





Date of compilation: 10/10/2020 Date of printing: 18/11/2020 Versión: 23

# **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: V400/ISA

Product name SPRAYS - ESMALTE ACRILICO MULTIUSOS 400 ml ISAVAL UFI:

9250-T0C8-100J-P62A

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

Intended use Aerosol acrylic paint.

Identified Uses	Industrial	Professional	Consumer
Consumer	-	-	-
Industrial Use		_	<b>✓</b>
	❤	-	-
Professional Use	-	<b>✓</b>	-
1.3. Details of the supplier of the safety data shee			
Name	PINTURAS ISAVAL S.L.		
Full address District and Country	c/Velluters, Parcela 2-14 - P 46394 - Ribarroja del Turia (		
District and Country	España	valencia)	
	Tel. +34 96 164 00 01		
	Fax +34 96 164 00 02		
e-mail address of the competent person			
responsible for the Safety Data Sheet	atencionalcliente@isaval.es	<b>S</b>	
1.4. Emergency telephone number	+34 96 1640001 (8:00-18:00 h.)	(working hours)	

### **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:

Aerosol, category 1	H222 H229	Extremely flammable aerosol. Pressurised container: may burst if heated.
Eye irritation, category 2	H319	Causes serious eye irritation.
Specific target organ toxicity - single exposure, category 3	H336	May cause drowsiness or dizziness.

### 2.2. Label elements

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







Date of compilation: 10/10/2020 Date of printing: 18/11/2020 Versión: 23

#### Hazard pictograms:





Signal words:

Danger

#### Hazard statements:

H222 Extremely flammable aerosol.

H229 Pressurised container: may burst if heated.

H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.

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

#### Precautionary statements:

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

P251 Do not pierce or burn, even after use.

P410+P412 Protect from sunlight. Do no expose to temperatures exceeding  $50^{\circ}\text{C}$  /  $122^{\circ}\text{F}$ .

P211 Do not spray on an open flame or other ignition source.

P102 Keep out of reach of children.

P261 Avoid breathing dust / fume / gas / mist / vapours / spray.

Contains: Methyl acetate

N-butyl acetate

### VOC (Directive 2004/42/EC):

Special finishes.

VOC given in g/litre of product in a ready-to-use condition : 704.48 Limit value: 840,00

### 2.3. Other hazards

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

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

### 3.2. Mixtures

Contains:

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

Methyl acetate

CAS 79-20-9 31 ≤ x < 35 Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066

EC 201-185-2 INDEX 607-021-00-X







Versión: 23 Date of compilation: 10/10/2020 Date of printing: 18/11/2020

Reg. no. 01-2119459211-47-XXXX

N-butyl acetate

CAS 123-86-4 20 ≤ x < 23 Flam. Liq. 3 H226, STOT SE 3 H336, EUH066

EC 204-658-1

INDEX 607-025-00-1

Reg. no. 01-2119485493-29-XXXX

**Propane** 

CAS 74-98-6 15 ≤ x < 19 Flam. Gas 1A H220, Press. Gas (Liq.) H280, Classification note according to

Annex VI to the CLP Regulation: U

EC 200-827-9

INDEX 601-003-00-5

Reg. no. 01-2119486944-21-0046

**Butane** 

CAS 106-97-8  $7 \le x < 9$  Flam. Gas 1A H220, Press. Gas (Liq.) H280, Classification note according to

Annex VI to the CLP Regulation: C U

EC 203-448-7

INDEX 601-004-00-0

Reg. no. 01-2119474691-32-XXXX

Xylene (mixture of isomers)

CAS 1330-20-7 5 ≤ x < 7 Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Eye Irrit. 2 H319,

Skin Irrit. 2 H315, Classification note according to Annex VI to the CLP

Regulation: C

EC 215-535-7

INDEX 601-022-00-9

Reg. no. 01-2119488216-32-XXXX

Petroleum Resins

CAS 64742-16-1  $3 \le x < 5$  Aquatic Chronic 4 H413

EC 265-116-8

INDEX -

Methyl formate

CAS 107-31-3 1 ≤ x < 3 Flam. Liq. 1 H224, Acute Tox. 4 H332, Asp. Tox. 1 H304, Eye Irrit. 2 H319,

STOT SE 3 H335

EC 203-481-7

INDEX 607-014-00-1

Reg. no. 01-2119487303-38-XXXX

2-methoxy-1-methylethyl acetate

CAS 108-65-6  $1 \le x < 3$  Flam. Liq. 3 H226

EC 203-603-9

INDEX 607-195-00-7

Reg. no. 01-2119475791-29-XXXX

Methanol

CAS 67-56-1 1 ≤ x < 3 Flam. Liq. 2 H225, Acute Tox. 3 H301, Acute Tox. 3 H311, Acute Tox. 3

H331, STOT SE 1 H370

EC 200-659-6

INDEX 603-001-00-X

Reg. no. 01-2119433307-44-XXXX

Isobutane

CAS 75-28-5  $1 \le x < 3$  Flam. Gas 1A H220, Press. Gas H280

EC 200-857-2







Versión: 23 Date of compilation: 10/10/2020 Date of printing: 18/11/2020

INDEX 601-004-00-0

Reg. no. 01-2119485395-27-XXXX

Isobutyl acetate

CAS 110-19-0 0 ≤ x < 0,5 Flam. Liq. 2 H225, STOT SE 3 H336, EUH066, Classification note according

to Annex VI to the CLP Regulation: C

EC 203-745-1

INDEX 607-026-00-7

Reg. no. 01-2119488971-22-XXXX

2-Butoxyethanol

CAS 111-76-2 0 ≤ x < 0,5 Acute Tox. 4 H302, Acute Tox. 4 H312, Acute Tox. 4 H332, Eye Irrit. 2 H319,

Skin Irrit. 2 H315

EC 203-905-0

INDEX 603-014-00-0

Reg. no. 01-2119475108-36-XXXX

Ethylbenzene

CAS 100-41-4 0 ≤ x < 0,5 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-XXXX

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

The product is an aerosol containing propellants. For the purposes of calculation of the health hazards, propellants are not considered (unless they have health hazards). The percentages indicated are inclusive of the propellants.

Percentage of propellants: 27,00 %

### **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







Versión: 23 Date of compilation: 10/10/2020 Date of printing: 18/11/2020

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

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

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

If overheated, aerosol cans can deform, explode and be propelled considerable distances. Put a protective helmet on before approaching the fire. 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.

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

Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site. Send away individuals who are not suitably equipped. Wear protective gloves / protective clothing / eye protection / face protection.

### 6.2. Environmental precautions

Do not disperse in the environment.

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

Use inert absorbent material to soak up leaked product. 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

Avoid bunching of electrostatic charges. Do not spray on flames or incandescent bodies. 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. Do not eat, drink or smoke during use. Do not breathe spray.

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

Store in a place where adequate ventilation is ensured, away from direct sunlight at a temperature below 50°C / 122°F, away from any combustion sources.

