LA-CO Industries, Inc.

Stylmark® Tube Marker, RS.2000 Paint Refill Tube

Safety Data Sheet

according to Regulation (EU) 2015/830
SDS Ref.: LACO1510011
Date of issue: 10/7/2015 Revision date: 1/8/2019 Supersedes: 12/20/2017 Version: 4.0

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

1.1. Product identifier

Product form : Mixture

Product name : Stylmark® Tube Marker, RS.2000 Paint Refill Tube

Synonyms : Stylmark® Tube Marker - Black, Blue, Green, Red, White, Yellow, Orange, Purple, Gray, Pink, Brown / RS.2000 Paint Refill Tube - Black, Blue, Green, Red, White, Yellow, Orange, Purple, Gray, Pink, Brown

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Marking.

1.2.2. Uses advised against

Restrictions on use : No additional information available

1.3. Details of the supplier of the safety data sheet

LA-CO Industries Europe S.A.S.
Parc Industriel de la Plaine de
l'Ain - Allée des Combes.
01150.BLYES.France.
Phone: +33 (0)4 74 46 23 23
Fax: +33 (0)4 74 46 23 29
E-mail: info@eu.laco.com
Web: http://www.markal.com

1.4. Emergency telephone number

Emergency number : 24-hour emergency: CHEMTREC- U.S. : 1-800-424-9300 International: +1-703-527-3887

EU Member State	Officieel adviesorgaan	Adres	Noodnummer
AUSTRIA	Vergiftungsinformationszentrale (Poisons Information Centre)	Allgemeines Krankenhaus Waehringer Geurtel 18-20 1090 Wien	+43 1 406 43 43
BELARUS	The Belarus Republican Poisons Centre	Kizhevatova str. 58 220115 Minsk	+375 (0)17 201 9158
BELGIUM	Centre Anti-Poisons/Antigifcentrum c/o Hôpital Central de la Base - Reine Astrid	Rue Bruyn 1 B -1120 Bruxelles/Brussel	+32 70 245 245
BULGARIA	Национален токсикологичен информационен център National Clinical Toxicology Centre, Emergency Medical Institute "Pirogov"	21 Totleben Boulevard 1606 SOFIA	+359 2 9154 409
CROATIA	Poisons Control Centre Institute of Medical Research & Occupational Health	Ksaverska Cesta 2 P.O. Box 291 HR-10000 Zagreb	+385 1 234 8342
CZECH REPUBLIC	Toxikologické informační středisko Clinic For Occupational Medicine, 1st Medical Faculty, Charles University	Na Bojišti 1 120 00 Praha 2	+42 2 2491 9293 +42 2 2491 5402
DENMARK	Giftlinjen Bispebjerg Hospital	Bispebjerg Bakke 23, 60, 1 DK-2400 København NV	+45 82 12 12 12 +45 35 31 55 55
ESTONIA	Mürgistusteabekeskus	Gonsiori 29 15027 Tallinn	+372 626 93 90
FINLAND	Myrkytystietokeskus	P.O.B 340 (Haartmaninkatu 4) HUS SF - 00029 Helsinki	+358 9 471 977
FRANCE	ORFILA		+33 1 45 42 59 59
GERMANY	Berliner Betrieb für Zentrale Gesundheitliche Aufgaben	Oranienburger Strasse 285 13437 Berlin	+49 30 19240
GERMANY	Informations und Beratungszentrum für Vergiftungsfälle	Kirrberger Straße, Gebäude 9 D-66421 Homburg/Saar	+49 6841 19240
GERMANY	Beratungstelle bei Vergiftungen, Klinische Toxikologie und Beratungsstelle bei Vergiftungen	Langenbeckstrasse 1 55131 Mainz	+49 6131 19240
GREECE	Poisons Information Centre	11527 Athens	+30 10 779 3777
HUNGARY	Országos Kémiai Biztonsági Intézet (National Institute of Chemical Safety) Egészségügyi Toxikológiai Tájékoztató Szolgálat (Health Toxicological Information Service)	1437 Budapest PO Box 839 1097 Budapest, Nagyvárad tér 2	+36 80 20 11 99

EU Member State	Officieel adviesorgaan	Adres	Noodnummer
ICELAND	Eitrunarmiðstöðin	Eitrunarmiðstöðin 108 Reykjavik	+354 543 22 22
IRELAND	National Poisons Information Centre	Beaumont Hospital PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2166
LATVIA	Valsts Toksikoloģijas centra Saindēšanās un zāļu informācijas centrs	2 Hipocrate Street LV 1038 Riga	+371 67 04 24 73
LITHUANIA	Apsinuodijimų kontrolės ir informacijos biuras	Siltnamiu 29 2043 Vilnius	+370 5 236 20 52/+370 687 53 378
MALTA	Medicines & Poisons Info Office	Mater Dei Hospital, Msida MSD 2090 Malta	25450000
NETHERLANDS	Nationaal Vergiftigingen Informatie Centrum National Institute for Public Health and the Environment, NB this service is only available to health professionals	Huispostnummer B.00.118, PO Box 85500 3508 GA Utrecht	+31 30 274 88 88
PORTUGAL	Centro de Informação Antivenenos Instituto Nacional de Emergência Médica (INEM)	Rua Almirante Barroso, 36 1000-013 Lisboa	808 250 143 (for use only in Portugal), +351 21 330 3284
ROMANIA	Biroul pentru Regulamentul Sanitar International si Informare Toxicologica	Str. Dr. Leonte Anastasievici Nr.1-3, Sector 5 50463 Bucuresti	+40 21 318 36 06
SLOVAKIA	Národné toxikologické informačné centrum University Hospital Bratislava	Limbová 5 833 05 Bratislava	+421 2 54 77 4 166
SPAIN	Servicio de Información Toxicológica Instituto Nacional de Toxicología, Departamento de Madrid	Calle Luis Cabrera 9 E-28002 Madrid	+34 91 562 04 20
SWEDEN	Giftinformationscentralen Swedish Poisons Information Centre, Karolinska Hospital	Box 60 500 SE-171 76 Stockholm	+46 8 33 12 31 (International) 112 (National)
SWITZERLAND	Centre Suisse d'Information Toxicologique	Freiestrasse 16 Postfach CH-8028 Zurich	+41 44 251 51 51 (International) 145 (National)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, Category 3	H226
Specific target organ toxicity — Single exposure, Category 3, Narcosis	H336

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :

GHS02 GHS07

Signal word (CLP) : Warning

Hazardous ingredients : Butyl acetate

Hazard statements (CLP) : H226 - Flammable liquid and vapour.
H336 - May cause drowsiness or dizziness.

Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 - Keep container tightly closed.
P240 - Ground and bond container and receiving equipment.
P241 - Use explosion-proof equipment.
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water .
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312 - Call a POISON CENTRE or doctor if you feel unwell.
P370+P378 - In case of fire: Use media other than water to extinguish.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P403+P235 - Store in a well-ventilated place. Keep cool.
P405 - Store locked up.

P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Unknown acute toxicity (CLP: Classification, Labelling, Packaging.) - SDS : 1.02% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)
1.02% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)
1.02% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

2.3. Other hazards

PBT: not yet assessed

vPvB: not yet assessed

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Comments : Only component with health hazards above the applicable thresholds and/or Exposure Limit values are shown.

Exact concentrations are withheld as trade secret.

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Butyl acetate	(CAS-No.) 123-86-4 (EC-No.) 204-658-1 (EC Index-No.) 607-025-00-1	25 - 55	Flam. Liq. 3, H226 STOT SE 3, H336
calcium carbonate	(CAS-No.) 471-34-1 (EC-No.) 207-439-9	30 - 40	Not classified
titanium dioxide	(CAS-No.) 13463-67-7 (EC-No.) 236-675-5	0 - 7	Not classified
Silicon dioxide (cristobalite)	(CAS-No.) 14808-60-7 (EC-No.) 238-878-4	0.5 - 1.5	Carc. 1A, H350i
Carbon black	(CAS-No.) 1333-86-4 (EC-No.) 215-609-9	< 1	Carc. 2, H351
Magnesium oxide	(CAS-No.) 1309-48-4 (EC-No.) 215-171-9	0 - 0.7	Not classified
Benzaldehyde	(CAS-No.) 100-52-7 (EC-No.) 202-860-4 (EC Index-No.) 605-012-00-5	< 0.5	Acute Tox. 4 (Oral), H302
2-methoxy-1-methylethyl acetate	(CAS-No.) 108-65-6 (EC-No.) 203-603-9 (EC Index-No.) 607-195-00-7	0 - 0.5	Flam. Liq. 3, H226
Aluminum oxide	(CAS-No.) 1344-28-1 (EC-No.) 215-691-6	< 0.1	Not classified
Xylene	(CAS-No.) 1330-20-7 (EC-No.) 215-535-7 (EC Index-No.) 601-022-00-9 (REACH-no) 01-2119488216-32	< 0.1	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315
D-Limonène	(CAS-No.) 5989-27-5 (EC-No.) 227-813-5 (EC Index-No.) 601-029-00-7	< 0.1	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Iron oxide red	(CAS-No.) 1309-37-1 (EC-No.) 215-168-2	< 0.1	Aquatic Chronic 2, H411
1-Butanol	(CAS-No.) 71-36-3 (EC-No.) 200-751-6 (EC Index-No.) 603-004-00-6	< 0.1	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336

ethylbenzene	(CAS-No.) 100-41-4 (EC-No.) 202-849-4 (EC Index-No.) 601-023-00-4 (REACH-no) 01-2119489370-35	< 0.1	Flam. Liq. 2, H225 Acute Tox. 4 (Inhalation:dust,mist), H332 STOT RE 2, H373 Asp. Tox. 1, H304
2-methoxypropyl acetate	(CAS-No.) 70657-70-4 (EC-No.) 274-724-2 (EC Index-No.) 607-251-00-0	< 0.1	Flam. Liq. 3, H226 Repr. 1B, H360D STOT SE 3, H335

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

First-aid measures after skin contact : Take off immediately all contaminated clothing. Rinse skin with water/shower.

