOR SB PATINA**

APN1-106G-700V-9HTK

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

Industrial **Professional** Consumer **VARNISHING PRODUCTS FOR DECORATION / COVERING WOOD MANUFACTURED**

1.3. Details of the supplier of the safety data sheet

ADLER SRL Name

Via Calabria, 6 - Fraz. Osteria Grande Full address

District and Country 40024 **Castel San Pietro Terme** (BO)

Italy

+39 051 945107 Tel +39 051 946516 Fax

e-mail address of the competent person

responsible for the Safety Data Sheet sds@adleronline.it

1.4. Emergency telephone number

For urgent inquiries refer to For any requirement contact +39051945107 in working time.

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

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	H225	Highly flammable liquid and vapour.
Aspiration hazard, category 1	H304	May be fatal if swallowed and enters airways.
Serious eye damage, category 1	H318	Causes serious eye damage.
Skin irritation, category 2	H315	Causes skin irritation.
Specific target organ toxicity - single exposure,	H336	May cause drowsiness or dizziness.
category 3		
Hazardous to the aquatic environment, chronic	H412	Harmful to aquatic life with long lasting effects.
toxicity, category 3		

2.2. Label elements

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

Hazard pictograms:









Signal words: Danger



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SECTION 2. Hazards identification .../>>

Hazard statements:

H225 Highly flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H318 Causes serious eye damage.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

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

P331 Do NOT induce vomiting.

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

Continue 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 FOAM, CO2, POWDER AND WATER-FOG to extinguish.

Contains: HYDROCARBONS C7,N-ALKANES,ISOALKANES,CYCLICS

ISOBUTYL ALCOHOL PROPAN-2-OL

1-METHOXY-2-PROPANOL

Product not intended for uses provided for by Directive 2004/42/EC.

2.3. Other hazards

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

The product does not contain substances with endocrine disrupting properties in concentration ≥ 0.1%.

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

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

PROPAN-2-OL

CAS 67-63-0 65 ≤ x < 70 Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336

EC 200-661-7 INDEX 603-117-00-0 REACH Reg. 01-2119457558-25

HYDROCARBONS C7,N-ALKANES,ISOALKANES,CYCLICS

CAS 7,6 ≤ x < 8,9 Flam. Liq. 2 H225, Asp. Tox. 1 H304, Skin Irrit. 2 H315, STOT SE 3 H336,

Aquatic Chronic 2 H411, Classification note according to Annex VI to the

CLP Regulation: P

EC 927-510-4

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REACH Reg. 01-2119475515-33 **1-METHOXY-2-PROPANOL**

CAS 107-98-2 4,8 ≤ x < 5 Flam. Liq. 3 H226, STOT SE 3 H336

EC 203-539-1 INDEX 603-064-00-3 REACH Reg. 01-2119457435-35

ISOBUTYL ALCOHOL

CAS 78-83-1 3,2 \leq x < 3,4 Flam. Liq. 3 H226, Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335,

STOT SE 3 H336

EC 201-148-0 INDEX 603-108-00-1 REACH Reg. 01-2119484609-23

DISTILLATES (PETROLEUM) PARAFFINIC HYDROTREATED LIGHT CAS 8042-47-5/64742-53-6 EC 232-455-8/265-156-6

CAS 8042-47-5 $2,9 \le x < 3,1$ **Asp. Tox. 1 H304**

EC INDEX

REACH Reg. 01-2119487078-27/01-2119487077-29



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SECTION 3. Composition/information on ingredients/>>

HYDROCARBONS, C9-C11, N-ALKANES, ISOALKANES, CYCLICS, < 2% AROMATICS

CAS 2,4 ≤ x < 2,6 Flam. Liq. 3 H226, Asp. Tox. 1 H304, STOT SE 3 H336, EUH066,

Classification note according to Annex VI to the CLP Regulation: P

EUH066: ≥ 20%

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FC.

