

# CHEMISOL PRIMER 400 ml CHEMITOOL

## 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: **CHC020302**  
 Product name: **CHEMISOL PRIMER 400 ml CHEMITOOL**  
 UFI: **YA80-10KA-P00C-U56S**

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

Intended use: **Aerosol primer for metal surfaces.**

Identified Uses	Industrial	Professional	Consumer
Consumer	-	-	✓
Industrial Use	✓	-	-
Professional Use	-	✓	-

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

Name: **Qualidade Lusavouga**  
 Full address: **Av. 5 de Outubro, 5000-001 Lisboa, Portugal**  
 District and Country: **Lisboa, Portugal**  
 e-mail address of the competent person responsible for the Safety Data Sheet: **qualidade@lusavouga.pt**

#### 1.4. Emergency telephone number

For urgent inquiries refer to

IT - Centro Antiveleni e Centro Nazionale di Informazione Tossicologica: Tel. 0382 24444 (IRCCS Fondazione Salvatore Maugeri - Pavia)  
 IT - Centro Antiveleni di Milano: Tel. 02 66101029 (Ospedale Niguarda Ca' Granda - Milano)  
 IT - Centro Antiveleni di Roma: Tel. 06 3054 343 (Policlinico Universitario A. Gemelli IRCCS - Roma)  
 IT - Centro Antiveleni di Bergamo: Tel. 800 883300 (ASST Papa Giovanni XXIII - Bergamo)  
 IT - Centro Antiveleni di Firenze: Tel. 055 794 7819 (Azienda Ospedaliera Universitaria Careggi - Firenze)  
 IT - Centro Antiveleni di Napoli: Tel. 081 5453333 (Azienda Ospedaliera A. Cardarelli - Napoli)  
 AT - Vergiftungsinformationszentrale (VIZ): Tel. +43 01 406 4343 (Austria)  
 BE - Belgisch Antigifcentrum: Tel. 070 245245 (Belgium)  
 BG - НАЦИОНАЛЕН ЦЕНТЪР ПО ТОКСИКОЛОГИЯ: Tel. +359 2 9154 233 (Bulgaria)  
 HR - Centar za kontrolu otrovanja: Tel. +385 1 2348342 (Croatia)  
 CY - Τμήμα Επιθεώρησης Εργασίας (TEE): Tel. 1401 (Cyprus)  
 CZ - Toxikologické informační středisko (TIS): Tel. +420 224 919 293 or +420 224 915 402 (Czech Republic)  
 DK - Giftlinjen: Ring 82 12 12 12 (Denmark)  
 EE - Mürgistusteabekeskus: Tel. 16662 (Estonia)  
 FI - Myrkytystietokeskus: Tel. 0800 147 111 or 09 471 977 (Finland)  
 FR - ORFILA (INRS): Tél. +33 (0) 1 45 42 59 59 (France)  
 DE - Giftnotruf der Charité Universitätsmedizin Berlin: Tel. +49 030 19240 (Germany)

**CHEMISOL PRIMER 400 ml CHEMITOOL**

GR - Κέντρο Δηλητηριάσεων: Τηλ. 210 7793777 (Greece)  
HU - Egészségügyi Toxikológiai Tájékoztató Szolgálat (ETTSZ): Tel. +36 80 20 1199 (Hungary)  
IS - Eitrunarmiðstöð: Tel. 543 2222 (Iceland)  
IE - National Poisons Information Centre (NPIC): Tel. 01 8092566 or 01 8379964 (Republic of Ireland)  
LV - Latvian Poisons Information Centre: Tel. +371 67042473 (Latvia)  
LT - Apsinuodijimų Informacijos biuras: Tel. 8-5 236 2052 (Lithuania)  
LU - Giftinformationszentrum: Tel. +352 8002 5500 (Luxembourg)  
NL - Nationaal Vergiftigingen Informatie Centrum (NVIC): Tel. 030 274 88 88 (Netherlands)  
NO - Giftinformasjonen: Tel. 22 9 13 00 (Norway)  
PL - Pomorskie Centrum Toksykologii: Tel. +58 682 04 04 (Poland)  
PT - Centro de Informação Antivenenos (CIAV): Tel. 800 250 250 (Portugal)  
RO - Biroul RSI Si Informare Toxicologica: Tel. 021 318 36 06 (Romania)  
SK - Národné Toxikologické informačné centrum (NTIC): Tel. 02 5477 4166 (Slovakia)  
SI - Center za klinično toksikologijo in farmakologijo: Tel. 112 (Slovenia)  
ES - Servicio de Información Toxicológica (SIT) España: Tel.+34 91 562 04 20 (Spain)  
SE - Giftinformationscentralen: Tel. 112 (Sweden)  
CH - Schweizerisches Toxikologisches Informationszentrum (STIZ): Tel. +41 145 (Switzerland)  
TR - UZEM: Tel. 114 (Turkey)  
GB - National Poisons Information Service (NPIS) Tel. 0344 892 0111 (United Kingdom)  
Members of the Public: NHS 111 (England), NHS 24 (Scotland) or NHS Direct (Wales)  
USA - American Association of Poison Control Centers: Tel. 1 800 222 1222 (U.S.A.)