### 7.3. Specific end use(s)



Versión: 23

# SPRAY MULTIPURPOSE ACRYLIC ENAMEL, 400 ml





Date of compilation: 10/10/2020

Date of printing: 18/11/2020

Information not available

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

### 8.1. Control parameters

### Regulatory References:

EU

DEU	Deutschland	TRGS 900 - Seite 1 von 69 (Fassung 29.03.2019)- Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte
ESP	España	LÍMITES DE EXPOSICIÓN PROFESIONAL PARA AGENTES QUÍMICOS EN ESPAÑA 2019 (INSST)
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
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

rabalho - Diário da República, 1.ª série - N.º 111 - 11 de junho de 2018
ROZPORZĄDZENIE MINISTRA RODZINY, PRACY I POLITYKI SPOŁECZNEJ z dnia 12 czerwca 2018 r Polska

POL United Kingdom EH40/2005 Workplace exposure limits (Third edition, published 2018)
Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; GBR

OEL EU

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 2020

NEL / DMEL s on mers local Acute s NPI VND	cystemic Chronic Id 152 mg/m	ocal Chronic systemic 44 mg/kg bw/d	μg/l  Effects on workers  Acute local  VND  NPI	Acute systemic  VND  VND	Chronic local  305 mg/m3  NPI	Chronic systemic 610 mg/m3 88 mg/kg bw/d
s on mers Acute s	152 mg/m	ocal Chronic systemic 44 mg/kg bw/d n3 44 mg/kg	Effects on workers Acute local	Acute systemic	305 mg/m3	systemic 610 mg/m3 88 mg/kg
s on mers Acute s		ocal Chronic systemic 44 mg/kg bw/d	Effects on workers Acute local	Acute systemic		systemic
s on mers Acute s		ocal Chronic systemic 44 mg/kg bw/d	Effects on workers Acute local	Acute systemic		systemic
s on mers local Acute s	ystemic Chronic Ic	ocal Chronic	Effects on workers	Acute	Chronic local	
s on			Effects on			
			μg/i			
		12				
		120	μg/l		·	
606	200	757	250			
616	200	770	250			
250	·	600				
610	200	760	250	SKIN	·	
616	200	770	250		·	
310	100	1240	400			
620	200	1240 (C)	400 (C)			
mg/m3	ppm	mg/m3	ppm	<u> </u>		
ry TWA/8I	1	STEL/15min				
	mg/m3 620 310 616 610 250 616	mg/m3 ppm 620 200 310 100 616 200 610 200 250 616 200 606 200	mg/m3         ppm         mg/m3           620         200         1240 (C)           310         100         1240           616         200         770           610         200         760           250         600           616         200         770           606         200         757	mg/m3         ppm         mg/m3         ppm           620         200         1240 (C)         400 (C)           310         100         1240         400           616         200         770         250           610         200         760         250           250         600         600           616         200         770         250           606         200         757         250	mg/m3         ppm         mg/m3         ppm           620         200         1240 (C)         400 (C)           310         100         1240         400           616         200         770         250           610         200         760         250         SKIN           250         600         600         500         500         500         500           606         200         757         250         250         500	mg/m3         ppm         mg/m3         ppm           620         200         1240 (C)         400 (C)           310         100         1240         400           616         200         770         250           610         200         760         250         SKIN           250         600         600         616         200         770         250           606         200         757         250         400

N-butyi acetate							
Threshold Limit Value							
Туре	Country	TWA/8h	TWA/8h			Remarks / Observations	
		mg/m3	ppm	mg/m3	ppm		
AGW	DEU	300	62	600 (C)	124 (C)		
VLA	ESP	724	150	965	200		
VLEP	FRA	710	150	940	200		



AGW

DEU

440

100

880

200

SKIN





Versión: 23 Date of c	compilation: 10/10/20	Date of pri	nting: 18/11/202	۷۷				
NDS/NDSCh	POL	240		720		·	·	
WEL	GBR	724	150	966	200			
OEL	EU	241	50	723	150			
TLV-ACGIH			50		150			
Predicted no-effect concen-	tration - PNEC	•	•			<u>.</u>	<u> </u>	
Normal value in fresh water	r			180	μg	/I	<u> </u>	
Normal value in marine wa	ter			18	μд	/I		
Normal value for fresh water	er sediment			981	μg	/kg/d		
Normal value for marine wa	ater sediment			98,1	μg	/kg/d		
Normal value of STP micro	organisms			35,6	m	g/l	·	
Normal value for the terres	trial compartment			90,3	μg	/kg/d		
Health - Derived no-ef	fect level - DNEL / D Effects on consumers	DMEL			Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic	Acute local	Acute	Chronic local	Chronic
Oral		2 mg/kg bw/d		systemic 2 mg/kg bw/d		systemic 2		systemic 2
Inhalation	300 mg/m3	300 mg/m3	35,7 mg/m3	12 mg/m3	600 mg/m3	600 mg/m3	300 mg/m3	48 mg/m3
Skin	NPI	6 mg/kg bw/d	NPI	3,4 mg/kg bw/d	NPI	11 mg/kg bw/d	NPI	7 mg/kg bw/
Propane Threshold Limit Value	)							
Туре	Country	TWA/8h		STEL/15min		Remarks Observat		
		mg/m3	ppm	mg/m3	ppm			
AGW	DEU	1800	1000	7200	4000	*	<u> </u>	
MAK	DEU	1800	1000	7200	4000	<u>.</u>	·	
VLA	ESP		1000					
NDS/NDSCh	POL	1800						
Butane Threshold Limit Value								
Туре	Country	TWA/8h	_	STEL/15min	_	Remarks		
		mg/m3	ppm	mg/m3	ppm	Observat	ons	
AGW	DEU	2400	1000	9600	4000	<u>.</u>	<u> </u>	
MAK	DEU	2400	1000	9600	4000	•	·	
VLA	ESP		1000				Gases	
VLEP	FRA	1900	800					
NDS/NDSCh	POL	1900		3000		·	·	
WEL	GBR	1450	600	1810	750	·	·	
WEL	GBR		4			RESP		
TLV-ACGIH					1000			
Xylene (mixture of iso Threshold Limit Value	mers)							
Туре	Country	TWA/8h		STEL/15min		Remarks Observat		
		mg/m3	ppm	mg/m3	ppm	Observat	OHO	







/ersión: 23 Date of comp	oilation: 10/10/20	Date of prin						
MAK	DEU	440	100	880	200	SKIN	<del>,</del>	
/LA	ESP	221	50	442	100	SKIN		
VLEP	FRA	221	50	442	100	SKIN		
VLEP	ITA	221	50	442	100	SKIN		
VLE	PRT	221	50	442	100	SKIN		
NDS/NDSCh	POL	100	-	200		SKIN	·	
WEL	GBR	220	50	441	100	SKIN	·	
OEL	EU	221	50	442	100	SKIN		
TLV-ACGIH		434	100	651	150			
Predicted no-effect concentration	n - PNEC	•						
Normal value in fresh water				327	μg/	<u> </u>		
Normal value in marine water				327	μg/	1		
Normal value for fresh water sec		12,46	mg	/kg/d				
Normal value for marine water s		12,46	mg	/kg/d				
Normal value of STP microorganisms				6,58	mg.	/I		
Normal value for the terrestrial o	compartment			2,31	mg	/kg/d	*	
Health - Derived no-effect	Effects on	OMEL			Effects on			
Route of exposure	consumers Acute local	Acute systemic	Chronic local	Chronic	workers Acute local	Acute	Chronic local	Chronic
Oral				systemic 1,6 mg/kg		systemic		systemic
Inhalation				bw/d 14,8 mg/m3			289 mg/m3	77 mg/m3
Skin			<del>.</del>			_	209 1119/1113	
SKIII				108 mg/kg bw/d				180 mg/kg bw/d
Methyl formate Threshold Limit Value								
Туре	Country	TWA/8h		STEL/15min		Remarks		
	-	mg/m3	ppm	mg/m3	ppm	Observat	IOTIS	
TLV-ACGIH		246	100					
Predicted no-effect concentration	on - PNEC							
Normal value in fresh water				115	μg/	<u> </u>		
Normal value in marine water				11,5	μg/	TI	*	
Health - Derived no-effect	level - DNEL / D Effects on consumers	MEL			Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic	Acute local	Acute	Chronic local	Chronic
Inhalation		_		systemic 14,29 mg/m3	-	systemic VND		systemic
Skin			•		VND	VND	NPI	·
2-methoxy-1-methylethyl a Threshold Limit Value	acetate							