REACH Reg. 01-2119463258-33

919-857-5

ACETONE

CAS 67-64-1 1.1 ≤ x < 1.2 Flam. Lig. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066

EC 200-662-2 INDEX 606-001-00-8 REACH Reg. 01-2119471330-49

N-BUTYL ACETATE

CAS 123-86-4 0,3 ≤ x < 0,35 Flam. Liq. 3 H226, STOT SE 3 H336, EUH066

EC 204-658-1 INDEX 607-025-00-1 REACH Reg. 01-2119485493-29

ETHYL ACETATE

CAS 141-78-6 0,25 ≤ x < 0,3 Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066

EC 205-500-4 INDEX 607-022-00-5

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

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).



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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. 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:

BGR	България	НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г. ЗА ЗАЩИТА НА РАБОТЕЩИТЕ ОТ РИСКОВЕ, СВЪРЗАНИ С ЕКСПОЗИЦИЯ НА ХИМИЧНИ АГЕНТИ ПРИ РАБОТА (изм. ДВ. бр.5 от 17 Януари 2020г.)
CZE	Česká Republika	Nařízení vlády č. 41/2020 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	Technischen Regeln für Gefahrstoffe (TRGS 900) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte. MAK- und BAT-Werte-Liste 2020, Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe, Mitteilung 56
ESP	España	Límites de exposición profesional para agentes químicos en España 2021
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
GRC	Ελλάδα	Π.Δ. 26/2020 (ΦΕΚ 50/Α` 6.3.2020) Εναρμόνιση της ελληνικής νομοθεσίας προς τις διατάξεις των οδηγιών 2017/2398/ΕΕ, 2019/130/ΕΕ και 2019/983/ΕΕ «για την τροποποίηση της οδηγίας 2004/37/ΕΚ "σχετικά με την προστασία των εργαζομένων από τους κινδύνους που συνδέονται με



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		την έκθεση σε καρκινογόνους ή μεταλλαξιγόνους παράγοντες κατά την εργασία"»
HRV	Hrvatska	Pravilnik o izmjenama i dopunama Pravilnika o zaštiti radnika od izloženosti opasnimkemikalijama na radu, graničnim vrijednostima izloženosti i biološkim graničnim vrijednostima (NN 1/2021)
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
LTU	Lietuva	Jsakymas dėl lietuvos higienos normos hn 23:2011 "cheminių medžiagų profesinio poveikio ribiniai dydžiai. Matavimo ir poveikio vertinimo bendrieji reikalavimai" patvirtinimo
LVA	Latvija	Grozījumi Ministru kabineta 2007. gada 15. maija noteikumos Nr. 325 "Darba aizsardzības prasības saskarē ar ķīmiskajām vielām darba vietās" (prot. Nr. 32 18. §; prot. Nr. 1 22. §)
NLD	Nederland	Arbeidsomstandighedenregeling. Lijst van wettelijke grenswaarden op grond van de artikelen 4.3, eerste lid, en 4.16, eerste lid, van het Arbeidsomstandighedenbesluit
PRT	Portugal	Decreto-Lei n.º 1/2021 de 6 de janeiro, valores-limite de exposição profissional indicativos para os agentes químicos. Decreto-Lei n.º 35/2020 de 13 de julho, proteção dos trabalhadores contra os riscos ligados à exposição durante o trabalho a agentes cancerígenos ou mutagénicos
POL	Polska	Rozporządzenie ministra rozwoju, pracy i technologii z dnia 18 lutego 2021 r. Zmieniające rozporządzenie w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy
ROU	România	Hotărârea nr. 53/2021 pentru modificarea hotărârii guvernului nr. 1.218/2006, precum și pentru modificarea si completarea hotărârii guvernului nr. 1.093/2006
SVN	Slovenija	Pravilnik o varovanju delavcev pred tveganji zaradi izpostavljenosti kemičnim snovem pri delu (Uradni list RS, št. 100/01, 39/05, 53/07, 102/10, 43/11 – ZVZD-1, 38/15, 78/18 in 78/19)
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
EU	OEL EU	Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; 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 98/24/EC; Directive 91/322/EEC.
	TLV-ACGIH	ACGIH 2021