**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.
Aspiration hazard, category 1	H304	May be fatal if swallowed and enters airways.
Eye irritation, category 2	H319	Causes serious eye irritation.
Skin irritation, category 2	H315	Causes skin irritation.
Specific target organ toxicity - single exposure, category 3	H335	May cause respiratory irritation.
Specific target organ toxicity - single exposure, category 3	H336	May cause drowsiness or dizziness.
Hazardous to the aquatic environment, chronic toxicity, category 3	H412	Harmful to aquatic life with long lasting effects.

**2.2. Label elements**

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

## Hazard pictograms:



**CHEMISOL PRIMER 400 ml CHEMITOOL**

Signal words: Danger

## Hazard statements:

**H222** Extremely flammable aerosol.  
**H229** Pressurised container: may burst if heated.  
**H319** Causes serious eye irritation.  
**H315** Causes skin irritation.  
**H335** May cause respiratory irritation.  
**H336** May cause drowsiness or dizziness.  
**H412** Harmful to aquatic life with long lasting effects.  
**EUH208** Contains: N-butyl acrylate  
May produce an allergic reaction.

## 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 not expose to temperatures exceeding 50°C / 122°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:** Acetone  
Hydrocarbons, C9, aromatics  
Solvent naphtha (petroleum), light arom.  
Reaction mass of ethylbenzene and xylene

Statements on the aspiration toxicity classification were not included in the label elements, based on section 1.3.3. of Annex I to CLP.

VOC (Directive 2004/42/EC):

## Special finishes.

VOC given in g/litre of product in a ready-to-use condition : 730,00  
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  $\geq$  than 0,1%.

**SECTION 3. Composition/information on ingredients****3.2. Mixtures**

Contains:

Identification	x = Conc. %	Classification 1272/2008 (CLP)
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**CHEMISOL PRIMER 400 ml CHEMITOOL****Acetone**

CAS 67-64-1 27 ≤ x &lt; 31 Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066

EC 200-662-2

INDEX 606-001-00-8

Reg. no. 01-2119471330-49-XXXX

**Propane**

CAS 74-98-6 15 ≤ x &lt; 19 Flam. Gas 1A H220, Press. Gas (Liq.) H280, Classification note/notes according to Annex VI to the CLP Regulation: U

EC 200-827-9

INDEX 601-003-00-5

Reg. no. 01-2119486944-21-0046

**Hydrocarbons, C9, aromatics**

CAS - 10 ≤ x &lt; 11 Flam. Liq. 3 H226, Asp. Tox. 1 H304, STOT SE 3 H335, STOT SE 3 H336, Aquatic Chronic 2 H411, Classification note/notes according to Annex VI to the CLP Regulation: P

EC 918-668-5

INDEX -

Reg. no. 01-2119455851-35-XXXX

**Butane**

CAS 106-97-8 7 ≤ x &lt; 9 Flam. Gas 1A H220, Press. Gas (Liq.) H280, Classification note/notes 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

**Reaction mass of ethylbenzene and xylene**

CAS - 5 ≤ x &lt; 7 Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Asp. Tox. 1 H304, STOT RE 2 H373, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335

EC 905-588-0

INDEX -

Reg. no. 01-2119539452-40-XXXX

**Solvent naphtha (petroleum), light arom.**

CAS 64742-95-6 5 ≤ x &lt; 7 Flam. Liq. 3 H226, Asp. Tox. 1 H304, STOT SE 3 H335, STOT SE 3 H336, Aquatic Chronic 2 H411, Classification note/notes according to Annex VI to the CLP Regulation: P

