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

1.1. Product identifier

Product form : Mixture

Trade name : Dura-Ink 80

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

1.2.1. Relevant identified uses

Main use category : Industrial use,Professional use

Use of the substance/mixture : Ink.

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

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 2	H225
Skin sensitisation, Category 1	H317
Specific target organ toxicity — Single exposure, Category 3, Narcosis	H336
Hazardous to the aquatic environment — Chronic Hazard, Category 3	H412

Full text of hazard classes and 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) : Danger

Hazardous ingredients : 1-Methoxy-2-propanol; bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate; Decanedioic acid, 1-methyl 10-(1,2,2,6,6-pentamethyl-4-piperidinyl) ester; Polyethylene glycol di[3-[3-(2H-benzotriazol-2- yl)-5-tert-butyl-4-hydroxyphenyl]- 1-oxopropyl] ether; Poly(oxy-1,2-ethanediyl), a-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-w-hydroxy-

Hazard statements (CLP) : H225 - Highly flammable liquid and vapour
H317 - May cause an allergic skin reaction
H336 - May cause drowsiness or dizziness
H412 - Harmful to aquatic life with long lasting effects

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 electrical, lighting, ventilating equipment
P261 - Avoid breathing spray, mist, vapours
P271 - Use only outdoors or in a well-ventilated area

P272 - Contaminated work clothing should not be allowed out of the workplace
P273 - Avoid release to the environment
P280 - Wear protective clothing, protective gloves
P302+P352 - IF ON SKIN: Wash with plenty of water
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
P312 - Call a doctor if you feel unwell
P321 - Specific treatment (see First aid measures on this label)
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention
P362+P364 - Take off contaminated clothing and wash it before reuse
P370+P378 - In case of fire: Use carbon dioxide (CO2), dry extinguishing powder, foam, Water spray 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 and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

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

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
1-Methoxy-2-propanol	(CAS-No.) 107-98-2 (EC-No.) 203-539-1 (EC Index-No.) 603-064-00-3	50 – 60	Flam. Liq. 3, H226 STOT SE 3, H336
ethanol	(CAS-No.) 64-17-5 (EC-No.) 200-578-6 (EC Index-No.) 603-002-00-5	5 – 10	Flam. Liq. 2, H225
C.I. Solvent Black 29	(CAS-No.) 117527-94-3 (EC-No.) 403-720-7 (EC Index-No.) 611-044-00-0	3 – 7	Aquatic Chronic 2, H411
Isopropanol	(CAS-No.) 67-63-0 (EC-No.) 200-661-7 (EC Index-No.) 603-117-00-0	1 – 2	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
Ethyl acetate	(CAS-No.) 141-78-6 (EC-No.) 205-500-4 (EC Index-No.) 607-022-00-5	1 – 2	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
propyl acetate	(CAS-No.) 109-60-4 (EC-No.) 203-686-1 (EC Index-No.) 607-024-00-6	0.3 – 0.7	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
(2-Methoxymethylethoxy)-propanol	(CAS-No.) 34590-94-8 (EC-No.) 252-104-2	0.3 – 0.7	Not classified
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	(CAS-No.) 41556-26-7 (EC-No.) 255-437-1	0.1 – 0.3	Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Polyethylene glycol di[3-[3-(2H-benzotriazol-2- yl)-5-tert-butyl-4-hydroxyphenyl]- 1-oxopropyl] ether	(CAS-No.) 104810-47-1	0.01 – 0.3	Skin Sens. 1, H317 Aquatic Chronic 2, H411
Poly(oxy-1,2-ethanediyl), a-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-w-hydroxy-	(CAS-No.) 104810-48-2	0.01 – 0.3	Skin Sens. 1, H317 Aquatic Chronic 2, H411

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. IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. Wash contaminated clothing before reuse.

First-aid measures after eye contact : If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

First-aid measures after ingestion : Do NOT induce vomiting unless directed to do so by medical personnel. Call a POISON CENTER or doctor/physician if you feel unwell.

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

Symptoms/effects after inhalation : May cause drowsiness or dizziness.

Symptoms/effects after skin contact : May cause an allergic skin reaction.

Symptoms/effects after eye contact : Direct contact with the eyes is likely to be irritating.

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

All treatments should be based on observed signs and symptoms of distress in the patient.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Carbon dioxide. Dry powder. Water spray.

Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Firefighting instructions : Exercise caution when fighting any chemical fire. In case of fire: stop leak if safe to do so. Do not allow run-off from fire fighting to enter drains or water courses.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. 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 : Avoid all eye and skin contact and do not breathe vapour and mist.

6.1.1. For non-emergency personnel

Protective equipment : Wear suitable gloves. In case of inadequate ventilation wear respiratory protection.

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Wear suitable gloves. Where excessive vapour, mist, or dust may result, use approved respiratory protection equipment.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Do not discharge into drains or the environment.

6.3. Methods and material for containment and cleaning up

For containment : Absorb and/or contain spill with inert material, then place in suitable container.

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Take up in non-combustible absorbent material and shove into container for disposal. This material and its container must be disposed of in a safe way, and as per local legislation.