				PROI	PAN-2-OL				
hreshold Limit V		TWA/8h		STEL/15	min	Domorko	/ Observations		
Туре	Country		nnm	mg/m3		Remarks	Observations		
TLV	BGR	mg/m3 980	ppm	1225	ppm				
TLV	CZE	500	200	1000	400				
AGW					400				
	DEU	500	200	1000					
MAK	DEU	500	200	1000	400				
VLA	ESP	500	200	1000	400				
VLEP	FRA	000	400	980	400				
TLV	GRC	980	400	1225	500				
GVI/KGVI	HRV	999	400	1250	500				
RD	LTU	350	150	600	250				
RV	LVA	350		600					
TGG	NLD	650							
NDS/NDSCh	POL	900		1200		SKIN			
TLV	ROU	200	81	500	203				
MV	SVN	500	200	2000	800				
WEL	GBR	999	400	1250	500				
TLV-ACGIH		492	200	983	400				
Predicted no-effe	ct concentra	tion - PNE	;						
Normal value in	fresh water						140,9	mg/l	
Normal value in	n marine wate	er					140,9	mg/l	
Normal value for	or fresh water	sediment					552	mg/kg	
Normal value for	or marine wat	er sediment					552	mg/kg	
Normal value for	or water, inter	mittent relea	ise				140,9	mg/l	
Normal value o	f STP microo	rganisms					2251	mg/l	
Normal value for	or the food ch	ain (second	ary poison	ing)			160	mg/kg	
Normal value for	or the terrestr	ial compartn	nent				28	mg/kg	
lealth - Derived r	no-effect leve	el - DNEL / I	OMEL						
	Effe	cts on consu	mers			Effects on w	vorkers		
Route of expos	ure Acut	te Acı	ite	Chronic	Chronic	Acute	Acute	Chronic	Chronic
	loca	l sys	temic	local	systemic	local	systemic	local	systemic
Oral		- 7 -			26		,		,
					mg/kg				
Inhalation					89				500
					mg/m3				mg/m3
Skin					319				888
- ****					mg/kg				mg/kg



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				1-METHOX	Y-2-PROPAN	OL			
hreshold Limit \	/alue								
Туре	Country	TWA/8h		STEL/15	min	Remarks /	Observations		
		mg/m3	ppm	mg/m3	ppm				
TLV	BGR	375	100	568	150	SKIN			
TLV	CZE	270	72,09	550	146,85	SKIN			
AGW	DEU	370	100	740	200				
MAK	DEU	370	100	740	200				
VLA	ESP	375	100	568	150	SKIN			
VLEP	FRA	188	50	375	100	SKIN			
TLV	GRC	360	100	1080	300				
GVI/KGVI	HRV	375	100	568	150				
VLEP	ITA	375	100	568	150	SKIN			
RD	LTU	190	50	300	75	SKIN			
RV	LVA	375	100	568	150	SKIN			
TGG	NLD	375		563		SKIN			
VLE	PRT	375	100	568	150				
NDS/NDSCh	POL	180		360		SKIN			
TLV	ROU	375	100	568	150	SKIN			
MV	SVN	375	100	568	150	SKIN			
WEL	GBR	375	100	560	150	SKIN			
OEL	EU	375	100	568	150	SKIN			
TLV-ACGIH		184	50	368	100				
redicted no-effe	ct concentra	ation - PNE	С						
Normal value in	n fresh water						10	mg/l	
Normal value in	n marine wate	er					1	mg/l	
Normal value for	or fresh wate	r sediment					100	mg/l	
Normal value for	or marine wa	ter sedimen	t				5,2	mg/kg	
Normal value for	or the terrest	rial compart	ment				5,49	mg/kg	
ealth - Derived r								0 0	
	Effe	ects on cons	umers			Effects on wo	orkers		
Route of expos	ure Acu	ite Ac	ute	Chronic	Chronic	Acute	Acute	Chronic	Chronic
	loca	al sv:	stemic	local	systemic	local	systemic	local	systemic
Oral		,			3,3 mg/kg		,		,
Inhalation					43,9	553,5			369
Skin					mg/m3	mg/m3			mg/m3 50.6
SKIII					18,1				,
					mg/kg				mg/kg