EC 265-199-0

INDEX 649-356-00-4

Reg. no. 01-2119455851-35-XXXX

**N-butyl acetate**

CAS 123-86-4 3 ≤ x &lt; 5 Flam. Liq. 3 H226, STOT SE 3 H336, EUH066

EC 204-658-1

INDEX 607-025-00-1

Reg. no. 01-2119485493-29-XXXX

**2-Butoxyethanol**

CAS 111-76-2 1 ≤ x &lt; 3 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

**Isobutane**

**CHEMISOL PRIMER 400 ml CHEMITOOL**

CAS 75-28-5	$1 \leq x < 3$	Flam. Gas 1A H220, Press. Gas H280
EC 200-857-2		
INDEX 601-004-00-0		
Reg. no. 01-2119485395-27-XXXX		
<b>Xylene (mixture of isomers)</b>		
CAS 1330-20-7	$0,5 \leq x < 1$	Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Eye Irrit. 2 H319, Skin Irrit. 2 H315, Classification note/notes according to Annex VI to the CLP Regulation: C
EC 215-535-7		
INDEX 601-022-00-9		
Reg. no. 01-2119488216-32-XXXX		
<b>2-methoxy-1-methylethyl acetate</b>		
CAS 108-65-6	$0 \leq x < 0,5$	Flam. Liq. 3 H226
EC 203-603-9		
INDEX 607-195-00-7		
Reg. no. 01-2119475791-29-XXXX		
<b>N-butyl acrylate</b>		
CAS 141-32-2	$0 \leq x < 0,5$	Flam. Liq. 3 H226, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Skin Sens. 1 H317, Classification note/notes according to Annex VI to the CLP Regulation: D
EC 205-480-7		
INDEX 607-062-00-3		
Reg. no. 01-2119453155-43-XXXX		
<b>Ethylbenzene</b>		
CAS 100-41-4	$0 \leq x < 0,5$	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: 28,00 %

Solvent naphtha (petroleum), light arom.

\*\* Solvent naphtha (petroleum), light arom. Low boiling point naphtha - unspecified [A complex combination of hydrocarbons obtained from distillation of aromatic streams. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C8 through C10 and boiling in the range of approximately 135Å ° C to 210Å ° C (275Å ° F to 410Å ° F).]

## 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.

**CHEMISOL PRIMER 400 ml CHEMITOOL****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**

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 the 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.

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### 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)

Information not available

### SECTION 8. Exposure controls/personal protection

#### 8.1. Control parameters

Regulatory References:

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
GRC	Ελλάδα	ΕΦΗΜΕΡΙΔΑ ΤΗΣ ΚΥΒΕΡΝΗΣΕΩΣ - ΤΕΥΧΟΣ ΠΡΩΤΟ Αρ. Φύλλου 152 - 21 Αυγούστου 2018
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 trabalho - Diário da República, 1.ª série - N.º 111 - 11 de junho de 2018
POL	Polska	ROZPORZĄDZENIE MINISTRA RODZINY, PRACY I POLITYKI SPOŁECZNEJ z dnia 12 czerwca 2018 r
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Third edition, published 2018)
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 2020

#### Acetone Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	
AGW	DEU	1200	500	2400 (C)	1000 (C)	
MAK	DEU	1200	500	2400	1000	
VLEP	FRA	1210	500	2420	1000	
TLV	GRC	1780		3560		
VLEP	ITA	1210	500			
VLE	PRT	1210	500			
NDS/NDSch	POL	600		1800		
WEL	GBR	1210	500	3620	1500	
OEL	EU	1210	500			
TLV-ACGIH			250		500	
Predicted no-effect concentration - PNEC						
Normal value in fresh water				10,6	mg/l	

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Normal value in marine water	1,06	mg/l
Normal value for fresh water sediment	30,4	mg/kg
Normal value for marine water sediment	3,04	mg/kg
Normal value for water, intermittent release	21	mg/l
Normal value of STP microorganisms	100	mg/l
Normal value for the food chain (secondary poisoning)	29,5	mg/kg
Normal value for the terrestrial compartment	29,5	mg/kg/d
Normal value for the atmosphere	NPI	

### Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral			VND	62 mg/kg				
Inhalation			VND	200 mg/m3	VND	2,420 mg/m3	VND	1,210 mg/m3
Skin			VND	62 mg/kg			VND	186 mg/kg

### Propane

#### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	1800	1000	7200	4000	
MAK	DEU	1800	1000	7200	4000	
VLA	ESP		1000			
TLV	GRC	1800	1000			
NDS/NDSch	POL	1800				

### Hydrocarbons, C9, aromatics

#### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
OEL	EU	100	19			

### Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				11 mg/kg bw/d				
Inhalation				32 mg/m3				150 mg/m3
Skin				11 mg/kg bw/d				25 mg/kg bw/d