Threshold Limit Value	)						
Туре	Country	TWA/8h		STEL/15min		Remarks / Observations	
		mg/m3	ppm	mg/m3	ppm		
AGW	DEU	270	50	270	50		
MAK	DEU	270	50	270	50		
VLA	ESP	275	50	550	100	SKIN	







REP	Versión: 23 Date of co	mpilation: 10/10/20	Date of prir	nting: 18/11/202	20			•	
PRT   275   50   950   100   SKIN	VLEP	FRA	275	50	550	100	SKIN		
Second   Pol.   280   520   548   100   541	VLEP	ITA	275	50	550	100	SKIN		
EL   GBR   274   50   548   100   SKIN	VLE	PRT	275	50	550	100	SKIN		
EL   EU   275   50   550   100   SKIN	NDS/NDSCh	POL	260		520		SKIN		
redicted no-effect concentration - PNEC    Sample   Samp	WEL	GBR	274	50	548	100	SKIN		
Commain value   G35	OEL	EU	275	50	550	100	SKIN		
Second   S	Predicted no-effect concentra	ation - PNEC							
Sum   Value   for friesh water sediment   Sum   Sum   Value   for marrine water sediment   Sum   Sum   Value   for marrine water sediment   Sum   Value   Feffects on   F	Normal value in fresh water				635	μд	/I		
Sum   Value   for friesh water sediment   Sum	Normal value in marine water	r			63,5	μд	/I		
100   mg	Normal value for fresh water	sediment			3,29				
Section   Parameter   Parame	Normal value for marine wate	er sediment			329	μg	/kg/d		
### Consistency   Chronic   Chronic	Normal value of STP microor	ganisms			100	mç	g/l		
### Consistency   Chronic   Chronic					290				
Acute local   Acute systemic   Chronic local   Chronic   Systemic   Systemi		ct level - DNEL / I Effects on	DMEL			Effects on			
NPI	Route of exposure		Acute systemic	Chronic local				Chronic local	
Net	Oral		NPI	-	36 mg/kg	-	Systemic		Systemic
STEL/15min	Inhalation				33 mg/m3				
New   Country   TWA/8h   STEL/15min   Remarks / Observations   Remark	Skin	NPI	NPI	NPI		NPI	NPI	NPI	
Mayes	Methanol								
Mg/m3   ppm   ppm   mg/m3	Type	Country	TWA/8h	_	STEL/15min				
AK DEU 130 100 260 200 SKIN  LA ESP 266 200 SKIN  LEP FRA 280 200 1300 1000 SKIN 11  LEP ITA 260 200 SKIN  LE PRT 260 200 SKIN  DS/NDSCh POL 100 300 SKIN  EL GBR 266 200 333 250 SKIN  EL EU 260 200  LV-ACGIH 262 200 328 250 SKIN  redicted no-effect concentration - PNEC  Tormal value in fresh water 2,08 mg/l  formal value for fresh water sediment 77 mg/kg/d  formal value for water, intermittent release 1,54 g/l  formal value of STP microorganisms 100 mg/kg/d  formal value for the terrestrial compartment 100 mg/kg/d		•	mg/m3	ppm	mg/m3	ppm			
SKIN   SKIN   LEP	AGW	DEU	270	200	1080	800	SKIN		
LEP	MAK	DEU	130	100	260	200	SKIN		
LEP	VLA	ESP	266	200			SKIN		
SKIN	VLEP				1300	1000		11	
DS/NDSCh	VLEP								
FEL   EU   260   200	VLE			200					
EL EU 260 200  LV-ACGIH 262 200 328 250 SKIN  redicted no-effect concentration - PNEC  ormal value in fresh water 20,8 mg/l  ormal value in marine water 2,08 mg/l  ormal value for fresh water sediment 77 mg/kg/d  ormal value for marine water sediment 7,7 mg/kg/d  ormal value for water, intermittent release 1,54 g/l  ormal value of STP microorganisms 100 mg/l  ormal value for the terrestrial compartment 100 mg/kg/d  ealth - Derived no-effect level - DNEL / DMEL  Effects on Effects on	NDS/NDSCh								
LV-ACGIH  262  200  328  250  SKIN  redicted no-effect concentration - PNEC  ormal value in fresh water  20,8  mg/l  ormal value in marine water  2,08  mg/l  ormal value for fresh water sediment  77  mg/kg/d  ormal value for marine water sediment  7,7  mg/kg/d  ormal value for water, intermittent release  1,54  g/l  ormal value of STP microorganisms  100  mg/l  ormal value for the terrestrial compartment  100  mg/kg/d  ealth - Derived no-effect level - DNEL / DMEL  Effects on	WEL		266	200	333	250	SKIN		
redicted no-effect concentration - PNEC  ormal value in fresh water  20,8 mg/l  ormal value in marine water  2,08 mg/l  ormal value for fresh water sediment  77 mg/kg/d  ormal value for marine water sediment  7,7 mg/kg/d  ormal value for water, intermittent release  1,54 g/l  ormal value of STP microorganisms  100 mg/kg/d  ealth - Derived no-effect level - DNEL / DMEL  Effects on  Effects on	OEL	EU	260	200	•	·	•	·	
ormal value in fresh water  20,8 mg/l  ormal value in marine water  2,08 mg/l  ormal value for fresh water sediment  77 mg/kg/d  ormal value for marine water sediment  7,7 mg/kg/d  ormal value for water, intermittent release  1,54 g/l  ormal value of STP microorganisms  100 mg/kg/d  ormal value for the terrestrial compartment  100 mg/kg/d  ealth - Derived no-effect level - DNEL / DMEL  Effects on	TLV-ACGIH		262	200	328	250	SKIN		
ormal value in marine water  2,08 mg/l  ormal value for fresh water sediment  77 mg/kg/d  ormal value for marine water sediment  7,7 mg/kg/d  ormal value for water, intermittent release  1,54 g/l  ormal value of STP microorganisms  100 mg/l  ormal value for the terrestrial compartment  100 mg/kg/d  ealth - Derived no-effect level - DNEL / DMEL  Effects on  Effects on	Predicted no-effect concentra	ation - PNEC							
ormal value for fresh water sediment  77 mg/kg/d  ormal value for marine water sediment  7,7 mg/kg/d  ormal value for water, intermittent release  1,54 g/l  ormal value of STP microorganisms  100 mg/kg/d  ormal value for the terrestrial compartment  100 mg/kg/d  ealth - Derived no-effect level - DNEL / DMEL  Effects on  Effects on	Normal value in fresh water				20,8	mç	g/l		
ormal value for marine water sediment 7,7 mg/kg/d ormal value for water, intermittent release 1,54 g/l ormal value of STP microorganisms 100 mg/l ormal value for the terrestrial compartment 100 mg/kg/d ealth - Derived no-effect level - DNEL / DMEL Effects on Effects on	Normal value in marine water	r			2,08	mç	g/l		
ormal value for water, intermittent release  1,54  g/l  ormal value of STP microorganisms  100  mg/l  ormal value for the terrestrial compartment  100  mg/kg/d  ealth - Derived no-effect level - DNEL / DMEL  Effects on  Effects on	Normal value for fresh water	sediment			77	mç	g/kg/d	•	
ormal value of STP microorganisms  100 mg/l  ormal value for the terrestrial compartment  100 mg/kg/d  ealth - Derived no-effect level - DNEL / DMEL  Effects on Effects on	Normal value for marine water	er sediment			7,7	mç	g/kg/d		
ormal value for the terrestrial compartment  100 mg/kg/d  ealth - Derived no-effect level - DNEL / DMEL  Effects on Effects on	Normal value for water, interr	mittent release			1,54	g/l			
ealth - Derived no-effect level - DNEL / DMEL  Effects on Effects on	Normal value of STP microor	ganisms			100	mç	g/l		
Effects on Effects on	Normal value for the terrestria	al compartment			100	mç	g/kg/d		
	Health - Derived no-effe	Effects on	DMEL						