				ISOBUTY	L ALCOHOL	
Threshold Limit V	/alue			1002011		
Туре	Country	TWA/8h		STEL/15r	min	Remarks / Observations
	,	mg/m3	ppm	mg/m3	ppm	
TLV	CZE	300	97,5	600	195	
AGW	DEU	310	100	310 (C)	100 (C)	
MAK	DEU	310	100	310	100	
VLA	ESP	154	50			
VLEP	FRA	150	50			
TLV	GRC	300	100	300	100	
GVI/KGVI	HRV	154	50	231	75	SKIN
RD	LTU	10				SKIN
RV	LVA	10				
TGG	NLD	150				
NDS/NDSCh	POL	100		200		SKIN
TLV	ROU	100	33	200	66	
MV	SVN	310	100	310	100	
WEL	GBR	154	50	231	75	
TLV-ACGIH		152	50			



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				ACE	TONE			
Threshold Limit Value								
Туре	Country	TWA/8h		STEL/15n	nin	Remarks / Observations		
		mg/m3	ppm	mg/m3	ppm			
TLV	BGR	600		1400				
TLV	CZE	800	331,2	1500	621			
AGW	DEU	1200	500	2400 (C)	1000 (C)			
MAK	DEU	1200	500	2400	1000			
VLEP	FRA	1210	500	2420	1000			
TLV	GRC	1780		3560				
GVI/KGVI	HRV	1210	500					
VLEP	ITA	1210	500					
RD	LTU	1210	500	2420	1000			
RV	LVA	1210	500			SKIN		
TGG	NLD	1210		2420				
VLE	PRT	1210	500					
NDS/NDSCh	POL	600		1800				
TLV	ROU	1210	500					
MV	SVN	1210	500	2420	1000			
WEL	GBR	1210	500	3620	1500			
OEL	EU	1210	500					
TLV-ACGIH			250		500			

				N-BUTY	L ACETATE				
Threshold Limit Value									
Туре	Country	TWA/8h		STEL/15r	nin	Remarks / Observations			
		mg/m3	ppm	mg/m3	ppm				
TLV	BGR	710		950					
TLV	CZE	950	196,65	1200	248,4				
AGW	DEU	300	62	600 (C)	124 (C)				
VLA	ESP	241	50	724	150				
VLEP	FRA	710	150	940	200				
TLV	GRC	710	150	950	200				
GVI/KGVI	HRV	241	50	723	150				
VLEP	ITA	241	50	723	150				
RD	LTU	241	50	723	150				
RV	LVA	200							
TGG	NLD	150							
VLE	PRT	241	50	723	150				
NDS/NDSCh	POL	240		720					
TLV	ROU	241	50	723	150				
MV	SVN	300	62	600	124				
WEL	GBR	724	150	966	200				
OEL	EU	241	50	723	150				
TLV-ACGIH			50		150				



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				ETHYL	ACETATE			
Threshold Limit Value								
Туре	Country	TWA/8h		STEL/15m	nin	Remarks / Observations		
		mg/m3	ppm	mg/m3	ppm			
TLV	BGR	734	200	1468	400			
TLV	CZE	700	191,1	900	245,7			
AGW	DEU	730	200	1460	400			
MAK	DEU	750	200	1500	400			
VLA	ESP	734	200	1468	400			
VLEP	FRA	734	200	1468	400			
TLV	GRC	734	200	1468	400			
GVI/KGVI	HRV	734	200	1468	400			
VLEP	ITA	734	200	1468	400			
RD	LTU	500	150	1100 (C)	300 (C)			
RV	LVA	200	54	1468	400			
TGG	NLD	734		1468				
VLE	PRT	734	200	1468	400			
NDS/NDSCh	POL	734		1468				
TLV	ROU	734	200	1468	400			
MV	SVN	734	200	1468	400			
WEL	GBR	734	200	1468	400			
OEL	EU	734	200	1468	400			
TLV-ACGIH		1441	400					

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.

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, 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

Properties	Value	Information
Appearance	liquid	
Colour	white	



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SECTION 9. Physical and chemical properties .../>>

characteristic Melting point / freezing point Not available Initial boiling point 35 °C Not available Flammability Lower explosive limit Not available Upper explosive limit Not available Flash point -4 Not available Auto-ignition temperature Hq Not available

Reason for missing data:substance/mixture is non-polar/aprotic (eg: an organic solvent

mixture)

Kinematic viscosity

Solubility

Partition coefficient: n-octanol/water
Vapour pressure

Density and/or relative density

Relative vapour density

Particle characteristics

Not available
Not available
Not available
Not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

Total solids (250°C / 482°F) 5,59 %

VOC (Directive 2010/75/EU) 90,32 % - 722,60 g/litre VOC (volatile carbon) 56,56 % - 452,48 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.