### Butane

#### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	2400	1000	9600	4000	
MAK	DEU	2400	1000	9600	4000	
VLA	ESP		1000			Gases



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VLEP	FRA	1900	800		
TLV	GRC	2350	1000		
NDS/NDSCh	POL	1900		3000	
WEL	GBR	1450	600	1810	750
WEL	GBR		4		RESP
TLV-ACGIH					1000

### Reaction mass of ethylbenzene and xylene

Predicted no-effect concentration - PNEC

Normal value in fresh water	327	µg/l
Normal value in marine water	327	µg/l
Normal value for fresh water sediment	12,46	mg/kg/d
Normal value for marine water sediment	12,46	mg/kg/d
Normal value for water, intermittent release	327	µg/l
Normal value of STP microorganisms	6,58	mg/l
Normal value for the terrestrial compartment	2,31	mg/kg/d

### Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				1,6 mg/kg bw/d				
Inhalation				14,8 mg/m3	289 mg/m3			77 mg/m3
Skin				108 mg/kg bw/d				180 mg/kg bw/d

### Solvent naphtha (petroleum), light arom.

#### Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation				32 mg/m3				
Skin				11 mg/kg				

### N-butyl acetate

#### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		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	
TLV	GRC	710	150	950	200	
NDS/NDSCh	POL	240		720		
WEL	GBR	724	150	966	200	
OEL	EU	241	50	723	150	
TLV-ACGIH			50		150	

Predicted no-effect concentration - PNEC

Normal value in fresh water	180	µg/l
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Normal value in marine water	18	µg/l
Normal value for fresh water sediment	981	µg/kg/d
Normal value for marine water sediment	98,1	µg/kg/d
Normal value of STP microorganisms	35,6	mg/l
Normal value for the terrestrial compartment	90,3	µg/kg/d

Health - Derived no-effect level - DNEL / DMEL								
Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		2 mg/kg bw/d		2 mg/kg bw/d		2		2
Inhalation	300 mg/m <sup>3</sup>	300 mg/m <sup>3</sup>	35,7 mg/m <sup>3</sup>	12 mg/m <sup>3</sup>	600 mg/m <sup>3</sup>	600 mg/m <sup>3</sup>	300 mg/m <sup>3</sup>	48 mg/m <sup>3</sup>
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/d

2-Butoxyethanol Threshold Limit Value						
Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	
AGW	DEU	49	10	98 (C)	20 (C)	SKIN
MAK	DEU	49	10	98	20	SKIN Hinweis
VLA	ESP	98	20	245	50	SKIN
VLEP	FRA	49	10	246	50	SKIN
TLV	GRC	120	25			
VLEP	ITA	98	20	246	50	SKIN
VLE	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		97	20			

Predicted no-effect concentration - PNEC		
Normal value in fresh water	8,8	mg/l
Normal value in marine water	880	µg/l
Normal value for fresh water sediment	34,6	mg/kg/d
Normal value for water, intermittent release	9,1	mg/l
Normal value of STP microorganisms	463	mg/l
Normal value for the food chain (secondary poisoning)	20	mg/kg
Normal value for the terrestrial compartment	2,33	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL								
Route of exposure	Effects on consumers				Effects on workers			
	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/m <sup>3</sup>	426 mg/m <sup>3</sup>	NPI	59 mg/m <sup>3</sup>	246 mg/m <sup>3</sup>	1091 mg/m <sup>3</sup>	NPI	98 mg/m <sup>3</sup>
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

Isobutane Threshold Limit Value				
Type	Country	TWA/8h	STEL/15min	Remarks /

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						Observations		
		mg/m3	ppm	mg/m3	ppm			
TLV-ACGIH		800						
<b>Xylene (mixture of isomers)</b>								
<b>Threshold Limit Value</b>								
Type	Country	TWA/8h		STEL/15min		Remarks / Observations		
		mg/m3	ppm	mg/m3	ppm			
AGW	DEU	440	100	880	200	SKIN		
MAK	DEU	440	100	880	200	SKIN		
VLA	ESP	221	50	442	100	SKIN		
VLEP	FRA	221	50	442	100	SKIN		
TLV	GRC	435	100	650	150			
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 - PNEC								
Normal value in fresh water				327		µg/l		
Normal value in marine water				327		µg/l		
Normal value for fresh water sediment				12,46		mg/kg/d		
Normal value for marine water sediment				12,46		mg/kg/d		
Normal value of STP microorganisms				6,58		mg/l		
Normal value for the terrestrial compartment				2,31		mg/kg/d		
<b>Health - Derived no-effect level - DNEL / DMEL</b>								
		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				1,6 mg/kg bw/d				
Inhalation				14,8 mg/m3			289 mg/m3	77 mg/m3
Skin				108 mg/kg bw/d				180 mg/kg bw/d
<b>2-methoxy-1-methylethyl acetate</b>								
<b>Threshold Limit Value</b>								
Type	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		
VLEP	FRA	275	50	550	100	SKIN		
TLV	GRC	275	50	550	100			
VLEP	ITA	275	50	550	100	SKIN		
VLE	PRT	275	50	550	100	SKIN		