Versión: 23 Date of compilation: 10/10/2020 Date of printing: 18/11/2020

Route of exposure	Acute local	Acute systemic	Chronic local	Chronic	Acute local	Acute	Chronic local	Chronic
)ral	<u>.</u>	8 mg/kg bw/d		systemic 8 mg/kg bw/d		systemic	<u>.</u>	systemic
halation	50 mg/m3	50 mg/m3	50 mg/m3	50 mg/m3	260 mg/m3	260 mg/m3	260 mg/m3	260 mg/m3
kin		8 mg/kg bw/d		8 mg/kg bw/d		40 mg/kg bw/d		40 mg/kg bw/d
sobutane Fhreshold Limit Value								
Гуре	Country	TWA/8h		STEL/15min	•	Remarks Observati		
		mg/m3	ppm	mg/m3	ppm			
TLV-ACGIH			800					
Isobutyl acetate								
Threshold Limit Value Type	Country	TWA/8h		STEL/15min		Remarks		
		mg/m3	ppm	mg/m3	ppm	Observati	ons	
AGW	DEU	300	62	600 (C)	124 (C)	·	·	
VLA	ESP	724	150		<del>.</del>	·	·	
VLEP	FRA	710	150	940	200	<u>.</u>	<del>.</del>	
NDS/NDSCh	POL	240		720				
WEL	GBR	724	150	903	187			
OEL	EU	241	50	723	150	•		
TLV-ACGIH	•	<u> </u>	50	•	150	•		
Predicted no-effect concentration	n - PNEC							
Normal value in fresh water				170	μg	/I		
Normal value in marine water				17	μg	/I		
Normal value for fresh water sed				877		/kg/d		
Normal value for marine water se				87,7		/kg/d		
Normal value of STP microorgan				200	mç			
Normal value for the terrestrial co	•			75,5	μg	/kg/d		
Health - Derived no-effect I	Effects on consumers	DMEL			Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute	Chronic local	Chronic
Oral	•	5 mg/kg bw/d		5 mg/kg bw/d		systemic	•	systemic
Inhalation	300 mg/m3		35,7 mg/m3	35,7 mg/m3	600 mg/m3	600 mg/m3	300 mg/m3	300 mg/m3
Skin	NPI	5 mg/kg bw/d	NPI	5 mg/kg bw/d	NPI	10 mg/kg bw/d	NPI	10 mg/kg bw/d
		TWA/8h		STEL/15min		Remarks Observati		
Threshold Limit Value	Country	1 117 (1011				0,000,741		
Threshold Limit Value	Country	mg/m3	ppm	mg/m3	ppm			
Threshold Limit Value Type	Country		ppm 10	mg/m3 98 (C)	ppm 20 (C)	SKIN		
Threshold Limit Value Type  AGW MAK	DEU	mg/m3 49 49	10	98 (C)	20 (C)	SKIN	Hinweis	
2-Butoxyethanol Threshold Limit Value Type  AGW MAK VLA VLEP	DEU	mg/m3 49	10	98 (C)	20 (C)		Hinweis	