1-METHOXY-2-PROPANOL

Dissolves various plastic materials. Stable in normal conditions of use and storage.

Absorbs and disolves in water and in organic solvents. With air it may slowly form explosive peroxides.

ACETONE

Decomposes under the effect of heat.

N-BUTYL ACETATE

Decomposes on contact with: water.

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.

1-METHOXY-2-PROPANOL

May react dangerously with: strong oxidising agents, strong acids.

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.

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.

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.



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

10.4. Conditions to avoid

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

1-METHOXY-2-PROPANOL

Avoid exposure to: air.

ACETONE

Avoid exposure to: sources of heat,naked flames.

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

1-METHOXY-2-PROPANOL

Incompatible with: oxidising substances, strong acids, alkaline metals.

ACETONE

Incompatible with: acids,oxidising substances.

N-BUTYL ACETATE

Incompatible with: water, nitrates, strong oxidants, acids, alkalis, zinc.

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.

ACETONE

May develop: ketenes, irritant substances.

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 hazard classes as defined in Regulation (EC) No 1272/2008

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

1-METHOXY-2-PROPANOL

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.

N-BUTYL ACETATE

WORKERS: inhalation; contact with the skin.

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

1-METHOXY-2-PROPANOL

The main route of entry is the skin, whereas the respiratory route is less important due to the low vapour pressure of the product. 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.

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.

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



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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).

ACUTE TOXICITY

ATE (Inhalation) of the mixture: Not classified (no significant component) ATE (Oral) of the mixture: Not classified (no significant component) ATE (Dermal) of the mixture: Not classified (no significant component)

PROPAN-2-OL

LD50 (Oral): 4710 mg/kg Rat LD50 (Dermal): 12800 mg/kg Rat LC50 (Inhalation vapours): 72,6 mg/l/4h Rat

HYDROCARBONS C7,N-ALKANES,ISOALKANES,CYCLICS

> 2800 mg/kg Rabbit LD50 (Dermal): LC50 (Inhalation vapours): > 23.3 mg/l/4h Rat

1-METHOXY-2-PROPANOL

LD50 (Oral): 5300 mg/kg Rat 13000 mg/kg Rabbit LD50 (Dermal): 54,6 mg/l/4h Rat LC50 (Inhalation vapours):

ISOBUTYL ALCOHOL

LD50 (Oral): 2460 mg/kg Rat 2460 mg/kg Rabbit LD50 (Dermal): LC50 (Inhalation vapours): 19,2 mg/l/4h Rat

HYDROCARBONS, C9-C11, N-ALKANES, ISOALKANES, CYCLICS, < 2% AROMATICS

LD50 (Oral): > 5000 mg/kg Ratto (Rat) LD50 (Dermal): > 200 mg/kg Ratto (Rat) LC50 (Inhalation vapours): > 9300 mg/l/4h Ratto (Rat)

N-BUTYL ACETATE

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

SKIN CORROSION / IRRITATION

Causes skin irritation

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

Respiratory sensitization

Information not available

Skin sensitization

Information not available

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



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Does not meet the classification criteria for this hazard class

Adverse effects on sexual function and fertility

Information not available

Adverse effects on development of the offspring

Information not available

Effects on or via lactation

Information not available

STOT - SINGLE EXPOSURE

May cause drowsiness or dizziness

Target organs

Information not available

Route of exposure

Information not available

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

Target organs

Information not available

Route of exposure

Information not available

ASPIRATION HAZARD

Toxic for aspiration

11.2. Information on other hazards

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

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

HYDROCARBONS, C9-C11, N-ALKANES, ISOALKANES, CYCLICS, < 2% AROMATICS LC50 - for Fish > 1000 mg/l/96h Oncorthynchus mykiss

> 1000 mg/l/48h Daphnia EC50 - for Crustacea

EC50 - for Algae / Aquatic Plants > 1000 mg/l Pseudokirchneriella subcapitata

0,23 mg/l Daphnia magna Chronic NOEC for Crustacea

HYDROCARBONS C7,N-ALKANES,ISOALKANES,CYCLICS

LC50 - for Fish 8,2 mg/l/96h Pimephales promelas EC50 - for Crustacea 4,5 mg/l/48h Daphnia magna