## CHEMISOL PRIMER 400 ml CHEMITOOL

NDS/NDSch	POL	260		520		SKIN
WEL	GBR	274	50	548	100	SKIN
OEL	EU	275	50	550	100	SKIN

Predicted no-effect concentration - PNEC						
Normal value in fresh water				635		µg/l
Normal value in marine water				63,5		µg/l
Normal value for fresh water sediment				3,29		mg/kg/d
Normal value for marine water sediment				329		µg/kg/d
Normal value of STP microorganisms				100		mg/l
Normal value for the terrestrial compartment				290		µg/kg soil dw

Health - Derived no-effect level - DNEL / DMEL								
Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		NPI		36 mg/kg bw/d				
Inhalation	NPI	NPI	33 mg/m3	33 mg/m3	550 mg/m3	NPI	NPI	275 mg/m3
Skin	NPI	NPI	NPI	320 mg/kg bw/d	NPI	NPI	NPI	796 mg/kg bw/d

N-butyl acrylate						
Threshold Limit Value						
Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	11	2	22	4	
MAK	DEU	11	2	22	4	SKIN
VLA	ESP	11	2	53	10	
VLEP	FRA	11	2	53	10	
TLV	GRC	55	10			
VLEP	ITA	11	2	53	10	
VLE	PRT	11	2	53	10	
NDS/NDSch	POL	11		30		
WEL	GBR	5	1	26	5	
OEL	EU	11	2	53	10	
TLV-ACGIH		10	2			

Predicted no-effect concentration - PNEC						
Normal value in fresh water				2,72		µg/l
Normal value in marine water				270		n/l
Normal value for fresh water sediment				33,8		µg/kg/d
Normal value for marine water sediment				3,38		µg/kg/d
Normal value for water, intermittent release				11		µg/l
Normal value of STP microorganisms				3,5		mg/l
Normal value for the terrestrial compartment				1		mg/kg/d

Health - Derived no-effect level - DNEL / DMEL								
Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic

## CHEMISOL PRIMER 400 ml CHEMITOOL

Oral	NPI			NPI				
Inhalation	NPI	NPI	NPI	NPI	VND	VND	11 mg/m <sup>3</sup>	NPI
Skin	NPI	NPI	NPI	NPI	VND	NPI	VND	NPI

### Fatty acids, C14-18 and C16-18-unsaturated, maleate

Predicted no-effect concentration - PNEC

Normal value of STP microorganisms 100 mg/l

### Propylidintrimethanol

#### Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				0,34 mg/kg bw/d				
Inhalation				0,58 mg/m <sup>3</sup>				3,3 mg/m <sup>3</sup>
Skin				0,34 mg/kg bw/d				0,94 mg/kg bw/d

### Ethylbenzene

#### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	
AGW	DEU	88	20	176	40	SKIN
MAK	DEU	88	20	176	40	SKIN
VLA	ESP	441	100	884	200	SKIN
VLEP	FRA	88,4	20	442	100	SKIN
TLV	GRC	435	100	545	125	
VLEP	ITA	442	100	884	200	SKIN
VLE	PRT	442	100	884	200	SKIN
NDS/NDSch	POL	200		400		SKIN
WEL	GBR	441	100	552	125	SKIN
OEL	EU	442	100	884	200	SKIN
TLV-ACGIH		87	20			

Predicted no-effect concentration - PNEC

Normal value in fresh water	100	µg/l
Normal value in marine water	55	µg/l
Normal value for fresh water sediment	13,7	mg/kg/d
Normal value for marine water sediment	1,37	mg/kg/d
Normal value for water, intermittent release	55	µg/l
Normal value of STP microorganisms	9,6	mg/l
Normal value for the food chain (secondary poisoning)	20	mg/kg
Normal value for the terrestrial compartment	2,68	mg/kg/d

#### Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		NPI		1,6 mg/kg bw/d				1,6
Inhalation	NPI	VND	NPI	15 mg/m <sup>3</sup>	293 mg/m <sup>3</sup>	VND	NPI	77 mg/m <sup>3</sup>

## CHEMISOL PRIMER 400 ml CHEMITOOL

Skin	NPI	NPI	NPI	NPI	NPI	180 mg/kg bw/d
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### 12-hydroxy-N-[6-(12-hydroxyoctadecanamido)hexyl]octadecanamide

Predicted no-effect concentration - PNEC

Normal value in fresh water	24	ng/l
Normal value in marine water	2,4	ng/l
Normal value for fresh water sediment	1,032	mg/kg/d
Normal value for marine water sediment	103,2	µg/kg/d
Normal value of STP microorganisms	10	mg/l
Normal value for the food chain (secondary poisoning)	33,3	mg/kg
Normal value for the terrestrial compartment	206	µg/kg/d

### Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Chronic systemic	Effects on workers			
	Acute local	Acute systemic	Chronic local		Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				1,67 mg/kg bw/d				
Inhalation								11,75 mg/m3
Skin								3,33 mg/kg bw/d

Legend:

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

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

## 8.2. Exposure controls

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

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

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

Provide an emergency shower with face and eye wash station.

### HAND PROTECTION

None required.

### 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.

### 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

**CHEMISOL PRIMER 400 ml CHEMITOOL**

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**

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
Lower inflammability limit	Not available
Upper inflammability limit	Not available
Lower explosive limit	Not available
Upper explosive limit	Not available
Vapour pressure	Not available
Vapour density	Not available
Relative density	0,76 ÷ 0,80 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	Not available
Explosive properties	not applicable
Oxidising properties	not applicable

**9.2. Other information**

VOC (Directive 2004/42/EC) : 99,95 % - 730,00 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.

**CHEMISOL PRIMER 400 ml CHEMITOOL****2-Butoxyethanol**

Decomposes under the effect of heat.

**2-methoxy-1-methylethyl acetate**

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

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

**N-butyl acrylate**

When hot it can polymerise with explosion even when stabilised with 20 ppm of monomethyl ether hydroquinone. Store at below < 35°C/95°F and out of direct light. Always leave a layer of air on top of the liquid.

**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.

**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, peroxy monosulphuric 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.

**2-Butoxyethanol**

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

**N-butyl acrylate**

May polymerise on contact with: amines, bases, halogens, strong oxidising agents, acids, hydrogen compounds. May polymerise if exposed to: heat. Forms explosive mixtures with: hot air.



**CHEMISOL PRIMER 400 ml CHEMITOOL**

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.

Acetone

Avoid exposure to: sources of heat, naked flames.

N-butyl acetate

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

2-Butoxyethanol

Avoid exposure to: sources of heat, naked flames.

N-butyl acrylate

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

**10.5. Incompatible materials**

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

Acetone

Incompatible with: acids, oxidising substances.

N-butyl acetate

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

2-Butoxyethanol

Keep away from: strong oxidants.

2-methoxy-1-methylethyl acetate

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

N-butyl acrylate

Incompatible with: amines, halogens, oxidising substances, strong acids, alkalis.

**10.6. Hazardous decomposition products**

Acetone

May develop: ketenes, irritant substances.

**CHEMISOL PRIMER 400 ml CHEMITOOL**

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

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.

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)

**CHEMISOL PRIMER 400 ml CHEMITOOL**

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).

**Ethylbenzene**

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

Interactive effects**N-butyl acetate**

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

**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.

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

**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

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## Butane

LC50 (Inhalation) &gt; 1442,738 mg/l/15min rat

## Propane

LC50 (Inhalation) 800000 ppm 15 min

## Ethylbenzene

LD50 (Oral) 3500 mg/kg Rat

LD50 (Dermal) 15354 mg/kg Rabbit

LC50 (Inhalation) 17,2 mg/l/4h Rat

## 2-Butoxyethanol

LD50 (Oral) &gt; 1000 mg/kg bw guinea pig

LD50 (Dermal) &gt; 400 mg/kg bw rabbit

LC50 (Inhalation) &gt; 400 ppm/4h rat

## Acetone

LD50 (Oral) 5800 mg/kg bw

LD50 (Dermal) 7426 mg/kg bw guinea pig

LC50 (Inhalation) &gt; 20 mg/l/4h air

## N-butyl acetate

LD50 (Oral) &gt; 10000 mg/kg Rat

LD50 (Dermal) &gt; 5000 mg/kg rabbit

LC50 (Inhalation) 0,74 mg/l/4h Rat

## N-butyl acrylate

LD50 (Oral) 900 mg/kg Rat

**CHEMISOL PRIMER 400 ml CHEMITOOL**

LD50 (Dermal) 750 mg/kg Rabbit

LC50 (Inhalation) 10,3 mg/l/4h Rat

Solvent naphtha (petroleum), light arom.