First-aid measures after eye contact : In case of contact, immediately flush eyes with plenty of water.

First-aid measures after ingestion : Get medical advice/attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation : May cause drowsiness or dizziness. Inhalation of vapours may cause respiratory irritation.

Symptoms/effects after skin contact : Repeated exposure may cause skin dryness or cracking.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Flammable liquid and vapour. Burning produces irritating, toxic and noxious fumes.

Explosion hazard : May form flammable/explosive vapour-air mixture.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers.

Protection during firefighting : Wear a self contained breathing apparatus. Wear fire/flame resistant/retardant clothing. EN469.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking. Avoid all eye and skin contact and do not breathe vapour and mist.

6.1.1. For non-emergency personnel

Protective equipment : Large amounts: Wear suitable protective clothing and gloves. Chemical goggles or safety glasses.

Emergency procedures : Evacuate area.

6.1.2. For emergency responders

Protective equipment : Large amounts: Wear suitable protective clothing and gloves, Chemical goggles or safety glasses.

Emergency procedures : Stop leak if safe to do so. Ventilate area.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Stop leak if safe to do so. Do not allow minor leaks or spills to accumulate on walking surfaces.

Methods for cleaning up : Absorb and/or contain spill with inert material, then place in suitable container. Following recovery, flush area with water. Clean surface thoroughly to remove residual contamination.

6.4. Reference to other sections

Section 13: disposal information. Section 7: safe handling. Section 8: personal protective equipment.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapours are flammable.

Precautions for safe handling : No open flames. No smoking. Take precautionary measures against static discharge. Use only non-sparking tools. Avoid all eye and skin contact and do not breathe vapour and mist. Use only outdoors or in a well-ventilated area.

Hygiene measures : Always wash your hands immediately after handling this product, and once again before leaving the workplace. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed.

Incompatible products : Strong acids. Strong bases. Strong oxidizers.

Incompatible materials : Heat sources. Direct sunlight.

Heat and ignition sources : Keep away from heat, sparks and flame.

Prohibitions on mixed storage : Incompatible materials.

Storage area : Store in dry, cool, well-ventilated area. Keep out of direct sunlight. Keep out of reach of children.

7.3. Specific end use(s)

Marking.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Butyl acetate (123-86-4)		
EU	Local name	n-butyl acetate
Austria	MAK (mg/m³)	480 mg/m³
Austria	MAK (ppm)	100 ppm
Austria	MAK Short time value (mg/m³)	480 mg/m³
Austria	MAK Short time value (ppm)	100 ppm
Austria	Remark (AT)	(gemessen als Momentanwert)
Czech Republic	Local name	Butylacetát
Czech Republic	Expoziční limity (PEL) (mg/m³)	950 mg/m³
Czech Republic	Expoziční limity (PEL) (ppm)	200.5 ppm
Czech Republic	Expoziční limity (NPK-P) (mg/m³)	1200 mg/m³
Czech Republic	Expoziční limity (NPK-P) (ppm)	253 ppm
Denmark	Local name	n-Butylacetat
Denmark	Grænseværdie (langvarig) (mg/m³)	710 mg/m³
Denmark	Grænseværdie (langvarig) (ppm)	150 ppm
Denmark	Grænseværdie (kortvarig) (mg/m³)	1420 mg/m³
Denmark	Grænseværdie (kortvarig) (ppm)	300 ppm
Finland	Local name	n-Butyyliasetaatti
Finland	HTP-arvo (8h) (mg/m³)	720 mg/m³
Finland	HTP-arvo (8h) (ppm)	150 ppm
Finland	HTP-arvo (15 min)	960 mg/m³
Finland	HTP-arvo (15 min) (ppm)	200 ppm
France	Local name	Acétate de n-butyle
France	VME (mg/m³)	710 mg/m³
France	VME (ppm)	150 ppm
France	VLE (mg/m³)	940 mg/m³
France	VLE (ppm)	200 ppm
Germany	TRGS 900 Local name	n-Butylacetat
Germany	TRGS 910 Acceptable concentration notes	
Hungary	Local name	n-BUTIL-ACETÁT

Butyl acetate (123-86-4)		
Hungary	AK-érték	950 mg/m³
Hungary	CK-érték	950 mg/m³
Hungary	Megjegyzések (HU)	i, sz; I.
Latvia	Local name	Etiķskābesbutilesteris (n-butilacetāts)
Latvia	OEL TWA (mg/m³)	200 mg/m³
Lithuania	IPRV (mg/m³)	500 mg/m³
Lithuania	IPRV (ppm)	100 ppm
Lithuania	TPRV (mg/m³)	700 mg/m³
Lithuania	TPRV (ppm)	150 ppm
Poland	Local name	Octan butylu (n-butylu octan)
Poland	NDS (mg/m³)	200 mg/m³
Poland	NDSCh (mg/m³)	950 mg/m³
Portugal	Local name	Acetato de n-butilo
Portugal	OEL TWA (ppm)	150 ppm
Portugal	OEL STEL (ppm)	200 ppm
Slovakia	Local name	n-Butylacetát
Slovakia	NPHV (priemerná) (mg/m³)	500 mg/m³
Slovakia	NPHV (priemerná) (ppm)	100 ppm
Slovakia	OEL STEL (mg/m³)	700 mg/m³
Slovakia	OEL STEL (ppm)	150 ppm
Slovenia	Local name	n-butilacetat
Slovenia	OEL TWA (mg/m³)	480 mg/m³
Slovenia	OEL TWA (ppm)	100 ppm
Slovenia	OEL STEL (mg/m³)	480 mg/m³
Slovenia	OEL STEL (ppm)	100 ppm
Spain	Local name	Acetato de n-butilo
Spain	VLA-ED (mg/m³)	724 mg/m³
Spain	VLA-ED (ppm)	150 ppm
Spain	VLA-EC (mg/m³)	965 mg/m³
Spain	VLA-EC (ppm)	200 ppm
Sweden	Local name	n-Butylacetat
Sweden	nivågränsvärde (NVG) (mg/m³)	500 mg/m³
Sweden	nivågränsvärde (NVG) (ppm)	100 ppm
Sweden	kortidsvärde (KTV) (mg/m³)	700 mg/m³
Sweden	kortidsvärde (KTV) (ppm)	150 ppm
Norway	Grenseverdier (AN) (mg/m³)	355 mg/m³
Norway	Grenseverdier (AN) (ppm)	75 ppm

Benzaldehyde (100-52-7)		
Finland	Local name	Bentsaldehydi
Finland	HTP-arvo (8h) (mg/m³)	4.4 mg/m³
Finland	HTP-arvo (8h) (ppm)	1 ppm
Finland	OEL Ceiling (mg/m³)	17.4 mg/m³
Finland	OEL Ceiling (ppm)	4 ppm
Finland	Huomautus (FI)	kattoarvo

Benzaldehyde (100-52-7)		
Finland	Regulatory reference	HTP-ARVOT 2018 (Sosiaali- ja terveysministeriö)
Germany	TRGS 910 Acceptable concentration notes	
Hungary	Local name	BENZALDEHID
Hungary	AK-érték	5 mg/m³
Hungary	CK-érték	10 mg/m³
Hungary	Regulatory reference	25/2000. (IX. 30.) EüM–SZCSM együttes rendelet a munkahelyek kémiai biztonságáról
Latvia	Local name	Benzaldehīds
Latvia	OEL TWA (mg/m³)	5 mg/m³
Latvia	Regulatory reference	Ministru kabineta 2007.gada 15.maija noteikumiem Nr.325
Lithuania	IPRV (mg/m³)	5 mg/m³
Poland	Local name	Benzaldehyd (benzoesowy aldehyd)
Poland	NDS (mg/m³)	10 mg/m³
Poland	NDSCh (mg/m³)	40 mg/m³
Poland	Regulatory reference	Dz. U. 2018 poz. 1286

D-Limonène (5989-27-5)		
Finland	Local name	D-Limoneeni
Finland	HTP-arvo (8h) (mg/m³)	140 mg/m³
Finland	HTP-arvo (8h) (ppm)	25 ppm
Finland	HTP-arvo (15 min)	280 mg/m³
Finland	HTP-arvo (15 min) (ppm)	50 ppm
Finland	Regulatory reference	HTP-ARVOT 2018 (Sosiaali- ja terveysministeriö)
Germany	TRGS 900 Local name	(R)-p-Mentha-1,8-dien (D-Limonen)
Germany	TRGS 900 Occupational exposure limit value (mg/m³)	28 mg/m³
Germany	TRGS 900 Occupational exposure limit value (ppm)	5 ppm
Germany	TRGS 900 Limitation of exposure peaks	4(II)
Germany	TRGS 900 Remark	DFG;H;Sh;Y
Germany	TRGS 900 Regulatory reference	TRGS900
Germany	TRGS 910 Acceptable concentration notes	
Spain	Local name	d-Limoneno
Spain	VLA-ED (mg/m³)	168 mg/m³
Spain	VLA-ED (ppm)	30 ppm
Spain	Notes	Sen (Sensibilizante), vía dérmica (Indica que, en las exposiciones a esta sustancia, la aportación por la vía cutánea puede resultar significativa para el contenido corporal total si no se adoptan medidas para prevenir la absorción. En estas situaciones, es aconsejable la utilización del control biológico para poder cuantificar la cantidad global absorbida del contaminante).
Spain	Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2018. INSHT
Sweden	nivågränsvärde (NVG) (mg/m³)	150 mg/m³
Sweden	nivågränsvärde (NVG) (ppm)	25 ppm
Sweden	kortidsvärde (KTV) (mg/m³)	300 mg/m³
Sweden	kortidsvärde (KTV) (ppm)	50 ppm
Norway	Local name	d-limonen (Limonen)