EC50 - for Algae / Aquatic Plants 3,1 mg/l Pseudokirchnerella subcapitata

1,534 mg/l 28 gg Chronic NOEC for Fish

Chronic NOEC for Crustacea 1 mg/l 21gg Daphnia magna

12.2. Persistence and degradability



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SECTION 12. Ecological information .../>>

ISOBUTYL ALCOHOL

1000 - 10000 mg/l Solubility in water

Rapidly degradable

1-METHOXY-2-PROPANOL

1000 - 10000 mg/l Solubility in water

Rapidly degradable

PROPAN-2-OL Rapidly degradable

ACETONE

Rapidly degradable

ETHYL ACETATE

Solubility in water > 10000 mg/l

Rapidly degradable

N-BUTYL ACETATE

Solubility in water 1000 - 10000 mg/l

HYDROCARBONS, C9-C11, N-ALKANES, ISOALKANES, CYCLICS, < 2% AROMATICS

Rapidly degradable

HYDROCARBONS C7,N-ALKANES,ISOALKANES,CYCLICS

Rapidly degradable

12.3. Bioaccumulative potential

ISOBUTYL ALCOHOL

Partition coefficient: n-octanol/water 1

1-METHOXY-2-PROPANOL

Partition coefficient: n-octanol/water < 1

PROPAN-2-OL

Partition coefficient: n-octanol/water 0,05

ACETONE

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

ETHYL ACETATE

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

N-BUTYL ACETATE

Partition coefficient: n-octanol/water 23 BCF 15,3

12.4. Mobility in soil

ISOBUTYL ALCOHOL

Partition coefficient: soil/water 0,31

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 ≥ than 0,1%.

12.6. Endocrine disrupting properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.



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12.7. 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 or ID number

ADR / RID, IMDG, IATA: 1263

14.2. UN proper shipping name

ADR / RID: PAINT IMDG: **PAINT** PAINT IATA:

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:

14.5. Environmental hazards

ADR / RID: NO IMDG: NO NO IATA:

14.6. Special precautions for user

ADR / RID: HIN - Kemler: 33 Limited Quantities: 5 L Tunnel restriction code: (D/E)

Special provision: 163, 367, 640D, 650

EMS: F-E, <u>S-E</u> IMDG: Limited Quantities: 5 L Maximum quantity: 60 L IATA: Cargo:

Packaging instructions: 364 Pass.: Maximum quantity: 5 L Packaging instructions: 353

A3, A72, A192 Special provision:

14.7. Maritime transport in bulk according to IMO instruments

Information not relevant

@EPY 11.1.0 - SDS 1004.14



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SECTION 15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Seveso Category - Directive 2012/18/EU: P5

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

Product

Point 3 - 40

Contained substance

Point 75

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors

Regulated explosives precursor

The acquisition, introduction, possession or use of that regulated explosives precursor by members of the general public is subject to reporting obligations as set out in Article 9.

All suspicious transactions and significant disappearances and thefts must be reported to the relevant national contact point.

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage ≥ than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to Regulation (EU) 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.

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
Asp. Tox. 1
Eye Dam. 1
Skin Irrit. 2
Flammable liquid, category 2
Aspiration hazard, category 1
Serious eye damage, category 1
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.

H304 May be fatal if swallowed and enters airways.

H318 Causes serious eye damage.
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.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)



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SECTION 16. Other information .../>>

- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 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: 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: Regulation (EC) 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: Time-weighted average exposure limit
- TWA STEL: Short-term 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) 2020/878 (II Annex of REACH Regulation)
- 4. Regulation (EC) 790/2009 (I Atp. CLP) 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
- 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) 2019/521 (XII Atp. CLP)
- 16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
- 17. Regulation (EU) 2019/1148
- 18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
- 19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
- 20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
- 21. Delegated Regulation (UE) 2021/849 (XVII 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
- FCHA 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.



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SECTION 16. Other information .../>>

CALCULATION METHODS FOR CLASSIFICATION

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

Changes to previous review: The following sections were modified: 02/03/08/09/11/12/14/15/16.