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

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep in fireproof place. Keep container tightly closed. Store in a dry, cool and well-ventilated place.

Incompatible products : Strong oxidizers.

Incompatible materials : Heat sources. Sources of ignition.

7.3. Specific end use(s)

Ink.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

(2-Methoxymethylethoxy)-propanol (34590-94-8)		
EU	Local name	(2-Methoxymethylethoxy)-propanol
EU	IOELV TWA (mg/m³)	308 mg/m³
EU	IOELV TWA (ppm)	50 ppm
EU	Notes	Skin
Czech Republic	Local name	propanol(2-Methoxymethylethoxy)-(technická sm s isomer)
Czech Republic	Expoziční limity (PEL) (mg/m³)	270 mg/m³
Czech Republic	Expoziční limity (PEL) (ppm)	44.6 ppm
Czech Republic	Expoziční limity (NPK-P) (mg/m³)	550 mg/m³
Czech Republic	Expoziční limity (NPK-P) (ppm)	90.8 ppm
Czech Republic	Remark (CZ)	D
Denmark	Local name	Dipropylenglycolmethylether (Methoxypropoxypropanol)
Denmark	Grænseværdie (langvarig) (mg/m³)	309 mg/m³
Denmark	Grænseværdie (langvarig) (ppm)	50 ppm
Denmark	Grænseværdie (kortvarig) (mg/m³)	600 mg/m³
Denmark	Grænseværdie (kortvarig) (ppm)	100 ppm
Denmark	Anmærkninger (DK)	E (betyder, at stoffet har en EF-grænseværdi); H (betyder, at stoffet kan optages gennem huden)
Finland	Local name	(2-Metoksimetyylietoksi)-propanoli
Finland	HTP-arvo (8h) (mg/m³)	310 mg/m³
Finland	HTP-arvo (8h) (ppm)	50 ppm
Finland	Huomautus (FI)	iho
France	Local name	(2-méthoxyméthyléthoxy)-propanol
France	VME (mg/m³)	308 mg/m³
France	VME (ppm)	50 ppm
France	Note (FR)	Peau
Germany	Local name	(2-Methoxymethylethoxy)propanol (Isomerengemisch)
Germany	TRGS 900 Occupational exposure limit value (mg/m³)	310 mg/m³
Germany	TRGS 900 Occupational exposure limit value (ppm)	50 ppm
Germany	TRGS 900 Limitation of exposure peaks (mg/m³)	310 mg/m³
Germany	TRGS 900 Limitation of exposure peaks (ppm)	50 ppm
Germany	Remark (TRGS 900)	DFG,EU,11
Hungary	Local name	(2-METOXIMETILETOXI)-PROPANOL (Dipropilénglikol-monometil-éter)
Hungary	AK-érték	308 mg/m³
Hungary	CK-érték	308 mg/m³
Hungary	Megjegyzések (HU)	EU1
Italy	Local name	(2-metossimetiletossi)-propanolo
Italy	OEL TWA (mg/m³)	308 mg/m³
Italy	OEL TWA (ppm)	50 ppm
Latvia	Local name	Metoksipropoksi propanols (dipropilēnglikola monometilēteris,DPM)
Latvia	OEL TWA (mg/m³)	308 mg/m³
Latvia	OEL TWA (ppm)	50 ppm
Netherlands	Local name	Dipropyleenglycolmethylether
Netherlands	Grenswaarde TGG 8H (mg/m³)	300 mg/m³
Poland	Local name	(2-Metoksymetyloetoksy)propanol
Poland	NDS (mg/m³)	240 mg/m³

(2-Methoxymethylethoxy)-propanol (34590-94-8)		
Poland	NDSCh (mg/m³)	480 mg/m³
Portugal	Local name	2-Metoximetiletoxipropanol (DPGME)
Portugal	OEL TWA (ppm)	100 ppm
Portugal	OEL STEL (ppm)	150 ppm
Slovakia	Local name	2-Metoxymetyl-etoxypropanol (dipropylén glykol mono-metyléter)
Slovakia	NPHV (priemerná) (mg/m³)	308 mg/m³
Slovakia	NPHV (priemerná) (ppm)	50 ppm
Slovakia	Upozornenie (SK)	poznámka K
Slovenia	Local name	(2-metoksimetiletoksi)propanol (mešanica izomer)
Slovenia	OEL TWA (mg/m³)	308 mg/m³
Slovenia	OEL TWA (ppm)	50 ppm
Spain	Local name	Éter metílico de dipropilenglicol
Spain	VLA-ED (mg/m³)	308 mg/m³
Spain	VLA-ED (ppm)	50 ppm
Spain	Notes	vía dérmica,VLI
Sweden	Local name	Dipropylenglykolmonometyleter
Sweden	nivågränsvärde (NVG) (mg/m³)	300 mg/m³
Sweden	nivågränsvärde (NVG) (ppm)	50 ppm
Sweden	kortidsvärde (KTV) (mg/m³)	450 mg/m³
Sweden	kortidsvärde (KTV) (ppm)	75 ppm
Sweden	Anmärkning (SE)	H
Norway	Local name	(2-metoksymetyletoksy)-propanol (Dipropylenglykolmetyleter)
Norway	Grenseverdier (AN) (mg/m³)	300 mg/m³
Norway	Grenseverdier (AN) (ppm)	50 ppm
Norway	Merknader (NO)	H (Kjemikalier som kan tas opp gjennom huden); E (EU har en veiledende grenseverdi for stoffet)