D-Limonène (5989-27-5)		
Norway	Grenseverdier (AN) (mg/m³)	140 mg/m³
Norway	Grenseverdier (AN) (ppm)	25 ppm
Norway	Merknader (NO)	A (Kjemikalier som skal betraktes som at de fremkaller allergi eller annen overfølsomhet i øynene eller luftveier, eller som skal betraktes som at de fremkaller allergi ved hudkontakt)
Norway	Regulatory reference	FOR-2018-08-21-1255
Switzerland	VME (mg/m³)	110 mg/m³
Switzerland	MAK (ppm)	20 ppm
Switzerland	KZGW (mg/m³)	220 mg/m³
Switzerland	KZGW (ppm)	40 ppm

Carbon black (1333-86-4)		
Belgium	Limit value (mg/m³)	3.5 mg/m³
Denmark	Local name	Carbon black
Denmark	Grænseværdie (langvarig) (mg/m³)	3.5 mg/m³
Denmark	Anmærkninger (DK)	K
Denmark	Regulatory reference	BEK nr 655 af 31/05/2018
Finland	Local name	Nokimusta
Finland	HTP-arvo (8h) (mg/m³)	3.5 mg/m³
Finland	HTP-arvo (15 min)	7 mg/m³
Finland	Regulatory reference	HTP-ARVOT 2018 (Sosiaali- ja terveysministeriö)
France	Local name	Noir de carbone
France	VME (mg/m³)	3.5 mg/m³
France	Note (FR)	Valeurs recommandées/admises
France	Regulatory reference	Circulaire du Ministère du travail (réf.: INRS ED 984, 2016)
Germany	TRGS 910 Acceptable concentration notes	
Ireland	OEL (8 hours ref) (mg/m³)	3.5 mg/m³
Ireland	OEL (15 min ref) (mg/m3)	7 mg/m³
Poland	Local name	Sadza techniczna
Poland	NDS (mg/m³)	4 mg/m³ frakcja wdychalna
Poland	Remark (PL)	Frakcja wdychalna – frakcja aerozolu wnikająca przez nos i usta, która po zdeponowaniu w drogach oddechowych stwarza zagrożenie dla zdrowia.
Poland	Regulatory reference	Dz. U. 2018 poz. 1286
Portugal	Local name	Carbono, preto (Negro de fumo)
Portugal	OEL TWA (mg/m³)	3 mg/m³ I (Fraçao inalável)
Slovakia	Regulatory reference	Norma Portuguesa NP 1796:2014
Spain	Local name	Negro de humo
Spain	VLA-ED (mg/m³)	3.5 mg/m³
Spain	Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2018. INSHT
Sweden	Local name	Kimrök
Sweden	nivågränsvärde (NVG) (mg/m³)	3 mg/m³

Carbon black (1333-86-4)		
Sweden	Anmärkning (SE)	2 (Med totaldamm menas de partiklar (aerosoler) som fastnar på ett filter i den provtagare som beskrivs i Metodserien, Provtagning av totaldamm och respirabelt damm, Metod nr 1010, Arbetarskyddsstyrelsen, numera Arbetsmiljöverket. Filterdiametern är normalt 37 mm, men kan även vara 25 mm. Trots sitt namn provtas inte den totala mängden luftburna partiklar med denna metod)
United Kingdom	Local name	Carbon black
United Kingdom	WEL TWA (mg/m³)	3.5 mg/m³
United Kingdom	WEL STEL (mg/m³)	7 mg/m³
Norway	Local name	Carbon Black (lampesot)
Norway	Grenseverdier (AN) (mg/m³)	3.5 mg/m³
Norway	Regulatory reference	FOR-2018-08-21-1255

2-methoxy-1-methylethyl acetate (108-65-6)		
Denmark	Grænseværdie (kortvarig) (mg/m³)	550 mg/m³
Denmark	Grænseværdie (kortvarig) (ppm)	100 ppm
Finland	Huomautus (FI)	iho
France	Note (FR)	Peau
Germany	TRGS 900 Limitation of exposure peaks (mg/m³)	270 mg/m³
Germany	TRGS 900 Limitation of exposure peaks (ppm)	50 ppm
Germany	TRGS 910 Acceptable concentration notes	
Slovakia	NPHV (priemerná) (mg/m³)	275 mg/m³
Slovakia	NPHV (priemerná) (ppm)	50 ppm
Slovakia	Upozornenie (SK)	(K)
Spain	VLA-ED (mg/m³)	275 mg/m³
Spain	VLA-ED (ppm)	50 ppm
Spain	VLA-EC (mg/m³)	550 mg/m³
Spain	VLA-EC (ppm)	100 ppm
Spain	Notes	VLI
Sweden	Anmärkning (SE)	H

2-methoxypropyl acetate (70657-70-4)		
Czech Republic	Remark (CZ)	D
Denmark	Grænseværdie (kortvarig) (mg/m³)	220 mg/m³
Denmark	Grænseværdie (kortvarig) (ppm)	40 ppm
Germany	TRGS 900 Limitation of exposure peaks (mg/m³)	224 mg/m³
Germany	TRGS 900 Limitation of exposure peaks (ppm)	40 ppm
Germany	TRGS 910 Acceptable concentration notes	
Slovakia	NPHV (priemerná) (mg/m³)	110 mg/m³
Slovakia	NPHV (priemerná) (ppm)	20 ppm
Slovakia	Upozornenie (SK)	(K)
Spain	VLA-ED (mg/m³)	28 mg/m³
Spain	VLA-ED (ppm)	5 ppm
Spain	VLA-EC (mg/m³)	220 mg/m³
Spain	VLA-EC (ppm)	40 ppm
Spain	Notes	TR1B,r

Silicon dioxide (cristobalite) (14808-60-7)		
EU	Local name	Silica crystaline (Quartz)
EU	Notes	SCOEL Recommendations (2003)
EU	Regulatory reference	SCOEL Recommendations
Austria	MAK (mg/m³)	0.15 mg/m³
Austria	Remark (AT)	(alveolengängige Fraktion; Jahres-Miw)
Belgium	Limit value (mg/m³)	0.1 mg/m³
Belgium	Remark (BE)	(poussières alvéolaires)
Denmark	Local name	Kvarts
Denmark	Grænseværdie (langvarig) (mg/m³)	0.3 mg/m³ (inhalable aerosol) 0.1 mg/m³ (K, respirable aerosol)
Denmark	Grænseværdie (kortvarig) (mg/m³)	0.6 mg/m³ (inhalable aerosol) 0.2 mg/m³ (K, respirable aerosol)
Denmark	Anmærkninger (DK)	K (betyder, at stoffet anses for at kunne være kræftfremkaldende)
Denmark	Regulatory reference	BEK nr 655 af 31/05/2018
Finland	Local name	Kvartsi
Finland	HTP-arvo (8h) (mg/m³)	0.05 mg/m³
Finland	Huomautus (FI)	(alveolijae)
Finland	Regulatory reference	HTP-ARVOT 2018 (Sosiaali- ja terveysministeriö)
France	Local name	Quartz (Silices cristallines)
France	VME (mg/m³)	0.1 mg/m³
France	Note (FR)	(poussières alvéolaires de quartz)
France	Regulatory reference	Article R4412-149 du Code du travail (réf.: INRS ED 984, 2016)
Germany	TRGS 910 Acceptable concentration notes	
Hungary	Local name	Kvarc
Hungary	AK-érték	0.15 mg/m³
Hungary	MK-érték	0.15 mg/m³ respirábilis frakció
Hungary	Megjegyzések (HU)	(respirable aerosol)
Hungary	Regulatory reference	25/2000. (IX. 30.) EüM–SZCSM együttes rendelet a munkahelyek kémiai biztonságáról
Ireland	OEL (8 hours ref) (mg/m³)	0.1 mg/m³
Lithuania	IPRV (mg/m³)	0.1 mg/m³
Lithuania	Remark (LT)	(Þiûrëk IX skyriaus 3 pastabà)
Netherlands	Local name	Silicium(di)oxide – kwarts
Netherlands	Grenswaarde TGG 8H (mg/m³)	0.075 mg/m³
Netherlands	Remark (MAC)	(Voor respirabel stof) (kankerverwekkende stoff)
Netherlands	Regulatory reference	Arbeidsomstandighedenregeling 2018
Poland	Local name	Krzemionka krystaliczna – kwarc
Poland	NDS (mg/m³)	2 mg/m³ (krzemionke powyzej 50%; pyl calkowity) 0.3 mg/m³ (krzemionke powyzej 50%; pyl respirabilny) 2 mg/m³ (krzemionke od 2% do 50%; pyl calkowity) 0.3 mg/m³ (krzemionke od 2% do 50%; pyl respirabilny)
Poland	Remark (PL)	Frakcja respirabilna – frakcja aerozolu wnikająca do dróg oddechowych, która stwarza zagrożenie dla zdrowia po zdeponowaniu w obszarze wymiany gazowej.
Poland	Regulatory reference	Dz. U. 2018 poz. 1286