'LE	PRT	98	20	246	50	SKIN	*	
NDS/NDSCh	POL	98		200		SKIN		
WEL	GBR	123	25	246	50	SKIN		
OEL	EU	98	20	246	50	SKIN		
TLV-ACGIH	EU	96	20	240	- <del>-</del>	SKIIN		
	tration DNFC							
Predicted no-effect concen					<u> </u>	<u></u>	<u> </u>	
Normal value in fresh wate				8,8	mg			
Normal value in marine wa				880	μg			
Normal value for fresh water				34,6		ı/kg/d	·	
Normal value for water, into				9,1	mg		·	
Normal value of STP micro				463	mg			
Normal value for the food o		ing)		20		ı/kg		
Normal value for the terres	·			2,33	mg	/kg/d		
Health - Derived no-ef	fect level - DNEL / D Effects on	DMEL			Effects on			
Doubs of ourselling	consumers	A suita avatamia	Chronic local	Chronic	workers	Agusto	Chronic local	Chrania
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		26,7 mg/kg bw/d		6,3 mg/kg bw/d				
Inhalation	147 mg/m3	426 mg/m3	NPI	59 mg/m3	246 mg/m3	1091 mg/m3	NPI	98 mg/m3
Skin	VND	89 mg/kg bw/d	NPI	75 mg/kg bw/d	VND	89 mg/kg bw/d	NPI	125 mg/kg bw/d
Threshold Limit Value		TWA/8h						
Threshold Limit Value	Country	TWA/8h		STEL/15min		Remarks / Observatio	ons	
Threshold Limit Value Type	Country	mg/m3	ppm	STEL/15min mg/m3	ppm	Remarks / Observatio	ons	
Threshold Limit Value Type AGW	Country	mg/m3 88	20	STEL/15min mg/m3	40	Remarks / Observatio	ons	
Threshold Limit Value Type  AGW  MAK	Country	mg/m3		STEL/15min mg/m3	40	Remarks / Observatio	ons	
Threshold Limit Value Type  AGW  MAK	Country	mg/m3 88	20	STEL/15min mg/m3	40	Remarks / Observatio	ons	
Threshold Limit Value Type  AGW MAK VLA VLEP	DEU DEU	mg/m3 88 88	20	STEL/15min mg/m3 176 176	40	Remarks / Observation SKIN	ons	
Threshold Limit Value Type  AGW  MAK  VLA  VLEP	DEU DEU ESP	mg/m3 88 88 441	20 20 100	STEL/15min mg/m3 176 176 884	40 40 200	Remarks / Observation SKIN SKIN SKIN	ons	
Threshold Limit Value Type  AGW  MAK  VLA  VLEP	DEU DEU ESP FRA	mg/m3 88 88 441 88,4	20 20 100 20	STEL/15min mg/m3 176 176 884 442	40 40 200 100	Remarks / Observation SKIN SKIN SKIN SKIN	ons	
Threshold Limit Value Type  AGW  MAK  VLA  VLEP  VLEP	DEU DEU ESP FRA ITA	mg/m3  88  88  441  88,4  442	20 20 100 20 100	STEL/15min mg/m3 176 176 884 442 884	40 40 200 100 200	Remarks / Observation  SKIN  SKIN  SKIN  SKIN  SKIN	ons	
Threshold Limit Value Type  AGW  MAK  VLA  VLEP  VLEP  VLE  NDS/NDSCh	DEU DEU ESP FRA ITA PRT	mg/m3  88  88  441  88,4  442  442	20 20 100 20 100	STEL/15min mg/m3  176  176  884  442  884  884	40 40 200 100 200	Remarks / Observation SKIN SKIN SKIN SKIN SKIN SKIN	ons	
Threshold Limit Value Type  AGW MAK VLA VLEP VLEP VLE NDS/NDSCh	DEU DEU ESP FRA ITA PRT POL	mg/m3  88  88  441  88,4  442  442  200	20 20 100 20 100 100	STEL/15min mg/m3 176 176 884 442 884 4884 400	40 40 200 100 200 200	Remarks / Observation  SKIN  SKIN  SKIN  SKIN  SKIN  SKIN  SKIN  SKIN	ons	
Threshold Limit Value Type  AGW  MAK  VLA  VLEP  VLEP  VLE  NDS/NDSCh  WEL  OEL	DEU DEU ESP FRA ITA PRT POL GBR	mg/m3  88  88  441  88,4  442  442  200  441	20 20 100 20 100 100	STEL/15min mg/m3 176 176 884 442 884 884 400 552	40 40 200 100 200 200	Remarks / Observation  SKIN	ons	
Threshold Limit Value Type  AGW  MAK  VLA  VLEP  VLEP  VLE  NDS/NDSCh  WEL  OEL  TLV-ACGIH	DEU DEU ESP FRA ITA PRT POL GBR EU	mg/m3  88  88  441  88,4  442  442  200  441  442	20 20 100 20 100 100	STEL/15min mg/m3 176 176 884 442 884 884 400 552	40 40 200 100 200 200	Remarks / Observation  SKIN	ons	
Threshold Limit Value Type  AGW  MAK  VLA  VLEP  VLEP  VLE  NDS/NDSCh  WEL  OEL  TLV-ACGIH  Predicted no-effect concen	DEU DEU ESP FRA ITA PRT POL GBR EU	mg/m3  88  88  441  88,4  442  442  200  441  442	20 20 100 20 100 100	STEL/15min mg/m3 176 176 884 442 884 884 400 552	40 40 200 100 200 200	Remarks / Observation  SKIN	ons	
Threshold Limit Value Type  AGW  MAK  VLA  VLEP  VLEP  VLE  NDS/NDSCh  WEL  OEL  TLV-ACGIH  Predicted no-effect concen	DEU DEU ESP FRA ITA PRT POL GBR EU tration - PNEC	mg/m3  88  88  441  88,4  442  442  200  441  442	20 20 100 20 100 100	STEL/15min mg/m3 176 176 884 442 884 400 552 884	40 40 200 100 200 200 125 200	Remarks / Observation  SKIN	ons	
Threshold Limit Value Type  AGW  MAK  VLA  VLEP  VLEP  VLE  NDS/NDSCh  WEL  OEL  TLV-ACGIH  Predicted no-effect concen  Normal value in fresh wate	DEU DEU ESP FRA ITA PRT POL GBR EU  tration - PNEC r	mg/m3  88  88  441  88,4  442  442  200  441  442	20 20 100 20 100 100	STEL/15min mg/m3 176 176 884 442 884 400 552 884	40 40 200 100 200 200 125 200	Remarks / Observation  SKIN	ons	
Threshold Limit Value Type  AGW MAK VLA VLEP VLEP VLE NDS/NDSCh WEL OEL TLV-ACGIH Predicted no-effect concen Normal value in fresh wate Normal value for fresh wate	DEU DEU ESP FRA ITA PRT POL GBR EU  tration - PNEC r	mg/m3  88  88  441  88,4  442  442  200  441  442	20 20 100 20 100 100	STEL/15min mg/m3  176  176  884  442  884  400  552  884	40 40 200 100 200 200 125 200 49 49	Remarks / Observation  SKIN	ons	
Threshold Limit Value Type  AGW  MAK  VLA  VLEP  VLEP  VLEP  VLE  NDS/NDSCh  WEL  OEL  TLV-ACGIH  Predicted no-effect concen  Normal value in fresh wate  Normal value for fresh wate  Normal value for marine wa	DEU DEU ESP FRA ITA PRT POL GBR EU  tration - PNEC r ter er sediment atter sediment	mg/m3  88  88  441  88,4  442  442  200  441  442	20 20 100 20 100 100	STEL/15min mg/m3 176 176 884 442 884 400 552 884	40 40 200 100 200 200 125 200 49 49	Remarks / Observation  SKIN  SKIN  SKIN  SKIN  SKIN  SKIN  SKIN  SKIN  SKIN  //  //  //  //  //  //  //  //  //	ons	
Threshold Limit Value Type  AGW MAK VLA VLEP VLEP VLE NDS/NDSCh WEL OEL TLV-ACGIH Predicted no-effect concen Normal value in fresh wate Normal value for fresh wate Normal value for marine wa Normal value for marine wa	DEU DEU ESP FRA ITA PRT POL GBR EU  tration - PNEC r ter er sediment ermittent release	mg/m3  88  88  441  88,4  442  442  200  441  442	20 20 100 20 100 100	STEL/15min mg/m3 176 176 884 442 884 400 552 884	40 40 200 100 200 200 125 200  µg µg mg	Remarks / Observation  SKIN  SKIN  SKIN  SKIN  SKIN  SKIN  SKIN  SKIN  SKIN  JUI  JUI  JUI  JUI  JUI  JUI  JUI  J	ons	
AGW MAK VLA VLEP VLEP VLE NDS/NDSCh WEL	DEU DEU ESP FRA ITA PRT POL GBR EU  tration - PNEC r ter er sediment ater sediment ermittent release organisms	mg/m3  88  88  441  88,4  442  442  200  441  442  87	20 20 100 20 100 100	STEL/15min mg/m3 176 176 884 442 884 400 552 884 100 55 13,7 1,37 55	40 40 200 100 200 200 125 200  µg, µg, µg, µg, µg, µg, µg, µg, µg, µg	Remarks / Observation  SKIN  SKIN  SKIN  SKIN  SKIN  SKIN  SKIN  SKIN  SKIN  JUI  JUI  JUI  JUI  JUI  JUI  JUI  J	ons	