Ethyl acetate (141-78-6)		
EU	Local name	Ethyl acetate
Austria	MAK (mg/m³)	1050 mg/m³
Austria	MAK (ppm)	300 ppm
Austria	MAK Short time value (mg/m³)	2100 mg/m³ max. 8x5 min./Schicht (gemessen als Momentanwert)
Austria	MAK Short time value (ppm)	600 ppm max. 8x5 min./Schicht (gemessen als Momentanwert)
Belgium	Limit value (mg/m³)	1461 mg/m³
Belgium	Limit value (ppm)	400 ppm
Czech Republic	Local name	Ethylacetát
Czech Republic	Expoziční limity (PEL) (mg/m³)	700 mg/m³
Czech Republic	Expoziční limity (PEL) (ppm)	194.6 ppm
Czech Republic	Expoziční limity (NPK-P) (mg/m³)	900 mg/m³
Czech Republic	Expoziční limity (NPK-P) (ppm)	250.2 ppm
Denmark	Local name	Ethylacetat (Eddikesyreethylester)
Denmark	Grænseværdie (langvarig) (mg/m³)	540 mg/m³
Denmark	Grænseværdie (langvarig) (ppm)	150 ppm
Denmark	Grænseværdie (kortvarig) (mg/m³)	1080 mg/m³
Denmark	Grænseværdie (kortvarig) (ppm)	300 ppm
Finland	Local name	Etyyliasetaatti
Finland	HTP-arvo (8h) (mg/m³)	1100 mg/m³
Finland	HTP-arvo (8h) (ppm)	300 ppm

Ethyl acetate (141-78-6)		
Finland	HTP-arvo (15 min)	1800 mg/m³
Finland	HTP-arvo (15 min) (ppm)	500 ppm
France	Local name	Acétate d'éthyle
France	VME (mg/m³)	1400 mg/m³
France	VME (ppm)	400 ppm
Germany	Local name	Ethylacetat
Hungary	Local name	ETIL-ACETÁT
Hungary	AK-érték	1400 mg/m³
Hungary	CK-érték	1400 mg/m³
Ireland	OEL (8 hours ref) (ppm)	200 ppm
Ireland	OEL (15 min ref) (ppm)	400 ppm
Latvia	Local name	Etiķskābesetilesteris (etilacetāts)
Latvia	OEL TWA (mg/m³)	200 mg/m³
Lithuania	IPRV (mg/m³)	500 mg/m³
Lithuania	IPRV (ppm)	150 ppm
Lithuania	NRV (mg/m³)	1100 mg/m³
Lithuania	NRV (ppm)	300 ppm
Poland	Local name	Octan etylu
Poland	NDS (mg/m³)	200 mg/m³
Poland	NDSCh (mg/m³)	600 mg/m³
Portugal	Local name	Acetato de etilo
Portugal	OEL TWA (ppm)	400 ppm
Slovakia	Local name	Etylacetát (octan etylový)
Slovakia	NPHV (priemerná) (mg/m³)	500 mg/m³
Slovakia	NPHV (priemerná) (ppm)	150 ppm
Slovakia	OEL STEL (mg/m³)	1100 mg/m³
Slovakia	OEL STEL (ppm)	300 ppm
Slovenia	Local name	etilacetat
Slovenia	OEL TWA (mg/m³)	1400 mg/m³
Slovenia	OEL TWA (ppm)	400 ppm
Slovenia	OEL STEL (mg/m³)	1400 mg/m³
Slovenia	OEL STEL (ppm)	400 ppm
Spain	Local name	Acetato de etilo
Spain	VLA-ED (mg/m³)	1460 mg/m³
Spain	VLA-ED (ppm)	400 ppm
Sweden	Local name	Etylacetat
Sweden	nivågränsvärde (NVG) (mg/m³)	500 mg/m³
Sweden	nivågränsvärde (NVG) (ppm)	150 ppm
Sweden	kortidsvärde (KTV) (mg/m³)	1100 mg/m³
Sweden	kortidsvärde (KTV) (ppm)	300 ppm
United Kingdom	WEL TWA (mg/m³)	730 mg/m³
United Kingdom	WEL TWA (ppm)	200 ppm
United Kingdom	WEL STEL (mg/m³)	1460 mg/m³
United Kingdom	WEL STEL (ppm)	400 ppm
Norway	Local name	Etylacetat
Norway	Grenseverdier (AN) (mg/m³)	550 mg/m³
Norway	Grenseverdier (AN) (ppm)	150 ppm
Switzerland	VME (mg/m³)	1400 mg/m³
Switzerland	MAK (ppm)	400 ppm
Switzerland	KZGW (mg/m³)	2800 mg/m³ max. 4x15 min./turno