LD50 (Oral) > 2000 mg/kg bw rat

LD50 (Dermal) > 2000 mg/kg bw rabbit

Isobutane

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

Reaction mass of ethylbenzene and xylene

LD50 (Oral) 3761,5 mg/kg bw rat

LD50 (Dermal) 12126 mg/kg bw rabbit

LC50 (Inhalation) 6525 ppm/4h rat

Hydrocarbons, C9, aromatics

LD50 (Oral) > 4 ml/kg bw rat

LD50 (Dermal) > 3000 mg/kg bw rabbit

**SKIN CORROSION / IRRITATION**

Causes skin irritation

**SERIOUS EYE DAMAGE / IRRITATION**

Causes serious eye irritation

**RESPIRATORY OR SKIN SENSITISATION**

May produce an allergic reaction. Contains: N-butyl acrylate

**GERM CELL MUTAGENICITY**

Does not meet the classification criteria for this hazard class

**CARCINOGENICITY**

Does not meet the classification criteria for this hazard class

**CHEMISOL PRIMER 400 ml CHEMITOOL**

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 respiratory irritation  
May cause drowsiness or dizziness

**STOT - REPEATED EXPOSURE**

Does not meet the classification criteria for this hazard class

**ASPIRATION HAZARD**

Toxic for aspiration

**SECTION 12. Ecological information**

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

**12.1. Toxicity**

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

**CHEMISOL PRIMER 400 ml CHEMITOOL**

<b>Butane</b>	
LC50 - for Fish	> 24,11 mg/l/96h
<b>Propane</b>	
LC50 - for Fish	85,82 mg/l/96h
EC50 - for Crustacea	41,82 mg/l/48h
<b>Ethylbenzene</b>	
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
Chronic NOEC for Crustacea	960 µg/l 7 days
Chronic NOEC for Algae / Aquatic Plants	3,95 mg/l 4 days
<b>2-Butoxyethanol</b>	
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
<b>Acetone</b>	
LC50 - for Fish	6,83 g/l
EC50 - for Crustacea	8,8 g/l/48h
Chronic NOEC for Crustacea	1,659 g/l 28 days
<b>N-butyl acetate</b>	
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
<b>N-butyl acrylate</b>	
LC50 - for Fish	28,65 mg/l/96h
EC50 - for Crustacea	10,15 mg/l/48h
EC50 - for Algae / Aquatic Plants	8,15 mg/l/72h
Chronic NOEC for Fish	2090,5 µg/l 4 days
Chronic NOEC for Crustacea	296,5 µg/l 21 days
Chronic NOEC for Algae / Aquatic Plants	2,8 mg/l 4 days
<b>Isobutane</b>	

**CHEMISOL PRIMER 400 ml CHEMITOOL**

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

Reaction mass of ethylbenzene and xylene

LC50 - for Fish 2,6 mg/l/96h

Chronic NOEC for Fish 1,3 mg/l 56 days

Chronic NOEC for Crustacea 1065 µg/l 7 days

Chronic NOEC for Algae / Aquatic Plants 440 µg/l 73 h

Hydrocarbons, C9, aromatics

EC50 - for Algae / Aquatic Plants > 290 µg/l/72h

Chronic NOEC for Algae / Aquatic Plants 70 µg/l 72 h

**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

2-Butoxyethanol

Solubility in water 1000 - 10000 mg/l

Rapidly degradable

Acetone

Rapidly degradable

N-butyl acetate

Solubility in water 5,3 g/l

Rapidly degradable



**CHEMISOL PRIMER 400 ml CHEMITOOL**

N-butyl acrylate

Solubility in water 1700 mg/l

Rapidly degradable

Solvent naphtha (petroleum), light arom.