Silicon dioxide (cristobalite) (14808-60-7)		
Portugal	Local name	Silica, cristalina α - Quartzo
Portugal	OEL TWA (mg/m³)	0.025 mg/m³ R (Fração respirável)
Slovakia	Regulatory reference	Norma Portuguesa NP 1796:2014
Slovakia	Local name	oxid kremičitý, kryštalický
Slovakia	NPHV (priemerná) (mg/m³)	0.1 mg/m³
Slovakia	Upozornenie (SK)	(Dokázaný karcinogén pre ludi, R)
Slovakia	Regulatory reference	Nariadenie vlády č. 83/2015 Z. z.
Slovenia	Local name	kremen
Slovenia	OEL TWA (mg/m³)	0.15 mg/m³
Slovenia	Regulatory reference	Uradni list RS, št. 38/2015 z dne 4.6.2015
Spain	Local name	Sílice Cristalina (Cuarzo)
Spain	VLA-ED (mg/m³)	0.1 mg/m³
Spain	Notes	(respirable aerosol)
Spain	Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2018. INSHT
Sweden	Local name	Kvarts
Sweden	nivågränsvärde (NVG) (mg/m³)	0.1 mg/m³
Sweden	Anmärkning (SE)	(respirabelt damm; M, 1)
Sweden	Regulatory reference	Hygieniska gränsvärden (AFS 2018:1)
Norway	Local name	α-kvarts
Norway	Grenseverdier (AN) (mg/m³)	0.3 mg/m³ Totalstøv 0.1 mg/m³ Respirabelt støv
Norway	Merknader (NO)	K (Kjemikalier som skal betraktes som kreftfremkallende); 7) Støv som inneholder α-kvarts, kristobalitt og/eller tridymitt vurderes ut fra summasjonsformel. Samtidig må verdiene for sjenerende støv overholdes
Norway	Regulatory reference	FOR-2018-08-21-1255
Switzerland	VME (mg/m³)	0.15 mg/m³
Switzerland	Remark	(respirable aerosol)

Magnesium oxide (1309-48-4)		
Austria	MAK (mg/m³)	10 mg/m³ (einatembare Fraktion) 5 mg/m³ (gemessen als alveolengängige Fraktion) 5 mg/m³ (Magnesiumoxidrauch, alveolengängige Fraktion)
Austria	MAK Short time value (mg/m³)	20 mg/m³ (einatembare Fraktion) max. 2x60 min./Schicht 10 mg/m³ (gemessen als alveolengängige Fraktion) max. 2x60 min./Schicht 20 mg/m³ (Magnesiumoxidrauch, alveolengängige Fraktion) max. 4x15 min./Schicht
Belgium	Limit value (mg/m³)	10 mg/m³
Belgium	Remark (BE)	(oxyde de) (fumées)
Denmark	Local name	Magnesiumoxid
Denmark	Grænseværdie (langvarig) (mg/m³)	6 mg/m³
Denmark	Grænseværdie (kortvarig) (mg/m³)	12 mg/m³
Denmark	Regulatory reference	BEK nr 655 af 31/05/2018
Germany	TRGS 900 Occupational exposure limit value (mg/m³)	10 mg/m³ E (mg/m3)
Germany	TRGS 910 Acceptable concentration notes	

Magnesium oxide (1309-48-4)		
Hungary	Local name	MAGNÉZIUM-OXID (Mg-ra számítva)
Hungary	AK-érték	6 mg/m³
Hungary	CK-érték	24 mg/m³
Hungary	Megjegyzések (HU)	respirable aerosol
Hungary	Regulatory reference	25/2000. (IX. 30.) EüM–SZCSM együttes rendelet a munkahelyek kémiai biztonságáról
Ireland	OEL (8 hours ref) (mg/m³)	4 mg/m³ respirable dust 5 mg/m³ fume 10 mg/m³ total inhalable dust
Ireland	OEL (15 min ref) (mg/m3)	10 mg/m³ fume
Lithuania	IPRV (mg/m³)	4 mg/m³
Poland	NDS (mg/m³)	5 mg/m³ dymy 10 mg/m³ pyly
Portugal	Local name	Óxido de magnésio
Portugal	OEL TWA (mg/m³)	10 mg/m³ I (Fraçao inalável)
Slovakia	Regulatory reference	Norma Portuguesa NP 1796:2014
Slovakia	Local name	Oxid horečnatý
Slovakia	NPHV (priemerná) (mg/m³)	10 mg/m³ 4 mg/m³ (inhalovate¾ná frakcia)
Slovakia	Regulatory reference	Nariadenie vlády č. 33/2018 Z.z.
Spain	Local name	Óxido de Magnesio
Spain	VLA-ED (mg/m³)	10 mg/m³
Spain	Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2018. INSHT
United Kingdom	WEL TWA (mg/m³)	10 mg/m³ (inhalable dust) 4 mg/m³ (fume and respirable dust)
Norway	Local name	Magnesiumoksid
Norway	Grenseverdier (AN) (mg/m³)	10 mg/m³
Norway	Merknader (NO)	1)
Norway	Regulatory reference	FOR-2018-08-21-1255
Switzerland	VME (mg/m³)	3 mg/m³
Switzerland	Remark	(respirable aerosol)

Iron oxide red (1309-37-1)		
Austria	MAK (mg/m³)	10 mg/m³ (einatembare Fraktion) 5 mg/m³ (aveolengängige Fraktion)
Austria	MAK Short time value (mg/m³)	20 mg/m³ (einatembare Fraktion) max. 2x60 min./Schicht 10 mg/m³ (aveolengängige Fraktion) max. 2x60 min./Schicht
Belgium	Limit value (mg/m³)	5 mg/m³
Belgium	Limit value (ppm)	2 ppm
Belgium	Remark (BE)	(trioxyde de; fumées, en Fe)
Denmark	Local name	Jernoxid
Denmark	Grænseværdie (langvarig) (mg/m³)	3.5 mg/m³
Denmark	Grænseværdie (kortvarig) (mg/m³)	7 mg/m³
Denmark	Anmærkninger (DK)	(Jernoxid, total dust)
Denmark	Regulatory reference	BEK nr 655 af 31/05/2018
Finland	Local name	Rautaoksidi, huurut

Iron oxide red (1309-37-1)		
Finland	HTP-arvo (8h) (mg/m³)	5 mg/m³
Finland	Huomautus (FI)	(Fe)
Finland	Regulatory reference	HTP-ARVOT 2018 (Sosiaali- ja terveysministeriö)
France	Local name	Trioxyde de difer
France	VME (mg/m³)	10 mg/m³ (oxyde rouge synthétique) 5 mg/m³ (trioxide de di-,fumées)
France	Note (FR)	Valeurs recommandées/admises
France	Regulatory reference	Circulaire du Ministère du travail (réf.: INRS ED 984, 2016)
Germany	TRGS 910 Acceptable concentration notes	
Hungary	Local name	VAS(III)-OXID (Fe-ra számítva)
Hungary	AK-érték	6 mg/m³
Hungary	Megjegyzések (HU)	(respirábilis por)
Hungary	Regulatory reference	25/2000. (IX. 30.) EüM–SZCSM együttes rendelet a munkahelyek kémiai biztonságáról
Ireland	OEL (8 hours ref) (mg/m³)	5 mg/m³ (Iron oxide, fume as Fe) 10 mg/m³ (Rouge total inhalable dust) 4 mg/m³ (Rouge total respirable dust)
Ireland	OEL (15 min ref) (mg/m3)	10 mg/m³ (Iron oxide, fume as Fe)
Lithuania	IPRV (mg/m³)	3.5 mg/m³
Lithuania	Remark (LT)	(Þiûrëk IX skyriaus 3 pastabà.)
Poland	Local name	Tlenki żelaza w przeliczeniu na Fe dymy
Poland	NDS (mg/m³)	5 mg/m³
Poland	NDSCh (mg/m³)	10 mg/m³
Poland	Remark (PL)	(dymy)
Poland	Regulatory reference	Dz. U. 2018 poz. 1286
Portugal	Local name	Óxido de ferro
Portugal	OEL TWA (mg/m³)	5 mg/m³ R (Fração respirável)
Slovakia	Regulatory reference	Norma Portuguesa NP 1796:2014
Slovakia	Local name	Oxidy železa, dymy (ako Fe)
Slovakia	NPHV (priemerná) (mg/m³)	1.5 mg/m³ (respirabilná frakcia) 4 mg/m³ (inhalovate¾ná frakcia)
Slovakia	Regulatory reference	Nariadenie vlády č. 33/2018 Z.z.
Spain	Local name	Óxido de hierro (III)
Spain	VLA-ED (mg/m³)	5 mg/m³
Spain	Notes	(Óxido de hierro(III) (polvo y humos), como Fe)
Spain	Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2018. INSHT
Sweden	Local name	Järnoxid (som Fe)
Sweden	nivågränsvärde (NVG) (mg/m³)	3.5 mg/m³
Sweden	Anmärkning (SE)	(Järnoxid, respirabelt damm)
Sweden	Regulatory reference	Hygieniska gränsvärden (AFS 2018:1)
United Kingdom	WEL TWA (mg/m³)	10 mg/m³ (Rouge, inhalable fraction) 4 mg/m³ (Rouge, respirable fraction) 5 mg/m³ (fume, as Fe)
United Kingdom	WEL STEL (mg/m³)	10 mg/m³ (fume, as Fe)
Norway	Local name	Jern(III)oksid (beregnet som Fe)
Norway	Grenseverdier (AN) (mg/m³)	3 mg/m³

Iron oxide red (1309-37-1)		
Norway	Merknader (NO)	(Jern(III)oksid, beregnet som Fe)
Norway	Regulatory reference	FOR-2018-08-21-1255
Switzerland	VME (mg/m³)	3 mg/m³
Switzerland	Remark	(alveolengängiger Staub)