Ethyl acetate (141-78-6)		
Switzerland	KZGW (ppm)	800 ppm max. 4x15 min./turno
Australia	TWA (mg/m³)	1460 mg/m³
Australia	TWA (ppm)	400 ppm
Isopropanol (67-63-0)		
Austria	MAK (mg/m³)	500 mg/m³
Austria	MAK (ppm)	200 ppm
Austria	MAK Short time value (mg/m³)	2000 mg/m³ max. 4x15 min./Schicht
Austria	MAK Short time value (ppm)	800 ppm max. 4x15 min./Schicht
Belgium	Limit value (mg/m³)	500 mg/m³
Belgium	Limit value (ppm)	200 ppm
Belgium	Short time value (mg/m³)	1000 mg/m³
Belgium	Short time value (ppm)	400 ppm
Czech Republic	Local name	iso-Propanol
Czech Republic	Expoziční limity (PEL) (mg/m³)	500 mg/m³
Czech Republic	Expoziční limity (PEL) (ppm)	203.5 ppm
Czech Republic	Expoziční limity (NPK-P) (mg/m³)	1000 mg/m³
Czech Republic	Expoziční limity (NPK-P) (ppm)	407 ppm
Czech Republic	Remark (CZ)	I
Denmark	Local name	Isopropylalkohol (Isopropanol; 2-Propanol; sec-Propylalkohol)
Denmark	Grænseværdie (langvarig) (mg/m³)	490 mg/m³
Denmark	Grænseværdie (langvarig) (ppm)	200 ppm
Denmark	Grænseværdie (kortvarig) (mg/m³)	980 mg/m³
Denmark	Grænseværdie (kortvarig) (ppm)	400 ppm
Finland	Local name	2-Propanoli
Finland	HTP-arvo (8h) (mg/m³)	500 mg/m³
Finland	HTP-arvo (8h) (ppm)	200 ppm
Finland	HTP-arvo (15 min)	620 mg/m³
Finland	HTP-arvo (15 min) (ppm)	250 ppm
France	Local name	Alcool isopropylique
France	VLE (mg/m³)	980 mg/m³
France	VLE (ppm)	400 ppm
Germany	Local name	Propan-2-ol
Germany	TRGS 900 Occupational exposure limit value (mg/m³)	500 mg/m³
Germany	TRGS 900 Occupational exposure limit value (ppm)	200 ppm
Germany	TRGS 903 (BGW)	50 mg/l Aceton (Blut; Expositionsende bzw. Schichtende)
Hungary	Local name	IZOPROPIL-ALKOHOL
Hungary	AK-érték	500 mg/m³
Hungary	CK-érték	2000 mg/m³
Ireland	OEL (8 hours ref) (ppm)	200 ppm
Ireland	OEL (15 min ref) (ppm)	400 ppm
Ireland	Notes (IE)	Sk
Latvia	Local name	Izopropanols (2-propanols, izopropilspirts,1-metil-1-etanols)
Latvia	OEL TWA (mg/m³)	350 mg/m³
Latvia	OEL STEL (mg/m³)	600 mg/m³
Lithuania	IPRV (mg/m³)	350 mg/m³
Lithuania	IPRV (ppm)	150 ppm
Lithuania	TPRV (mg/m³)	600 mg/m³
Lithuania	TPRV (ppm)	250 ppm
Netherlands	Grenswaarde TGG 8H (mg/m³)	650 mg/m³

Isopropanol (67-63-0)		
Netherlands	Grenswaarde TGG 8H (ppm)	250 ppm
Poland	Local name	Propan-2-ol (izopropylowy alkohol)
Poland	NDS (mg/m³)	900 mg/m³
Poland	NDSCh (mg/m³)	1200 mg/m³
Portugal	Local name	2-Propanol (isopropanol ou álcool isopropílico)
Portugal	OEL TWA (ppm)	200 ppm
Portugal	OEL STEL (ppm)	400 ppm
Slovakia	Local name	Izopropylalkohol (propán-2-ol)
Slovakia	NPHV (priemerná) (mg/m³)	500 mg/m³
Slovakia	NPHV (priemerná) (ppm)	200 ppm
Slovakia	OEL STEL (mg/m³)	1000 mg/m³
Slovakia	OEL STEL (ppm)	400 ppm
Slovenia	Local name	propan-2-ol (izopropilalkohol; izopropanol)
Slovenia	OEL TWA (mg/m³)	500 mg/m³
Slovenia	OEL TWA (ppm)	200 ppm
Slovenia	OEL STEL (mg/m³)	2000 mg/m³
Slovenia	OEL STEL (ppm)	800 ppm
Spain	Local name	Isopropanol (Alcohol isopropílico)
Spain	VLA-ED (mg/m³)	500 mg/m³ VLB, s
Spain	VLA-ED (ppm)	200 ppm VLB, s 40 ppm F, I "(Acetona en orina; Final de la semana, laboral 1)"
Spain	VLA-EC (mg/m³)	1000 mg/m³ VLB, s
Spain	VLA-EC (ppm)	400 ppm VLB, s
Sweden	Local name	Isopropanol
Sweden	nivågränsvärde (NVG) (mg/m³)	350 mg/m³
Sweden	nivågränsvärde (NVG) (ppm)	150 ppm
Sweden	kortidsvärde (KTV) (mg/m³)	600 mg/m³
Sweden	kortidsvärde (KTV) (ppm)	250 ppm
United Kingdom	WEL TWA (mg/m³)	999 mg/m³
United Kingdom	WEL TWA (ppm)	400 ppm
United Kingdom	WEL STEL (mg/m³)	1250 mg/m³
United Kingdom	WEL STEL (ppm)	500 ppm
Norway	Local name	2-propanol (Isopropanol)
Norway	Grenseverdier (AN) (mg/m³)	245 mg/m³
Norway	Grenseverdier (AN) (ppm)	100 ppm
Switzerland	VME (mg/m³)	500 mg/m³
Switzerland	MAK (ppm)	200 ppm 25 ppm acetone (urina; fine dell'esposizione / del turno) 25 ppm acetone (sangue; fine dell'esposizione / del turno)
Switzerland	KZGW (mg/m³)	1000 mg/m³ max. 4x15 min./turno
Switzerland	KZGW (ppm)	400 ppm max. 4x15 min./turno
Australia	TWA (mg/m³)	999 mg/m³
Australia	TWA (ppm)	400 ppm
Australia	STEL (mg/m³)	1250 mg/m³
Australia	STEL (ppm)	500 ppm