Degradability: information not available

Isobutane

Rapidly degradable

Reaction mass of ethylbenzene and xylene

Rapidly degradable

Hydrocarbons, C9, aromatics

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

2-Butoxyethanol

Partition coefficient: n-octanol/water 0,81

Acetone

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

BCF 3

N-butyl acetate

Partition coefficient: n-octanol/water 2,3

BCF 15,3

**CHEMISOL PRIMER 400 ml CHEMITOOL**

N-butyl acrylate	
Partition coefficient: n-octanol/water	2,38
BCF	37

**12.4. Mobility in soil**

Xylene (mixture of isomers)	
Partition coefficient: soil/water	2,73
N-butyl acetate	
Partition coefficient: soil/water	< 3
N-butyl acrylate	
Partition coefficient: soil/water	1,6
Solvent naphtha (petroleum), light arom.	
Partition coefficient: soil/water	1,78

**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  $\geq$  than 0,1%.

**12.6. Other adverse effects**

Information not available

**SECTION 13. Disposal considerations****13.1. Waste treatment methods**

Product residues are to be considered special hazardous waste.

Empty cans, even if completely emptied, must not be dispersed in the environment.

The aerosol container overheated to a temperature above 50Å ° C can burst even if it contains a small residue of gas.

Disposal must take place in an authorized place and in compliance with the laws in force.

Waste transportation can be subject to ADR.

European waste catalog number (contaminated containers):

The aerosol as domestic waste is excluded from the application of the aforementioned standard.

The exhausted aerosol for professional / industrial use can be classified:

15.01.10 \*: packaging containing residues of dangerous substances or contaminated by these substances.

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**

## CHEMISOL PRIMER 400 ml CHEMITOOL

### 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)

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 Quantities: 1 L	Tunnel restriction code: (D)
	Special Provision: -		
IMDG:	EMS: F-D, S-U	Limited Quantities: 1 L	
	Cargo:	Maximum quantity: 150 Kg	Packaging instructions: 203
	Pass.:	Maximum quantity: 75 Kg	Packaging instructions: 203
	Special Instructions:	A145, A167, A802	

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Information not relevant

**CHEMISOL PRIMER 400 ml CHEMITOOL****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

Product  
Point 40

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage  $\geq$  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

**CHEMISOL PRIMER 400 ml CHEMITOOL**

<b>Aerosol 3</b>	Aerosol, category 3
<b>Flam. Liq. 2</b>	Flammable liquid, category 2
<b>Flam. Liq. 3</b>	Flammable liquid, category 3
<b>Press. Gas</b>	Pressurised gas
<b>Press. Gas (Liq.)</b>	Liquefied gas
<b>Acute Tox. 4</b>	Acute toxicity, category 4
<b>Asp. Tox. 1</b>	Aspiration hazard, category 1
<b>STOT RE 2</b>	Specific target organ toxicity - repeated exposure, category 2
<b>Eye Irrit. 2</b>	Eye irritation, category 2
<b>Skin Irrit. 2</b>	Skin irritation, category 2
<b>STOT SE 3</b>	Specific target organ toxicity - single exposure, category 3
<b>Skin Sens. 1</b>	Skin sensitization, category 1
<b>Aquatic Chronic 2</b>	Hazardous to the aquatic environment, chronic toxicity, category 2
<b>Aquatic Chronic 3</b>	Hazardous to the aquatic environment, chronic toxicity, category 3
<b>H220</b>	Extremely flammable gas.
<b>H222</b>	Extremely flammable aerosol.
<b>H229</b>	Pressurised container: may burst if heated.
<b>H225</b>	Highly flammable liquid and vapour.
<b>H226</b>	Flammable liquid and vapour.
<b>H280</b>	Contains gas under pressure; may burst if heated.
<b>H302</b>	Harmful if swallowed.
<b>H312</b>	Harmful in contact with skin.
<b>H332</b>	Harmful if inhaled.
<b>H304</b>	May be fatal if swallowed and enters airways.
<b>H373</b>	May cause damage to organs through prolonged or repeated exposure.
<b>H319</b>	Causes serious eye irritation.
<b>H315</b>	Causes skin irritation.
<b>H335</b>	May cause respiratory irritation.
<b>H317</b>	May cause an allergic skin reaction.
<b>H336</b>	May cause drowsiness or dizziness.
<b>H411</b>	Toxic to aquatic life with long lasting effects.
<b>H412</b>	Harmful to aquatic life with long lasting effects.
<b>EUH066</b>	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%

**CHEMISOL PRIMER 400 ml CHEMITOOL**

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

**GENERAL BIBLIOGRAPHY**

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
  2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
  3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
  4. Regulation (EU) 2015/830 of the European Parliament
  5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
  6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
  7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
  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:

03 / 08.