Aluminum oxide (1344-28-1)		
Austria	MAK (mg/m³)	10 mg/m³ (gemessen als einatembarer Aerosolanteil) 5 mg/m³ (alveolengängiger Anteil)
Austria	MAK Short time value (mg/m³)	20 mg/m³ (gemessen als einatembarer Aerosolanteil) max. 2x60 min./Schicht 10 mg/m³ (alveolengängiger Anteil) max. 2x60 min./Schicht
Belgium	Limit value (mg/m³)	10 mg/m³
Belgium	Remark (BE)	(oxyde d´) (en Al)
Denmark	Grænseværdie (langvarig) (mg/m³)	5 mg/m³ (total) 2 mg/m³ (respirabel)
Denmark	Grænseværdie (kortvarig) (mg/m³)	10 mg/m³ (total) 4 mg/m³ (respirabel)
France	VME (mg/m³)	10 mg/m³
France	Note (FR)	(respirable aerosol)
Germany	TRGS 900 Occupational exposure limit value (mg/m³)	3 mg/m³
Germany	TRGS 900 Remark	(gemessen als alveolengängiger Staubanteil)
Germany	TRGS 910 Acceptable concentration notes	
Hungary	AK-érték	6 mg/m³
Hungary	Megjegyzések (HU)	(respirable aerosol)
Ireland	OEL (8 hours ref) (mg/m³)	10 mg/m³ (total inhalable dust) 4 mg/m³ (respirable dust)
Lithuania	IPRV (mg/m³)	2 mg/m³
Lithuania	Remark (LT)	(alveolinë frakcija. Þiûrëk IX skyriaus 3 pastabà.)
Poland	NDS (mg/m³)	2.5 mg/m³ (dymy, pyl calkowity) 1.2 mg/m³ (dymy, pyl respirabilny)
Slovakia	NPHV (priemerná) (mg/m³)	1.5 mg/m³ (respirabilná frakcia) 4 mg/m³ (inhalovate¾ná frakcia)
Spain	VLA-ED (mg/m³)	10 mg/m³
Sweden	nivågränsvärde (NVG) (mg/m³)	5 mg/m³ (inhalable aerosol) 2 mg/m³ (respirable aerosol)
United Kingdom	WEL TWA (mg/m³)	10 mg/m³ (inhalable aerosol) 4 mg/m³ (respirable aerosol)
Norway	Grenseverdier (AN) (mg/m³)	10 mg/m³
Norway	Merknader (NO)	1)
Switzerland	VME (mg/m³)	3 mg/m³
Switzerland	Remark	(respirable aerosol)

calcium carbonate (471-34-1)		
France	VME (mg/m³)	10 mg/m³
France	Note (FR)	inhalable aerosol
Germany	TRGS 910 Acceptable concentration notes	
Hungary	AK-érték	10 mg/m³
Hungary	Megjegyzések (HU)	inhalable aerosol

calcium carbonate (471-34-1)		
Poland	NDS (mg/m³)	10 mg/m³
Poland	Remark (PL)	pyly
United Kingdom	WEL TWA (mg/m³)	10 mg/m³ inhalable aerosol 4 mg/m³ respirable aerosol
Switzerland	VME (mg/m³)	3 mg/m³
Switzerland	Remark	(respirable aerosol)

Xylene (1330-20-7)		
EU	Local name	Xylene, mixed isomers, pure
EU	IOELV TWA (mg/m³)	221 mg/m³
EU	IOELV TWA (ppm)	50 ppm
EU	IOELV STEL (mg/m³)	442 mg/m³
EU	IOELV STEL (ppm)	100 ppm
EU	Notes	Skin
Austria	MAK (mg/m³)	221 mg/m³ (H)
Austria	MAK (ppm)	50 ppm (H)
Austria	MAK Short time value (mg/m³)	442 mg/m³ max. 4x15 min./Schicht, (H)
Austria	MAK Short time value (ppm)	100 ppm max. 4x15 min./Schicht, (H)
Belgium	Limit value (mg/m³)	221 mg/m³
Belgium	Limit value (ppm)	50 ppm
Belgium	Short time value (mg/m³)	442 mg/m³
Belgium	Short time value (ppm)	100 ppm
Belgium	Remark (BE)	D
Czech Republic	Local name	Xylen technická sm s isomer a (všechny isomery)
Czech Republic	Expoziční limity (PEL) (mg/m³)	200 mg/m³
Czech Republic	Expoziční limity (PEL) (ppm)	46 ppm
Czech Republic	Expoziční limity (NPK-P) (mg/m³)	400 mg/m³
Czech Republic	Expoziční limity (NPK-P) (ppm)	92 ppm
Czech Republic	Remark (CZ)	D,I
Denmark	Local name	Xylen (Dimethylbenzen), alle isomere
Denmark	Grænseværdie (langvarig) (mg/m³)	109 mg/m³
Denmark	Grænseværdie (langvarig) (ppm)	25 ppm
Denmark	Grænseværdie (kortvarig) (mg/m³)	218 mg/m³
Denmark	Grænseværdie (kortvarig) (ppm)	50 ppm
Denmark	Anmærkninger (DK)	H
Finland	Local name	Ksyleeni
Finland	HTP-arvo (8h) (mg/m³)	220 mg/m³
Finland	HTP-arvo (8h) (ppm)	50 ppm
Finland	HTP-arvo (15 min)	440 mg/m³
Finland	HTP-arvo (15 min) (ppm)	100 ppm
Finland	Huomautus (FI)	iho
France	Local name	Xylène, isomères mixtes, purs
France	VME (mg/m³)	221 mg/m³
France	VME (ppm)	50 ppm
France	VLE (mg/m³)	442 mg/m³

Xylene (1330-20-7)		
France	VLE (ppm)	100 ppm
Germany	TRGS 900 Local name	Xylol (alle Isomeren)
Germany	TRGS 900 Occupational exposure limit value (mg/m³)	440 mg/m³
Germany	TRGS 900 Occupational exposure limit value (ppm)	100 ppm
Germany	TRGS 900 Remark	H
Germany	TRGS 910 Acceptable concentration notes	
Hungary	Local name	XILOL(ok)
Hungary	AK-érték	221 mg/m³
Hungary	CK-érték	442 mg/m³
Ireland	OEL (8 hours ref) (mg/m³)	221 mg/m³
Ireland	OEL (8 hours ref) (ppm)	50 ppm
Ireland	OEL (15 min ref) (mg/m3)	442 mg/m³
Ireland	OEL (15 min ref) (ppm)	100 ppm
Ireland	Notes (IE)	Sk, IOELV
Italy	Local name	Xilene, isomeri misti, puro
Italy	OEL TWA (mg/m³)	221 mg/m³
Italy	OEL TWA (ppm)	50 ppm
Italy	OEL STEL (mg/m³)	442 mg/m³
Italy	OEL STEL (ppm)	100 ppm
Latvia	Local name	Ksilols (o-,m-,p-ksilols, dimetilbenzols)
Latvia	OEL TWA (mg/m³)	221 mg/m³
Latvia	OEL TWA (ppm)	50 ppm
Latvia	OEL STEL (mg/m³)	442 mg/m³
Latvia	OEL STEL (ppm)	100 ppm
Lithuania	IPRV (mg/m³)	200 mg/m³
Lithuania	IPRV (ppm)	50 ppm
Lithuania	TPRV (mg/m³)	450 mg/m³
Lithuania	TPRV (ppm)	100 ppm
Lithuania	Remark (LT)	O
Netherlands	Local name	Xyleen, o-, m-, p-isomeren
Netherlands	Grenswaarde TGG 8H (mg/m³)	210 mg/m³
Netherlands	Grenswaarde TGG 8H (ppm)	50 ppm
Netherlands	Grenswaarde TGG 15MIN (mg/m³)	442 mg/m³
Netherlands	Remark (MAC)	(H)
Poland	Local name	Ksylen mieszanina izomerów: 1,2-; 1,3-; 1,4-
Poland	NDS (mg/m³)	100 mg/m³
Poland	NDSCh (mg/m³)	350 mg/m³
Portugal	Local name	Xileno (isómeros)
Portugal	OEL TWA (ppm)	100 ppm
Portugal	OEL STEL (ppm)	150 ppm
Slovakia	Local name	Xylén, zmiešané izoméry
Slovakia	NPHV (priemerná) (mg/m³)	221 mg/m³ (K)
Slovakia	NPHV (priemerná) (ppm)	50 ppm (K) 1.5 ppm (Xylén) 2000 ppm (Suma kyselín 2,3,4-metylhippurových)

Xylene (1330-20-7)		
Slovakia	OEL STEL (mg/m³)	442 mg/m³
Slovakia	OEL STEL (ppm)	100 ppm
Slovenia	Local name	ksilen (mešane izomere)
Slovenia	OEL TWA (mg/m³)	221 mg/m³
Slovenia	OEL TWA (ppm)	50 ppm
Slovenia	OEL STEL (mg/m³)	442 mg/m³
Slovenia	OEL STEL (ppm)	100 ppm
Spain	Local name	Xilenos, mezcla isómeros
Spain	VLA-ED (mg/m³)	221 mg/m³ vía dérmica,VLB,VLI
Spain	VLA-ED (ppm)	50 ppm vía dérmica,VLB,VLI 1.5 ppm (Ácidos metilhipúricos en orina; Final de la jornada laboral 2)
Spain	VLA-EC (mg/m³)	442 mg/m³ vía dérmica,VLB,VLI
Spain	VLA-EC (ppm)	100 ppm vía dérmica,VLB,VLI
Sweden	Local name	Xylen
Sweden	nivågränsvärde (NVG) (mg/m³)	221 mg/m³
Sweden	nivågränsvärde (NVG) (ppm)	50 ppm
Sweden	kortidsvärde (KTV) (mg/m³)	442 mg/m³
Sweden	kortidsvärde (KTV) (ppm)	100 ppm
Sweden	Anmärkning (SE)	(H)
United Kingdom	WEL TWA (mg/m³)	220 mg/m³ (Sk)
United Kingdom	WEL TWA (ppm)	50 ppm (Sk) 650 ppm (methyl hippuric acid/mol creatinine in urine, Post shift)
United Kingdom	WEL STEL (mg/m³)	441 mg/m³ (Sk)
United Kingdom	WEL STEL (ppm)	100 ppm (Sk)
Norway	Local name	Xylen (alle isomere)
Norway	Grenseverdier (AN) (mg/m³)	108 mg/m³
Norway	Grenseverdier (AN) (ppm)	25 ppm
Norway	Merknader (NO)	H
Switzerland	VME (mg/m³)	435 mg/m³
Switzerland	MAK (ppm)	100 ppm 1.5 ppm Methylhippur-(Tolur-)säure (urina; in caso di esposizione per molto tempo/fine dell'esposizione / del turno) 1.5 ppm xilolo (sangue; fine dell'esposizione / del turno)
Switzerland	KZGW (mg/m³)	870 mg/m³ max. 4x30 min./turno
Switzerland	KZGW (ppm)	200 ppm max. 4x30 min./turno