Versión: 23 Date of compilation: 10/10/2020 Date of printing: 18/11/2020

	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	·	NPI	•	1,6 mg/kg	•	Systernic	<u>.</u>	1,6
Inhalation	NPI	VND	NPI	bw/d 15 mg/m3	293 mg/m3	VND	NPI	77 mg/m3
Skin	, 141 1	NPI	- 1411	NPI	NPI	NPI	NPI	180 mg/kg
								bw/d
Ethanol Threshold Limit Value								
Туре	Country	TWA/8h	-	STEL/15min	<del>.</del>	Remarks		
	<u> </u>	mg/m3	ppm	mg/m3	ppm	Observa	tions	
AGW	DEU	380	200	1520	800			
MAK	DEU	380	200	1520	800			
VLA	ESP			1910	1000			
VLEP	FRA	1900	1000	9500	5000			
NDS/NDSCh	POL	1900	•	<del></del> -	•	•		
WEL	GBR	1920	1000	•	•			
TLV-ACGIH				1884	1000			
Predicted no-effect concent	tration - PNEC							
Normal value in fresh water	r			960	μд	/I		
Normal value in marine wat	ter			790	μд	/I		
Normal value for fresh wate	er sediment			3,6	mç	g/kg/d	<del>.</del>	
Normal value for marine wa	ater sediment			2,9	mç	g/kg/d		
Normal value for water, inte	ermittent release			2,75	mç	g/l		
Normal value of STP micro	organisms			580	mç	g/l		
Normal value for the food c	hain (secondary poisor	ning)		380	mç	g/kg		
Normal value for the terrest	trial compartment			630	μg	/kg/d		
Health - Derived no-ef	Effects on	DMEL			Effects on			
Route of exposure	consumers Acute local	Acute systemic	Chronic local	Chronic	workers Acute local	Acute	Chronic local	Chronic
Oral	<u> </u>	NPI		systemic 87 mg/kg bw/d		systemic	<u> </u>	systemic 87
Inhalation	950 mg/m3	NPI	NPI	114 mg/m3	1900 mg/m3	NPI	NPI	950 mg/m3
Skin	NPI	NPI	NPI	206 mg/kg bw/d	NPI	NPI	NPI	343 mg/kg bw/d
Propan-2-ol								
Threshold Limit Value Type	Country	TWA/8h		STEL/15min		Remarks		
		mg/m3	ppm	mg/m3	ppm	Observa	tions	
AGW	DEU	500	200	1000	400			
MAK	DEU	500	200	1000	400		·	
VLA	ESP	500	200	1000	400			
VLEP	FRA			980	400			
NDS/NDSCh	POL	900		1200		SKIN		
WEL	GBR	999	400	1250	500		<del> </del>	
TLV-ACGIH		492	200	983	400		•	







Versión: 23 Date of compilation: 10/10/2020 Date of printing: 18/11/2020

Predicted no-effect concentration - PNEC	·		
Normal value in fresh water	140,9	mg/l	
Normal value in marine water	140,9	mg/l	
Normal value for fresh water sediment	552	mg/kg/d	
Normal value for marine water sediment	552	mg/kg/d	
Normal value for water, intermittent release	140,9	mg/l	
Normal value of STP microorganisms	2,251	g/l	
Normal value for the food chain (secondary poisoning)	160	mg/kg	
Normal value for the terrestrial compartment	28	mg/kg/d	

Health - Derived no-effect level - DNEL / DMEL								
	Effects on				Effects on			
	consumers				workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral	VND	VND	VND	26 mg/kg bw/d	VND	VND	VND	VND
Inhalation	VND	VND	VND	89 mg/m3	VND	VND	VND	500 mg/m3
Skin	VND	VND	VND	319 mg/kg bw/d	VND	VND	VND	888 mg/kg

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

None required.

### SKIN PROTECTION

Wear category I 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.

### 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, a mask with a type AX filter combined with a type P filter should be worn (see standard EN 14387).

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.

### ENVIRONMENTAL EXPOSURE CONTROLS

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







Versión: 23 Date of compilation: 10/10/2020 Date of printing: 18/11/2020

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

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

Appearance aerosol Colour various

Odour characteristic of solvent

Odour threshold Not available
pH Not available
Melting point / freezing point Not available
Initial boiling point Not available
Boiling range Not available
Flash point < 0 °C
Evaporation Rate Not available
Flammability of solids and gases flammable gas

Flammability of solids and gases
Lower inflammability limit
Upper inflammability limit
Not available
Lower explosive limit
Upper explosive limit
Vapour pressure
Vapour density

Illustration
Not available
Not available
Not available
Vapour density

Not available

Relative density 0,72 ÷ 0,76 g/ml a 20°C Solubility insoluble in water

Partition coefficient: n-octanol/water Not available

Auto-ignition temperature Not available

Decomposition temperature Not available

Viscosity 10`` - 13`` Coppa Ford

Explosive properties not applicable
Oxidising properties not applicable

9.2. Other information

VOC (Directive 2004/42/EC): 95,20 % - 704,48 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.

N-butyl acetate

Decomposes on contact with: water.

2-methoxy-1-methylethyl acetate

Stable in normal conditions of use and storage. On contact with: strong oxidising agents.







Versión: 23 Date of compilation: 10/10/2020 Date of printing: 18/11/2020

With the air it may slowly develop peroxides that explode with an increase in temperature.

Isobutyl acetate

Decomposes under the effect of heat. Attacks various types of plastic materials.

2-Butoxyethanol

Decomposes under the effect of heat.

### 10.2. Chemical stability

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

#### 10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

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.

Xylene (mixture of isomers)

Stable in normal conditions of use and storage.Reacts violently with: strong oxidants,strong acids,nitric acid,perchlorates.May form explosive mixtures with: air

2-methoxy-1-methylethyl acetate

May react violently with: oxidising substances, strong acids, alkaline metals.

Isobutyl acetate

Risk of explosion on contact with: strong oxidising agents. May react violently with: alkaline hydroxides, potassium tert-butoxide. Forms explosive mixtures with: air.

2-Butoxyethanol

May react dangerously with: aluminium,oxidising agents.Forms peroxides with: air.

Ethylbenzene

Reacts violently with: strong oxidants. Attacks various types of plastic materials. May form explosive mixtures with: air.

### 10.4. Conditions to avoid

Avoid overheating.

N-butyl acetate

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

Isobutyl acetate







Versión: 23 Date of compilation: 10/10/2020 Date of printing: 18/11/2020

Avoid exposure to: sources of heat,naked flames.

2-Butoxyethanol

Avoid exposure to: sources of heat,naked flames.

### 10.5. Incompatible materials

Strong reducing or oxidising agents, strong acids or alkalis, hot material.

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.

Isobutyl acetate

Incompatible with: strong oxidants, nitrates, strong acids, strong bases.

2-Butoxyethanol

Keep away from: strong oxidants.

### 10.6. Hazardous decomposition products

2-Butoxyethanol

May develop: hydrogen.

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

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







Versión: 23 Date of compilation: 10/10/2020 Date of printing: 18/11/2020

N-butyl acetate

WORKERS: inhalation; contact with the skin.

Xylene (mixture of isomers)

WORKERS: inhalation; contact with the skin.

POPULATION: ingestion of contaminated food or water; inhalation of ambient air.

2-methoxy-1-methylethyl acetate

WORKERS: inhalation; contact with the skin.

Methanol

WORKERS: inhalation; contact with the skin.

POPULATION: ingestion of contaminated food or water; 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.