propyl acetate (109-60-4)		
Austria	Remark (AT)	(gemessen als Momentanwert)
Czech Republic	Local name	n-Propylacetát
Czech Republic	Expoziční limity (PEL) (mg/m³)	800 mg/m³
Czech Republic	Expoziční limity (PEL) (ppm)	190 ppm

propyl acetate (109-60-4)		
Czech Republic	Expoziční limity (NPK-P) (mg/m³)	1000 mg/m³
Czech Republic	Expoziční limity (NPK-P) (ppm)	240 ppm
Czech Republic	Remark (CZ)	I
Denmark	Local name	n-Propylacetat
Denmark	Grænseværdie (langvarig) (mg/m³)	625 mg/m³
Denmark	Grænseværdie (langvarig) (ppm)	150 ppm
Denmark	Grænseværdie (kortvarig) (mg/m³)	1250 mg/m³
Denmark	Grænseværdie (kortvarig) (ppm)	300 ppm
Finland	Local name	1-Propyyliasetaatti
Finland	HTP-arvo (8h) (mg/m³)	420 mg/m³
Finland	HTP-arvo (8h) (ppm)	100 ppm
Finland	HTP-arvo (15 min)	850 mg/m³
Finland	HTP-arvo (15 min) (ppm)	200 ppm
France	Local name	Acétate de n-propyle
France	VME (mg/m³)	840 mg/m³
France	VME (ppm)	200 ppm
France	Note (FR)	Valeurs recommandées/admises
Hungary	Local name	PROPIL-ACETÁT
Hungary	AK-érték	840 mg/m³
Hungary	CK-érték	840 mg/m³
Hungary	Megjegyzések (HU)	b, i; I.
Latvia	Local name	Propilacetāts (etiķskābespropilesteris)
Latvia	OEL TWA (mg/m³)	200 mg/m³
Poland	Local name	Octan propylu
Poland	NDS (mg/m³)	200 mg/m³
Poland	NDSCh (mg/m³)	400 mg/m³
Portugal	Local name	Acetato de n-propilo
Portugal	OEL TWA (ppm)	200 ppm
Portugal	OEL STEL (ppm)	250 ppm
Slovakia	Local name	Propylacetát (octan propylový)
Slovakia	NPHV (priemerná) (mg/m³)	400 mg/m³
Slovakia	NPHV (priemerná) (ppm)	100 ppm
Slovakia	OEL STEL (mg/m³)	800 mg/m³
Slovakia	OEL STEL (ppm)	200 ppm
Slovenia	Local name	propilacetat
Slovenia	OEL TWA (mg/m³)	420 mg/m³
Slovenia	OEL TWA (ppm)	100 ppm
Slovenia	OEL STEL (mg/m³)	420 mg/m³
Slovenia	OEL STEL (ppm)	100 ppm
Spain	Local name	Acetato de n-propilo
Spain	VLA-ED (mg/m³)	849 mg/m³
Spain	VLA-ED (ppm)	200 ppm
Spain	VLA-EC (mg/m³)	1060 mg/m³
Spain	VLA-EC (ppm)	250 ppm
Sweden	Local name	Propylacetat
Sweden	nivågränsvärde (NVG) (mg/m³)	400 mg/m³
Sweden	nivågränsvärde (NVG) (ppm)	100 ppm
Sweden	kortidsvärde (KTV) (mg/m³)	800 mg/m³
Sweden	kortidsvärde (KTV) (ppm)	200 ppm

propyl acetate (109-60-4)		
Sweden	Anmärkning (SE)	V (Vägledande korttidsgränsvärde ska användas som ett rekommenderat högsta värde som inte bör överskridas)
Norway	Local name	n-propylacetat
Norway	Grenseverdier (AN) (mg/m³)	420 mg/m³
Norway	Grenseverdier (AN) (ppm)	100 ppm