ethylbenzene (100-41-4)		
EU	Local name	Ethylbenzene
EU	IOELV TWA (mg/m³)	442 mg/m³
EU	IOELV TWA (ppm)	100 ppm
EU	IOELV STEL (mg/m³)	884 mg/m³
EU	IOELV STEL (ppm)	200 ppm
EU	Notes	Skin
Austria	MAK (mg/m³)	440 mg/m³ (H)
Austria	MAK (ppm)	100 ppm (H)

ethylbenzene (100-41-4)		
Austria	MAK Short time value (mg/m³)	880 mg/m³ max. 8x5 min./Schicht (gemessen als Momentanwert), (H)
Austria	MAK Short time value (ppm)	200 ppm max. 8x5 min./Schicht (gemessen als Momentanwert), (H)
Belgium	Limit value (mg/m³)	442 mg/m³
Belgium	Limit value (ppm)	100 ppm
Belgium	Short time value (mg/m³)	551 mg/m³
Belgium	Short time value (ppm)	125 ppm
Belgium	Remark (BE)	D
Czech Republic	Local name	Ethylbenzen
Czech Republic	Expoziční limity (PEL) (mg/m³)	200 mg/m³
Czech Republic	Expoziční limity (PEL) (ppm)	46 ppm
Czech Republic	Expoziční limity (NPK-P) (mg/m³)	500 mg/m³
Czech Republic	Expoziční limity (NPK-P) (ppm)	115 ppm
Czech Republic	Remark (CZ)	D
Denmark	Local name	Ethylbenzen
Denmark	Grænseværdie (langvarig) (mg/m³)	217 mg/m³
Denmark	Grænseværdie (langvarig) (ppm)	50 ppm
Denmark	Grænseværdie (kortvarig) (mg/m³)	434 mg/m³
Denmark	Grænseværdie (kortvarig) (ppm)	100 ppm
Denmark	Anmærkninger (DK)	K
Finland	Local name	Etyylibentseeni
Finland	HTP-arvo (8h) (mg/m³)	220 mg/m³ iho
Finland	HTP-arvo (8h) (ppm)	50 ppm iho 5.2 ppm (Virtsan mantelihappo, Työvuoron päätyttyä työviikon tai altistumisjakson loputtua)
Finland	HTP-arvo (15 min)	880 mg/m³ iho
Finland	HTP-arvo (15 min) (ppm)	200 ppm iho
France	Local name	Ethylbenzène
France	VME (mg/m³)	88.4 mg/m³
France	VME (ppm)	20 ppm
France	VLE (mg/m³)	442 mg/m³
France	VLE (ppm)	100 ppm
France	Note (FR)	Peau
Germany	TRGS 900 Local name	Ethylbenzol
Germany	TRGS 900 Occupational exposure limit value (mg/m³)	440 mg/m³
Germany	TRGS 900 Occupational exposure limit value (ppm)	100 ppm
Germany	TRGS 903 Biological limit value	1 mg/l Ethylbenzol (Blut; Expositionsende bzw. Schichtende) 800 mg/l Mandelsäure + Phenylglyoxylsäure (Urin; Expositionsende bzw. Schichtende)
Germany	TRGS 910 Acceptable concentration notes	
Hungary	Local name	ETILBENZOL
Hungary	AK-érték	442 mg/m³
Hungary	CK-érték	884 mg/m³
Ireland	OEL (8 hours ref) (mg/m³)	442 mg/m³
Ireland	OEL (8 hours ref) (ppm)	100 ppm

ethylbenzene (100-41-4)		
Ireland	OEL (15 min ref) (mg/m3)	884 mg/m³
Ireland	OEL (15 min ref) (ppm)	200 ppm
Italy	Local name	Etilbenzene
Italy	OEL TWA (mg/m³)	442 mg/m³
Italy	OEL TWA (ppm)	100 ppm
Italy	OEL STEL (mg/m³)	884 mg/m³
Italy	OEL STEL (ppm)	200 ppm
Latvia	Local name	Etilbenzols
Latvia	OEL TWA (mg/m³)	442 mg/m³
Latvia	OEL TWA (ppm)	100 ppm
Latvia	OEL STEL (mg/m³)	884 mg/m³
Latvia	OEL STEL (ppm)	200 ppm
Lithuania	IPRV (mg/m³)	442 mg/m³
Lithuania	IPRV (ppm)	100 ppm
Lithuania	TPRV (mg/m³)	884 mg/m³
Lithuania	TPRV (ppm)	200 ppm
Lithuania	Remark (LT)	O
Netherlands	Local name	Ethylbenzeen
Netherlands	Grenswaarde TGG 8H (mg/m³)	215 mg/m³
Netherlands	Grenswaarde TGG 15MIN (mg/m³)	430 mg/m³
Poland	Local name	Etylobenzen
Poland	NDS (mg/m³)	200 mg/m³
Poland	NDSCh (mg/m³)	400 mg/m³
Portugal	Local name	Etilbenzeno
Portugal	OEL TWA (ppm)	20 ppm
Slovakia	Local name	Etylbenzén
Slovakia	NPHV (priemerná) (mg/m³)	442 mg/m³ (K)
Slovakia	NPHV (priemerná) (ppm)	100 ppm (K) 12 ppm (2 - a 4 -Etylfenol) 1600 ppm (Kyselina mandlová a kyselina fenylglyoxylová)
Slovakia	OEL STEL (mg/m³)	884 mg/m³
Slovakia	OEL STEL (ppm)	200 ppm
Slovenia	Local name	etilbenzen
Slovenia	OEL TWA (mg/m³)	442 mg/m³
Slovenia	OEL TWA (ppm)	100 ppm
Slovenia	OEL STEL (mg/m³)	884 mg/m³
Slovenia	OEL STEL (ppm)	200 ppm
Spain	Local name	Etilbenceno
Spain	VLA-ED (mg/m³)	441 mg/m³ vía dérmica,VLB,VLI
Spain	VLA-ED (ppm)	100 ppm vía dérmica,VLB,VLI 700 ppm I, S "(Suma del acido mandélico y el ácido fenilglioxílico en orina; Final de la semana laboral 1)"
Spain	VLA-EC (mg/m³)	884 mg/m³ vía dérmica,VLB,VLI
Spain	VLA-EC (ppm)	200 ppm vía dérmica,VLB,VLI
Sweden	Local name	Etylbensen

ethylbenzene (100-41-4)		
Sweden	nivågränsvärde (NVG) (mg/m³)	200 mg/m³
Sweden	nivågränsvärde (NVG) (ppm)	50 ppm
Sweden	kortidsvärde (KTV) (mg/m³)	450 mg/m³
Sweden	kortidsvärde (KTV) (ppm)	100 ppm
United Kingdom	WEL TWA (mg/m³)	441 mg/m³
United Kingdom	WEL TWA (ppm)	100 ppm
United Kingdom	WEL STEL (mg/m³)	552 mg/m³
United Kingdom	WEL STEL (ppm)	125 ppm
United Kingdom	Remark (WEL)	(Sk)
Norway	Local name	Etylbenzen
Norway	Grenseverdier (AN) (mg/m³)	20 mg/m³
Norway	Grenseverdier (AN) (ppm)	5 ppm
Norway	Merknader (NO)	HK
Switzerland	VME (mg/m³)	435 mg/m³
Switzerland	MAK (ppm)	100 ppm 1.5 ppm Etilbenzene (sangue; fine dell'esposizione / del turno) 2 ppm Acido mandelico + acido fenilgliossilico (urina; fine dell'esposizione / del turno)
Switzerland	KZGW (mg/m³)	435 mg/m³
Switzerland	KZGW (ppm)	100 ppm

1-Butanol (71-36-3)		
EU	Local name	n-Butyl alcohol
Austria	MAK (mg/m³)	150 mg/m³
Austria	MAK (ppm)	50 ppm
Austria	MAK Short time value (mg/m³)	600 mg/m³ max. 4x15 min./Schicht
Austria	MAK Short time value (ppm)	200 ppm max. 4x15 min./Schicht
Belgium	Limit value (mg/m³)	62 mg/m³
Belgium	Limit value (ppm)	20 ppm
Belgium	Remark (BE)	D
Czech Republic	Local name	Butanol (všechny isomery)
Czech Republic	Expoziční limity (PEL) (mg/m³)	300 mg/m³
Czech Republic	Expoziční limity (PEL) (ppm)	99 ppm
Czech Republic	Expoziční limity (NPK-P) (mg/m³)	600 mg/m³
Czech Republic	Expoziční limity (NPK-P) (ppm)	198 ppm
Czech Republic	Remark (CZ)	I
Denmark	Local name	1-Butanol (Butylalkohol)
Finland	Local name	n-Butanoli
Finland	HTP-arvo (8h) (mg/m³)	150 mg/m³
Finland	HTP-arvo (8h) (ppm)	50 ppm
Finland	HTP-arvo (15 min)	230 mg/m³
Finland	HTP-arvo (15 min) (ppm)	75 ppm
Finland	Huomautus (FI)	iho
France	Local name	Alcool n-butylique
France	VLE (mg/m³)	150 mg/m³