Xylene (mixture of isomers)

Toxic effect on the central nervous system (encephalopathy); irritating for the skin, conjunctiva, cornea and respiratory apparatus.

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).

Methanol

The minimum lethal dose for humans by ingestion is considered to be in the range from 300 to 1000 mg/kg. Ingestion of 4-10 ml of the substance may cause permanent blindness in adult humans (IPCS).

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







Versión: 23 Date of compilation: 10/10/2020 Date of printing: 18/11/2020

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).

Xylene (mixture of isomers)

Intake of alcohol interferes with the metabolism of the substance, inhibiting it. Ethanol consumption (0.8 g/kg) before a 4-hour exposure to xylene vapours (145 and 280 ppm) causes a 50% reduction in the excretion of methyl hippuric acid, whereas the concentration of xylenes in the blood increases approx. 1.5-2 times. At the same time there is an increase in the secondary side effects of the ethanol. The metabolism of the xylenes is increased by phenobarbital and 3-methyl-colantrene type enzyme inducers. Aspirin and xylenes mutually inhibit their conjugation with the glycine, which results in a decrease in urinary excretion of methyl hippuric acid. Other industrial products can interfere with the metabolism of xylenes.

desired in difficility exercises of metry implanted and. Other made that produces but interiore with the r
ACUTE TOXICITY
ATE (Inhalation) of the mixture: > 20 mg/l ATE (Oral) of the mixture: >2000 mg/kg ATE (Dermal) of the mixture: >2000 mg/kg
Petroleum Resins
LD50 (Oral) 2000 mg/kg
Xylene (mixture of isomers)
LD50 (Oral) > 3000 mg/kg rat
LD50 (Dermal) > 1700 mg/kg rabbit
LC50 (Inhalation) 5000 ppm/4h rat

2-methoxy-1-methylethyl acetate

LD50 (Oral) > 5000 mg/kg Rat

LD50 (Dermal) > 5000 mg/kg Rat

LC50 (Inhalation) 1805,05 ppm LC0 (4 h) rat

Butane

LC50 (Inhalation) > 1442,738 mg/l/15min rat

Propane

LC50 (Inhalation) 800000 ppm 15 min







Versión: 23 Date of compilation: 10/10/2020 Date of printing: 18/11/2020

Ethylbenzene
LD50 (Oral) 3500 mg/kg Rat
LD50 (Dermal) 15354 mg/kg Rabbit
LC50 (Inhalation) 17,2 mg/l/4h Rat
Methanol
LD50 (Oral) 1978 mg/kg bw rat
LC50 (Inhalation) 123,3 mg/l/4h rat
LC30 (IIIIalation) 123,3 mg//4n fat
2-Butoxyethanol
LD50 (Oral) > 1000 mg/kg bw guinea pig
LD50 (Dermal) > 400 mg/kg bw rabbit
LC50 (Inhalation) > 400 ppm/4h rat
Methyl acetate
LD50 (Oral) 6482 mg/kg rat
LD50 (Dermal) 2000 mg/kg bw rat
LC50 (Inhalation) 49,2 mg/l/4h rabbit
N-butyl acetate
LD50 (Oral) > 10000 mg/kg Rat
LD50 (Dermal) > 5000 mg/kg rabbit
LC50 (Inhalation) 0,74 mg/l/4h Rat
Isobutyl acetate
LD50 (Oral) 13413 mg/kg bw rat
LD50 (Dermal) 17400 mg/kg bw rabbit
LC50 (Inhalation) 30 mg/l/6h rat







Versión: 23 Date of compilation: 10/10/2020 Date of printing: 18/11/2020

Isobutane

LC50 (Inhalation) > 1442,738 mg/l/15min rat

Methyl formate

LD50 (Oral) 1500 mg/kg bw rat

LD50 (Dermal) 4000 mg/kg bw rat

LC50 (Inhalation) 5,2 mg/l/4h rat

### SKIN CORROSION / IRRITATION

Repeated exposure may cause skin dryness or cracking.

#### SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

### 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

Xylene (mixture of isomers)

Classified in Group 3 (not classifiable as a human carcinogen) by the International Agency for Research on Cancer (IARC).
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 drowsiness or dizziness

### STOT - REPEATED EXPOSURE







Versión: 23 Date of compilation: 10/10/2020 Date of printing: 18/11/2020

Does not meet the classification criteria for this hazard class

### ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

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

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

#### 12.1. Toxicity

Petroleum Resins

EC50 - for Crustacea 100 mg/l/48h EC50 - for Algae / Aquatic Plants 100 mg/l/72h

Xylene (mixture of isomers)

LC50 - for Fish 2,6 mg/l/96h
EC50 - for Algae / Aquatic Plants 4,6 mg/l/72h
EC10 for Crustacea 1,9 mg/l/21d
Chronic NOEC for Fish 1,3 mg/l 56 days
Chronic NOEC for Crustacea 960 µg/l 7 days
Chronic NOEC for Algae / Aquatic Plants 440 µg/l 73 h

2-methoxy-1-methylethyl acetate

 LC50 - for Fish
 > 100 mg/l/96h

 EC50 - for Crustacea
 > 100 mg/l/48h

 EC50 - for Algae / Aquatic Plants
 > 100 mg/l/72h

 Chronic NOEC for Fish
 > 10 mg/l 14 days

Chronic NOEC for Crustacea 100 mg/l
Chronic NOEC for Algae / Aquatic Plants 1 g/l 4 days

Butane

LC50 - for Fish > 24,11 mg/l/96h

Propane

LC50 - for Fish 85,82 mg/l/96h EC50 - for Crustacea 41,82 mg/l/48h

Ethylbenzene

 LC50 - for Fish
 4,65 mg/l/96h

 EC50 - for Crustacea
 2,1 mg/l/48h

 EC50 - for Algae / Aquatic Plants
 5,15 mg/l/72h

 Chronic NOEC for Fish
 3,3 mg/l 4 days







Versión: 23 Date of compilation: 10/10/2020 Date of printing: 18/11/2020

Chronic NOEC for Crustacea 960  $\mu$ g/l 7 days Chronic NOEC for Algae / Aquatic Plants 3,95 mg/l 4 days

Methanol

LC50 - for Fish 15,4 g/l/96h

Chronic NOEC for Fish 446,7 mg/l 28 days
Chronic NOEC for Crustacea 208 mg/l 21 days

2-Butoxyethanol

LC50 - for Fish 1,474 g/l

EC50 - for Crustacea 1,55 g/l

EC50 - for Algae / Aquatic Plants 911 mg/l/72h

EC10 for Crustacea 134 mg/l 21 days

Chronic NOEC for Fish 100 mg/l 21 days

Chronic NOEC for Crustacea 100 mg/l 21 days

Chronic NOEC for Algae / Aquatic Plants 88 mg/l 72 h

Methyl acetate

LC50 - for Fish 300 mg/l/96h
EC50 - for Crustacea 1,027 g/l
EC50 - for Algae / Aquatic Plants 120 mg/l/72h
Chronic NOEC for Algae / Aquatic Plants 120 mg/l 72 h

N-butyl acetate

LC50 - for Fish 18 mg/l/96h
EC50 - for Crustacea 32 mg/l/48h
EC50 - for Algae / Aquatic Plants 246 mg/l/72h
Chronic NOEC for Crustacea 23,2 mg/l 21 days
Chronic NOEC for Algae / Aquatic Plants 105 mg/l 72 h