1-Methoxy-2-propanol (107-98-2)		
EU	Local name	1-Methoxypropanol-2
EU	IOELV TWA (mg/m³)	375 mg/m³
EU	IOELV TWA (ppm)	100 ppm
EU	IOELV STEL (mg/m³)	568 mg/m³
EU	IOELV STEL (ppm)	150 ppm
EU	Notes	Skin
Austria	MAK (mg/m³)	187 mg/m³
Austria	MAK (ppm)	50 ppm
Austria	MAK Short time value (mg/m³)	187 mg/m³
Austria	MAK Short time value (ppm)	50 ppm
Austria	Remark (AT)	(gemessen als Momentanwert), (H)
Belgium	Limit value (mg/m³)	375 mg/m³
Belgium	Limit value (ppm)	100 ppm
Belgium	Short time value (mg/m³)	568 mg/m³
Belgium	Short time value (ppm)	150 ppm
Belgium	Remark (BE)	D
Czech Republic	Local name	1-Methoxy-2-propanol
Czech Republic	Expoziční limity (PEL) (mg/m³)	270 mg/m³
Czech Republic	Expoziční limity (PEL) (ppm)	73.17 ppm
Czech Republic	Expoziční limity (NPK-P) (mg/m³)	550 mg/m³
Czech Republic	Expoziční limity (NPK-P) (ppm)	149.05 ppm
Czech Republic	Remark (CZ)	D
Denmark	Local name	1-Methoxy-2-propanol (Propylenglycolmonomethylether)
Denmark	Grænseværdie (langvarig) (mg/m³)	185 mg/m³
Denmark	Grænseværdie (langvarig) (ppm)	50 ppm
Denmark	Grænseværdie (kortvarig) (mg/m³)	370 mg/m³
Denmark	Grænseværdie (kortvarig) (ppm)	100 ppm
Denmark	Anmærkninger (DK)	E (betyder, at stoffet har en EF-grænseværdi)
Finland	Local name	1-Metoksi-2-propanoli
Finland	HTP-arvo (8h) (mg/m³)	370 mg/m³
Finland	HTP-arvo (8h) (ppm)	100 ppm
Finland	HTP-arvo (15 min)	560 mg/m³
Finland	HTP-arvo (15 min) (ppm)	150 ppm
Finland	Huomautus (FI)	iho
France	Local name	Ether méthylique du propylène-glycol (1-Méthoxy-2-propanol)
France	VME (mg/m³)	188 mg/m³
France	VME (ppm)	50 ppm
France	VLE (mg/m³)	375 mg/m³
France	VLE (ppm)	100 ppm
France	Note (FR)	Peau
Germany	Local name	1-Methoxy-2-propanol
Germany	TRGS 900 Occupational exposure limit value (mg/m³)	370 mg/m³
Germany	TRGS 900 Occupational exposure limit value (ppm)	100 ppm
Germany	TRGS 900 Limitation of exposure peaks (mg/m³)	740 mg/m³
Germany	TRGS 900 Limitation of exposure peaks (ppm)	200 ppm

1-Methoxy-2-propanol (107-98-2)		
Germany	Remark (TRGS 900)	DFG,EU,Y
Hungary	Local name	1-METOXIPROPÁN-2-OL
Hungary	AK-érték	375 mg/m³
Hungary	CK-érték	568 mg/m³
Hungary	Megjegyzések (HU)	b; EU1
Ireland	OEL (8 hours ref) (mg/m³)	375 mg/m³
Ireland	OEL (8 hours ref) (ppm)	100 ppm
Ireland	OEL (15 min ref) (mg/m3)	568 mg/m³
Ireland	OEL (15 min ref) (ppm)	150 ppm
Italy	Local name	Metossipropanolo-2,1-
Italy	OEL TWA (mg/m³)	375 mg/m³
Italy	OEL TWA (ppm)	100 ppm
Italy	OEL STEL (mg/m³)	568 mg/m³
Italy	OEL STEL (ppm)	150 ppm
Latvia	Local name	1-Metoksi-2-propanols (propilēnglikola monometilēteris, monopropilēnglikolmetilēteris)
Latvia	OEL TWA (mg/m³)	375 mg/m³
Latvia	OEL TWA (ppm)	100 ppm
Latvia	OEL STEL (mg/m³)	568 mg/m³
Latvia	OEL STEL (ppm)	150 ppm
Lithuania	IPRV (mg/m³)	190 mg/m³
Lithuania	IPRV (ppm)	50 ppm
Lithuania	TPRV (mg/m³)	300 mg/m³
Lithuania	TPRV (ppm)	75 ppm
Netherlands	Local name	1-Methoxy-2-propanol
Netherlands	Grenswaarde TGG 8H (mg/m³)	375 mg/m³
Netherlands	Grenswaarde TGG 15MIN (mg/m³)	563 mg/m³
Netherlands	Remark (MAC)	(H)
Poland	Local name	1-Metoksypropan-2-ol
Poland	NDS (mg/m³)	180 mg/m³
Poland	NDSCh (mg/m³)	360 mg/m³
Portugal	Local name	1-Metoxi-2-propanol (PGME)
Portugal	OEL TWA (ppm)	50 ppm
Portugal	OEL STEL (ppm)	100 ppm
Slovakia	Local name	1-Metoxypropán-2-ol (propylénglykolmonometyléter)
Slovakia	NPHV (priemerná) (mg/m³)	375 mg/m³
Slovakia	NPHV (priemerná) (ppm)	100 ppm
Slovakia	OEL STEL (mg/m³)	568 mg/m³
Slovakia	OEL STEL (ppm)	150 ppm
Slovakia	Upozornenie (SK)	(K)
Slovenia	Local name	1-metoksi-2-propanol (propilenglikolmonometil eter)
Slovenia	OEL TWA (mg/m³)	375 mg/m³
Slovenia	OEL TWA (ppm)	100 ppm
Slovenia	OEL STEL (mg/m³)	562.5 mg/m³
Slovenia	OEL STEL (ppm)	150 ppm
Spain	Local name	1-Metoxipropan-2-ol (Éter 1-metílico de propilenglicol)
Spain	VLA-ED (mg/m³)	375 mg/m³
Spain	VLA-ED (ppm)	100 ppm
Spain	VLA-EC (mg/m³)	568 mg/m³
Spain	VLA-EC (ppm)	150 ppm