1-Butanol (71-36-3)		
France	VLE (ppm)	50 ppm
Germany	TRGS 900 Local name	Butan-1-ol
Germany	TRGS 900 Occupational exposure limit value (mg/m³)	310 mg/m³
Germany	TRGS 900 Occupational exposure limit value (ppm)	100 ppm
Germany	TRGS 903 Biological limit value	2 mg/g creatinine 1-Butanol (Urin; vor nachfolgender Schicht) 10 mg/g creatinine 1-Butanol (Urin; Expositionsende bzw. Schichtende)
Germany	TRGS 910 Acceptable concentration notes	
Hungary	Local name	n-BUTIL-ALKOHOL
Hungary	AK-érték	45 mg/m³
Hungary	CK-érték	90 mg/m³
Ireland	OEL (8 hours ref) (ppm)	20 ppm
Ireland	Notes (IE)	SK
Latvia	Local name	Butilspirti(pirmējais, otrējais,trešējais) (n-butanols,
Latvia	OEL TWA (mg/m³)	10 mg/m³
Lithuania	IPRV (mg/m³)	45 mg/m³
Lithuania	IPRV (ppm)	15 ppm
Lithuania	NRV (mg/m³)	90 mg/m³
Lithuania	NRV (ppm)	30 ppm
Lithuania	Remark (LT)	Û O
Poland	Local name	Butan-1-ol (n-butylowy alkohol)
Poland	NDS (mg/m³)	50 mg/m³
Poland	NDSCh (mg/m³)	150 mg/m³
Portugal	Local name	n-Butanol (Álcool n-butílico)
Portugal	OEL TWA (ppm)	20 ppm
Slovakia	Local name	n-Butanol
Slovakia	NPHV (priemerná) (mg/m³)	310 mg/m³ krátkodobý: kategória I.
Slovakia	NPHV (priemerná) (ppm)	100 ppm krátkodobý: kategória I. 2 ppm (M,d) 10 ppm (M,b)
Slovenia	Local name	butan-1-ol
Slovenia	OEL TWA (mg/m³)	310 mg/m³
Slovenia	OEL TWA (ppm)	100 ppm
Slovenia	OEL STEL (mg/m³)	310 mg/m³
Slovenia	OEL STEL (ppm)	100 ppm
Spain	Local name	n-Butanol (Alcohol n-butílico)
Spain	VLA-EC (mg/m³)	154 mg/m³
Spain	VLA-EC (ppm)	50 ppm
Spain	Notes	vía dérmica,
Sweden	Local name	n-Butanol
Sweden	nivågränsvärde (NVG) (mg/m³)	45 mg/m³
Sweden	nivågränsvärde (NVG) (ppm)	15 ppm
Sweden	takgränsvärde (TGV) (mg/m³)	90 mg/m³
Sweden	takgränsvärde (TGV) (ppm)	30 ppm
Sweden	Anmärkning (SE)	H

1-Butanol (71-36-3)		
United Kingdom	WEL STEL (mg/m³)	154 mg/m³
United Kingdom	WEL STEL (ppm)	50 ppm
United Kingdom	Remark (WEL)	(Sk)
Norway	Local name	Butan-1-ol
Norway	Grenseverdier (Takverdi) (mg/m³)	75 mg/m³
Norway	Grenseverdier (Takverdi) (ppm)	25 ppm
Norway	Merknader (NO)	H
Switzerland	VME (mg/m³)	150 mg/m³
Switzerland	MAK (ppm)	50 ppm
Switzerland	KZGW (mg/m³)	150 mg/m³
Switzerland	KZGW (ppm)	50 ppm

titanium dioxide (13463-67-7)		
EU	Local name	Titanium dioxide
Austria	MAK (mg/m³)	5 mg/m³ (alveolengängiger Anteil)
Austria	MAK Short time value (mg/m³)	10 mg/m³ max. 2x60 min./Schicht (alveolengängiger Anteil)
Belgium	Limit value (mg/m³)	10 mg/m³
Belgium	Remark (BE)	(dioxyde de)
Denmark	Local name	Titandioxid
Denmark	Grænseværdie (langvarig) (mg/m³)	6 mg/m³
Denmark	Grænseværdie (kortvarig) (mg/m³)	12 mg/m³
France	Local name	Titane (dioxyde de), en Ti
France	VME (mg/m³)	10 mg/m³
France	Note (FR)	inhalable aerosol
Germany	TRGS 900 Local name	Titandioxid
Germany	TRGS 910 Acceptable concentration notes	
Ireland	OEL (8 hours ref) (mg/m³)	10 mg/m³ total inhalable dust 4 mg/m³ respirable dust
Latvia	Local name	Titānadioksīds
Latvia	OEL TWA (mg/m³)	10 mg/m³
Lithuania	IPRV (mg/m³)	5 mg/m³
Portugal	Local name	Dióxido de titânio
Portugal	OEL TWA (mg/m³)	10 mg/m³
Slovakia	Local name	Oxid titaničitý
Slovakia	NPHV (priemerná) (mg/m³)	5 mg/m³
Spain	Local name	Dióxido de titanio
Spain	VLA-ED (mg/m³)	10 mg/m³
Spain	Notes	inhalable aerosol
Sweden	Local name	Titandioxid
Sweden	nivågränsvärde (NVG) (mg/m³)	5 mg/m³
Sweden	Anmärkning (SE)	total dust, 1
United Kingdom	WEL TWA (mg/m³)	10 mg/m³ inhalable aerosol 4 mg/m³ respirable aerosol
Norway	Local name	Titandioksid
Norway	Grenseverdier (AN) (mg/m³)	5 mg/m³

titanium dioxide (13463-67-7)		
Switzerland	VME (mg/m³)	3 mg/m³
Switzerland	Remark	(respirable aerosol)

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Hand protection:
None under normal use.

Eye protection:
None under normal use

Respiratory protection:
In case of inadequate ventilation wear respiratory protection. Wear appropriate mask. EN 12083

Consumer exposure controls:

Keep out of reach of children.

Other information:

Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Solid marker containing liquid colored paint.
Colour	: Variable.
Odour	: Solvent.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: 21 - 55 °C
Boiling point	: > 35 °C
Flash point	: 27.5 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Flammable liquid and vapour.
Vapour pressure	: < 110 kPa
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: insoluble in water.
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Lower explosive limit (LEL)	: 1.2 vol %
Upper explosive limit (UEL)	: 7.5 vol %

9.2. Other information

VOC content : ≈ 50 %

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known.

10.2. Chemical stability

Flammable liquid and vapour. May form flammable/explosive vapour-air mixture.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid
Open flame. Overheating. Direct sunlight. Heat. Sparks.

10.5. Incompatible materials
Strong bases. Strong oxidizers. Strong acids.

10.6. Hazardous decomposition products
May release flammable gases. Burning produces irritating, toxic and noxious fumes.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

Butyl acetate (123-86-4)	
LD50 oral rat	10760 mg/kg
LD50 dermal rabbit	> 14112 mg/kg
LC50 inhalation rat (mg/l)	> 21 mg/l/4h

Benzaldehyde (100-52-7)	
LD50 oral rat	1430 mg/kg
LD50 dermal rabbit	> 2000 mg/kg

D-Limonène (5989-27-5)	
LD50 oral rat	> 4400 mg/kg
LD50 oral	> 2000 mg/kg
LD50 dermal rabbit	> 5000 mg/kg

Carbon black (1333-86-4)	
LD50 oral rat	> 8000 mg/kg
LC50 inhalation rat (mg/l)	> 4.6 mg/m³ 4 h

2-methoxy-1-methylethyl acetate (108-65-6)	
LD50 oral rat	8532 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 inhalation rat (ppm)	4345 ppm 6 h

2-methoxypropyl acetate (70657-70-4)	
LC50 inhalation rat (ppm)	2700 ppm 6 h

Magnesium oxide (1309-48-4)	
LD50 oral rat	3870 - 3990 mg/kg

Iron oxide red (1309-37-1)	
LD50 oral rat	> 10000 mg/kg
LD50 dermal rat	5500 mg/kg
LC50 inhalation rat (mg/l)	5.05 mg/l/4h

Aluminum oxide (1344-28-1)	
LD50 oral rat	> 15900 mg/kg
LC50 inhalation rat (mg/l)	7.6 mg/l/4h

calcium carbonate (471-34-1)	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 3 mg/l/4h

Xylene (1330-20-7)	
LD50 oral rat	> 3500 mg/kg

ethylbenzene (100-41-4)	
LD50 oral rat	3500 mg/kg
LD50 dermal rabbit	17.8 ml/kg
LC50 inhalation rat (ppm)	< 1500 ppm

titanium dioxide (13463-67-7)	
LD50 oral rat	> 5000 mg/kg
LC50 inhalation rat (mg/l)	> 6.82 mg/l/4h

Unknown acute toxicity (CLP: Classification, Labelling, Packaging.) - SDS : 1.02% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)
1.02% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)
1.02% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

Skin corrosion/irritation : Not classified

Additional information : Repeated exposure may cause skin dryness or cracking.

Serious eye damage/irritation : Not classified

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified.