Isobutyl acetate

LC50 - for Fish 16,6 mg/l/96h
EC50 - for Crustacea 24,6 mg/l/48h
EC50 - for Algae / Aquatic Plants 321,5 mg/l/72h
Chronic NOEC for Crustacea 23,2 mg/l 21 days
Chronic NOEC for Algae / Aquatic Plants 1505 mg/l 72 h

Isobutane

LC50 - for Fish > 24,11 mg/l/96h

Methyl formate

 LC50 - for Fish
 115 mg/l/96h

 EC50 - for Crustacea
 500 mg/l/48h

 EC50 - for Algae / Aquatic Plants
 1,079 g/l/72h

 EC10 for Algae / Aquatic Plants
 131,2 mg/l/72h







Versión: 23 Date of compilation: 10/10/2020 Date of printing: 18/11/2020

Chronic NOEC for Fish 46 mg/l 4 days

### 12.2. Persistence and degradability

Propane

Global Warming Potential (GWP): 3. Ozone Depletion Potential (ODP): 0.

2-methoxy-1-methylethyl acetate

Easily biodegradable. It is rapidly oxidized into the air by photochemical reaction.

Xylene (mixture of isomers)

Solubility in water 146 - 208 mg/L @ 25 °C and pH 7 mg/l

Rapidly degradable

2-methoxy-1-methylethyl acetate

Solubility in water > 10000 mg/l

Rapidly degradable

Butane

Solubility in water 0,1 - 100 mg/l

Rapidly degradable

Propane

Solubility in water 0,1 - 100 mg/l

Rapidly degradable

Ethylbenzene

Solubility in water 1000 - 10000 mg/l

Rapidly degradable

Methanol

Solubility in water 1000 - 10000 mg/l

Rapidly degradable

2-Butoxyethanol

Solubility in water 1000 - 10000 mg/l

Rapidly degradable

Methyl acetate

Solubility in water 243500 mg/l

Rapidly degradable

N-butyl acetate

Solubility in water 5,3 g/l

Rapidly degradable

Isobutyl acetate

Solubility in water 1000 - 10000 mg/l

Rapidly degradable

Isobutane







Versión: 23 Date of compilation: 10/10/2020 Date of printing: 18/11/2020

Rapidly degradable

Methyl formate

Rapidly degradable

### 12.3. Bioaccumulative potential

Xylene (mixture of isomers)	
Partition coefficient: n-octanol/water	3,12
BCF	25,9
2-methoxy-1-methylethyl acetate	
Partition coefficient: n-octanol/water	1,2
Butane	
Partition coefficient: n-octanol/water	1,09
Propane	
Partition coefficient: n-octanol/water	1,09
Ethylbenzene	
Partition coefficient: n-octanol/water	3,6
Methanol	
Partition coefficient: n-octanol/water	0.77
BCF	-0,77
БСГ	0,2
2-Butoxyethanol	
Partition coefficient: n-octanol/water	0,81
	0,0 .
Methyl acetate	
Partition coefficient: n-octanol/water	0,18
N-butyl acetate	
Partition coefficient: n-octanol/water	2,3
BCF	15,3
Isobutyl acetate	
Partition coefficient: n-octanol/water	2,3
BCF	15,3
12.4. Mobility in soil	

Xylene (mixture of isomers)

Partition coefficient: soil/water 2,73







Date of compilation: 10/10/2020

Date of printing: 18/11/2020

Methyl acetate

Versión: 23

Partition coefficient: soil/water 0,18

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. 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.

Product residues are considered hazardous special waste. Do not dispose of in wastewater.

Empty cylinders, although completely emptied, should not be dispersed in the environment.

The overheated aerosol container at a temperature above 50 °C may burst even if it contains a small gas residue.

Waste transport may be subject to ADR.

Refer to applicable regulations.

European Waste Catalog (contaminated containers):

Aerosol as a household waste is excluded from the application of the above standard.

The exhausted commercial / industrial aerosol can be classified as: 15.01.10 \*: packaging containing residues of dangerous or contaminated substances.

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

### 14.1. UN number

ADR / RID, IMDG, 1950

IATA:

### 14.2. UN proper shipping name

ADR / RID: AEROSOLS IMDG: AEROSOLS

IATA: AEROSOLS, FLAMMABLE

### 14.3. Transport hazard class(es)







Versión: 23 Date of compilation: 10/10/2020 Date of printing: 18/11/2020

ADR / RID: Class: 2 Label: 2.1

IMDG: Class: 2 Label: 2.1

IATA: Class: 2 Label: 2.1



### 14.4. Packing group

ADR / RID, IMDG,

IATA:

### 14.5. Environmental hazards

ADR / RID: NO IMDG: NO IATA: NO

#### 14.6. Special precautions for user

ADR / RID: HIN - Kemler: -- Limited Tunnel Quantities: 1 restriction code: (D)

Special Provision: -

IMDG: EMS: F-D, S-U Limited

Quantities: 1

IATA: Cargo: Maximum

Special Instructions:

Pass.:

Packaging quantity: 150 instructions:

Kg

203 Maximum Packaging quantity: 75 instructions: 203

Kg A145, A167, A802

### 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: P3a

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

<u>Product</u>

40 Point

Contained substance







Versión: 23 Date of compilation: 10/10/2020 Date of printing: 18/11/2020

Point 69 Methanol Reg. no.: 01-2119433307-44-

XXXX

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 (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.

VOC (Directive 2004/42/EC) :

Special finishes.

### 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. Gas 1A Flammable gas, category 1A

Aerosol 1 Aerosol, category 1
Aerosol 3 Aerosol, category 3

Flam. Liq. 1 Flammable liquid, category 1
Flam. Liq. 2 Flammable liquid, category 2
Flam. Liq. 3 Flammable liquid, category 3

Press. Gas (Liq.) Liquefied gas
Press. Gas Pressurised gas

Acute Tox. 3 Acute toxicity, category 3







Versión: 23 Date of compilation: 10/10/2020 Date of printing: 18/11/2020

STOT SE 1 Specific target organ toxicity - single exposure, category 1

Acute Tox. 4 Acute toxicity, category 4

Asp. Tox. 1 Aspiration hazard, category 1

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

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

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

Aquatic Chronic 4 Hazardous to the aquatic environment, chronic toxicity, category 4

H220Extremely flammable gas.H222Extremely flammable aerosol.

H229Pressurised container: may burst if heated.H224Extremely flammable liquid and vapour.H225Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H280 Contains gas under pressure; may burst if heated.

H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H331 Toxic if inhaled.

H370 Causes damage to organs.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.

H332 Harmful if inhaled.

H304 May be fatal if swallowed and enters airways.

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

H319 Causes serious eye irritation.

H315 Causes skin irritation.

H335 May cause respiratory irritation.H336 May cause drowsiness or dizziness.

H413 May cause long lasting harmful effects to aquatic life.

EUH066 Repeated exposure may cause skin dryness or cracking.

#### LEGEND:

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







Versión: 23 Date of compilation: 10/10/2020 Date of printing: 18/11/2020

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

### Note for users:

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

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

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

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

### 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 Section 11.

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:

01