1-Methoxy-2-propanol (107-98-2)		
Spain	Notes	vía dérmica,VLI
Sweden	Local name	1-Metoxi-2-propanol
Sweden	nivågränsvärde (NVG) (mg/m³)	190 mg/m³
Sweden	nivågränsvärde (NVG) (ppm)	50 ppm
Sweden	kortidsvärde (KTV) (mg/m³)	300 mg/m³
Sweden	kortidsvärde (KTV) (ppm)	75 ppm
Sweden	Anmärkning (SE)	H
United Kingdom	WEL TWA (mg/m³)	375 mg/m³
United Kingdom	WEL TWA (ppm)	100 ppm
United Kingdom	WEL STEL (mg/m³)	560 mg/m³
United Kingdom	WEL STEL (ppm)	150 ppm
Norway	Local name	1-metoksy-2-propanol (Propylenglykolmonometyleter)
Norway	Grenseverdier (AN) (mg/m³)	180 mg/m³
Norway	Grenseverdier (AN) (ppm)	50 ppm
Norway	Merknader (NO)	H
Switzerland	VME (mg/m³)	360 mg/m³
Switzerland	MAK (ppm)	100 ppm 20 ppm (urina; fine dell'esposizione / del turno)
Switzerland	KZGW (mg/m³)	720 mg/m³
Switzerland	KZGW (ppm)	200 ppm
Australia	TWA (mg/m³)	375 mg/m³
Australia	TWA (ppm)	100 ppm
Australia	STEL (mg/m³)	1120 mg/m³
Australia	STEL (ppm)	300 ppm

ethanol (64-17-5)		
Austria	MAK (mg/m³)	1900 mg/m³
Austria	MAK (ppm)	1000 ppm
Austria	MAK Short time value (mg/m³)	3800 mg/m³ max. 3x60 min./Schicht (gemessen als Momentanwert)
Austria	MAK Short time value (ppm)	2000 ppm max. 3x60 min./Schicht (gemessen als Momentanwert)
Belgium	Limit value (mg/m³)	1907 mg/m³
Belgium	Limit value (ppm)	1000 ppm
Czech Republic	Local name	Ethanol
Czech Republic	Expoziční limity (PEL) (mg/m³)	1000 mg/m³
Czech Republic	Expoziční limity (PEL) (ppm)	530 ppm
Czech Republic	Expoziční limity (NPK-P) (mg/m³)	3000 mg/m³
Czech Republic	Expoziční limity (NPK-P) (ppm)	1590 ppm
Denmark	Local name	Ethanol (Ethylalkohol)
Denmark	Grænseværdie (langvarig) (mg/m³)	1900 mg/m³
Denmark	Grænseværdie (langvarig) (ppm)	1000 ppm
Denmark	Grænseværdie (kortvarig) (mg/m³)	3800 mg/m³
Denmark	Grænseværdie (kortvarig) (ppm)	2000 ppm
Finland	Local name	Etanoli
Finland	HTP-arvo (8h) (mg/m³)	1900 mg/m³
Finland	HTP-arvo (8h) (ppm)	1000 ppm
Finland	HTP-arvo (15 min)	2500 mg/m³
Finland	HTP-arvo (15 min) (ppm)	1300 ppm
France	Local name	Alcool éthylique
France	VME (mg/m³)	1900 mg/m³
France	VME (ppm)	1000 ppm
France	VLE (mg/m³)	9500 mg/m³
France	VLE (ppm)	5000 ppm