D-Limonène (5989-27-5)	
IARC group	3 - Not classifiable

Carbon black (1333-86-4)	
IARC group	2B - Possibly carcinogenic to humans,Inhalation of dust

Silicon dioxide (cristobalite) (14808-60-7)	
IARC group	1 - Carcinogenic to humans

Iron oxide red (1309-37-1)	
IARC group	3 - Not classifiable

Xylene (1330-20-7)	
IARC group	3 - Not classifiable

ethylbenzene (100-41-4)	
IARC group	2B - Possibly carcinogenic to humans

titanium dioxide (13463-67-7)	
IARC group	2B - Possibly carcinogenic to humans

titanium dioxide (13463-67-7)	
NOAEL (chronic, oral, animal/male, 2 years)	5 mg/kg bodyweight rat

Reproductive toxicity : Not classified

D-Limonène (5989-27-5)	
LOAEL (animal/male, F0/P)	500 (500 - 600) mg/kg
LOAEL (animal/female, F0/P)	500 (500 - 600) mg/kg

STOT-single exposure : May cause drowsiness or dizziness.
STOT-repeated exposure : Not classified

Benzaldehyde (100-52-7)	
NOAEL (oral, rat, 90 days)	400 mg/kg bodyweight/day

D-Limonène (5989-27-5)	
NOAEL (subacute, oral, animal/male, 28 days)	825 mg/kg bodyweight
NOAEL (subacute, oral, animal/female, 28 days)	1650 mg/kg bodyweight
NOAEL (subchronic, oral, animal/male, 90 days)	500 (100 - 600) mg/kg bodyweight
NOAEL (subchronic, oral, animal/female, 90 days)	500 (100 - 600) mg/kg bodyweight

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : No ecotoxicological data about this product are known.
Acute aquatic toxicity : Not classified
Chronic aquatic toxicity : Not classified

D-Limonène (5989-27-5)	
LC50 fish 1	< 1 mg/l Pimephales promelas
EC50 Daphnia 1	< 1 mg/l

2-methoxy-1-methylethyl acetate (108-65-6)	
LC50 fish 1	100 - 180 mg/l
EC50 Daphnia 1	> 500 mg/l 48 h
ErC50 (algae)	> 1000 mg/l

Magnesium oxide (1309-48-4)	
LC50 fish 1	1355 mg/l
EC50 Daphnia 1	190 mg/l

Iron oxide red (1309-37-1)	
EC50 Daphnia 1	> 100 mg/l

Aluminum oxide (1344-28-1)	
EC50 Daphnia 1	1470 mg/l
NOEC (acute)	50 mg/l

calcium carbonate (471-34-1)	
LC50 fish 1	> 100 % v/v, 96 h
EC50 Daphnia 1	> 100 % v/v, 48 h

ethylbenzene (100-41-4)	
LC50 fish 1	5.1 mg/l
EC50 other aquatic organisms 1	7.7 mg/l

NOEC (acute)	3.3 mg/l

12.2. Persistence and degradability

Stylmark® Tube Marker, RS.2000 Paint Refill Tube	
Persistence and degradability	Not established.

D-Limonène (5989-27-5)	
Persistence and degradability	Readily biodegradable.

Carbon black (1333-86-4)	
Persistence and degradability	Not readily biodegradable.

2-methoxy-1-methylethyl acetate (108-65-6)	
Persistence and degradability	Readily biodegradable.
Biodegradation	89 % 10 d

ethylbenzene (100-41-4)	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Stylmark® Tube Marker, RS.2000 Paint Refill Tube	
Bioaccumulative potential	Not established.

D-Limonène (5989-27-5)	
Bioconcentration factor (BCF REACH)	1022 estimated
Log Kow	4.38
Bioaccumulative potential	Bioaccumulative potential.

2-methoxy-1-methylethyl acetate (108-65-6)	
Log Pow	0.43

Xylene (1330-20-7)	
BCF fish 1	1.3 mg/l
Bioaccumulative potential	Not expected to bioaccumulate.

ethylbenzene (100-41-4)	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

Stylmark® Tube Marker, RS.2000 Paint Refill Tube	
Ecology - soil	No additional information available.

12.5. Results of PBT and vPvB assessment

Stylmark® Tube Marker, RS.2000 Paint Refill Tube
PBT: not yet assessed
vPvB: not yet assessed

12.6. Other adverse effects

Additional information : No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Additional information : Handle empty containers with care because residual vapours are flammable.

Ecology - waste materials : Avoid release to the environment.

European List of Waste (LoW) code : For disposal within the EC, the appropriate code according to the European Waste

Catalogue (EWC) should be used.
20 01 27* - paint, inks, adhesives and resins containing dangerous substances

HP Code : HP3 - "Flammable:"
— flammable liquid waste: liquid waste having a flash point below 60 °C or waste gas oil, diesel and light heating oils having a flash point > 55 °C and ≤ 75 °C;
— flammable pyrophoric liquid and solid waste: solid or liquid waste which, even in small quantities, is liable to ignite within five minutes after coming into contact with air;
— flammable solid waste: solid waste which is readily combustible or may cause or contribute to fire through friction;
— flammable gaseous waste: gaseous waste which is flammable in air at 20 °C and a standard pressure of 101.3 kPa;
— water reactive waste: waste which, in contact with water, emits flammable gases in dangerous quantities;
— other flammable waste: flammable aerosols, flammable self-heating waste, flammable organic peroxides and flammable self-reactive waste.
HP5 - "Specific Target Organ Toxicity (STOT)/Aspiration Toxicity:" waste which can cause specific target organ toxicity either from a single or repeated exposure, or which cause acute toxic effects following aspiration.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR) : UN 1263
UN-No. (IMDG) : UN 1263
UN-No. (IATA) : UN 1263
UN-No. (ADN) : UN 1263
UN-No. (RID) : UN 1263

14.2. UN proper shipping name

Proper Shipping Name (ADR) : PAINT
Proper Shipping Name (IMDG) : PAINT
Proper Shipping Name (IATA) : PAINT
Proper Shipping Name (ADN) : PAINT
Proper Shipping Name (RID) : PAINT
Transport document description (ADR) : UN 1263 PAINT, 3, III, (D/E)
Transport document description (IMDG) : UN 1263 PAINT, 3, III
Transport document description (IATA) : UN 1263 PAINT, 3, III
Transport document description (ADN) : UN 1263 PAINT, 3, III
Transport document description (RID) : UN 1263 PAINT, 3, III

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 3
Danger labels (ADR) : 3

:

IMDG

Transport hazard class(es) (IMDG) : 3
Danger labels (IMDG) : 3

:

IATA

Transport hazard class(es) (IATA) : 3
Hazard labels (IATA) : 3

:

ADN

Transport hazard class(es) (ADN) : 3

Danger labels (ADN) : 3

:

RID

Transport hazard class(es) (RID) : 3

Danger labels (RID) : 3

:

14.4. Packing group

Packing group (ADR) : III

Packing group (IMDG) : III

Packing group (IATA) : III

Packing group (ADN) : III

Packing group (RID) : III

14.5. Environmental hazards

Dangerous for the environment : No

Marine pollutant : No

Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport

Classification code (ADR) : F1

Hazard identification number (Kemler No.) : 30

Orange plates :

Tunnel restriction code (ADR) : D/E

EAC code : •3YE

- Transport by sea

EmS-No. (Fire) : F-E

EmS-No. (Spillage) : S-E

Stowage category (IMDG) : A

Properties and observations (IMDG) : Miscibility with water depends upon the composition.

- Air transport

Special provisions (IATA) : A3, A72, A192

ERG code (IATA) : 3L

- Inland waterway transport

Classification code (ADN) : F1

- Rail transport

Classification code (RID) : F1

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

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances
Contains no substance subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.
Substance(s) are not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC.

VOC content : ≈ 50 %

15.1.2. National regulations

Germany

VwVwS Annex reference : Water hazard class (WGK) 1, Slightly hazardous to water (Classification according to AwSV, Annex 1)

WGK remark : Classification based on the components in compliance withVerwaltungsvorschrift wassergefährdender Stoffe (VwVwS)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen : 2-methoxypropyl acetate,Silicon dioxide (cristobalite) are listed

SZW-lijst van mutagene stoffen : 2-methoxypropyl acetate is listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : 2-methoxypropyl acetate,Xylene are listed

Denmark

Class for fire hazard : Class II-1

Store unit : 5 liter

Classification remarks : R10 <H226;H336>; Emergency management guidelines for the storage of flammable liquids must be followed

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

Pregnant/breastfeeding women working with the product must not be in direct contact with the product

The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

15.2. Chemical safety assessment
No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:	
Classification.	

Abbreviations and acronyms:	
	ATE: Acute Toxicity Estimate
	CAS (Chemical Abstracts Service) number
	CLP: Classification, Labelling, Packaging.
	EC50: Environmental Concentration associated with a response by 50% of the test population.
	GHS: Globally Harmonized System (of Classification and Labeling of Chemicals).
	LD50: Lethal Dose for 50% of the test population
	OSHA: Occupational Safety & Health Administration
	PBT: Persistent, Bioaccumulative, Toxic

	TWA: Time Weighted Average
	TSCA: Toxic Substances Control Act

Data sources : ESIS (European chemincal Substances Information System; accessed at: http://esis.jrc.ec.europa.eu/index.php?PGM=cla. European Chemicals Agency (ECHA) C&L Inventory database. Accessed at http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database. Krister Forsberg and S.Z. Mansdorf, "Quick Selection Guide to Chemical Protective Clothing", Fifth Edition. National Fire Protection Association. Fire Protection Guide to Hazardous Materials; 10th edition. REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

Full text of H- and EUH-statements:	
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
Carc. 1A	Carcinogenicity (inhalation) Category 1A
Carc. 2	Carcinogenicity, Category 2
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Repr. 1B	Reproductive toxicity, Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H350i	May cause cancer by inhalation.
H351	Suspected of causing cancer.
H360D	May damage the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

H411	Toxic to aquatic life with long lasting effects.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Flam. Liq. 3	H226	On basis of test data
STOT SE 3	H336	Calculation method

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product