ethanol (64-17-5)		
Germany	Local name	Ethanol
Germany	TRGS 900 Occupational exposure limit value (mg/m³)	960 mg/m³
Germany	TRGS 900 Occupational exposure limit value (ppm)	500 ppm
Hungary	Local name	ETIL-ALKOHOL
Hungary	AK-érték	1900 mg/m³
Hungary	CK-érték	7600 mg/m³
Ireland	OEL (15 min ref) (ppm)	1000 ppm
Latvia	Local name	Etilspirts (etanols)
Latvia	OEL TWA (mg/m³)	1000 mg/m³
Lithuania	IPRV (mg/m³)	1000 mg/m³
Lithuania	IPRV (ppm)	500 ppm
Lithuania	TPRV (mg/m³)	1900 mg/m³
Lithuania	TPRV (ppm)	1000 ppm
Netherlands	Local name	Ethanol
Netherlands	Grenswaarde TGG 8H (mg/m³)	260 mg/m³
Netherlands	Grenswaarde TGG 15MIN (mg/m³)	1900 mg/m³
Poland	Local name	Etanol (alkohol etylowy)
Poland	NDS (mg/m³)	1900 mg/m³
Portugal	Local name	Etanol (Álcool etílico)
Portugal	OEL STEL (ppm)	1000 ppm
Slovakia	Local name	Etylalkohol (etanol)
Slovakia	NPHV (priemerná) (mg/m³)	960 mg/m³
Slovakia	NPHV (priemerná) (ppm)	500 ppm
Slovakia	OEL STEL (mg/m³)	1920 mg/m³
Slovakia	OEL STEL (ppm)	1000 ppm
Slovenia	Local name	etanol (etilalkohol)
Slovenia	OEL TWA (mg/m³)	1900 mg/m³
Slovenia	OEL TWA (ppm)	1000 ppm
Slovenia	OEL STEL (mg/m³)	7600 mg/m³
Slovenia	OEL STEL (ppm)	4000 ppm
Spain	Local name	Etanol (Alcohol etílico)
Spain	VLA-ED (mg/m³)	1910 mg/m³
Spain	VLA-ED (ppm)	1000 ppm
Spain	Notes	s,
Sweden	Local name	Etanol
Sweden	nivågränsvärde (NVG) (mg/m³)	1000 mg/m³
Sweden	nivågränsvärde (NVG) (ppm)	500 ppm
Sweden	kortidsvärde (KTV) (mg/m³)	1900 mg/m³
Sweden	kortidsvärde (KTV) (ppm)	1000 ppm
United Kingdom	WEL TWA (mg/m³)	1920 mg/m³
United Kingdom	WEL TWA (ppm)	1000 ppm
Norway	Local name	Etanol
Norway	Grenseverdier (AN) (mg/m³)	950 mg/m³
Norway	Grenseverdier (AN) (ppm)	500 ppm
Switzerland	VME (mg/m³)	960 mg/m³
Switzerland	MAK (ppm)	500 ppm
Switzerland	KZGW (mg/m³)	1920 mg/m³
Switzerland	KZGW (ppm)	1000 ppm
Australia	TWA (mg/m³)	1920 mg/m³
Australia	TWA (ppm)	1000 ppm

8.2. Exposure controls

Appropriate engineering controls:

Avoid creating mist or spray. Avoid splashing. Either local exhaust or general room ventilation is usually required.

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

It is a good industrial hygiene practice to minimize skin contact. Wear suitable gloves. Nitrile rubber gloves. EN374

Eye protection:

In case of splashing or aerosol production: protective goggles. EN 166

Respiratory protection:

In case of inadequate ventilation wear respiratory protection. Use an approved respirator equipped with oil/mist cartridges. EN 12083

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	:	Opaque liquid.
Colour	:	Black.
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	:	No data available
Boiling point	:	79 °C (estimated from ethanol content)
Flash point	:	16 °C (estimated from ethanol content)
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	No data available
Vapour pressure	:	No data available
Relative vapour density at 20 °C	:	No data available
Relative density	:	No data available
Density	:	1.05 g/ml
Solubility	:	No data available
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
Explosive limits	:	No data available

9.2. Other information

VOC content	:	72 % / 6.3 lbs/gal / 756 g/L

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Avoid excessive heat or cold. Direct sunlight. Heat. Keep away from sources of ignition. Open flame. Overheating. Sparks.

10.5. Incompatible materials

Strong oxidizers.

10.6. Hazardous decomposition products

May release flammable gases. Carbon oxides (CO, CO2).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified (Based on available data, the classification criteria are not met)

(2-Methoxymethylethoxy)-propanol (34590-94-8)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 19020 mg/kg
LC50 inhalation rat (mg/l)	> 1667 mg/l/4h
LC50 inhalation rat (Dust/Mist - mg/l/4h)	> 1667 mg/l/4h

Ethyl acetate (141-78-6)	
LD50 oral rat	5620 mg/kg
LD50 dermal rabbit	> 20000 mg/kg
LC50 inhalation rat (mg/l)	> 18 mg/l/4h

Isopropanol (67-63-0)	
LD50 oral rat	5840 mg/kg
LD50 dermal rabbit	16.4 ml/kg
LC50 inhalation rat (ppm)	> 10000 ppm/4h

propyl acetate (109-60-4)	
LD50 oral rat	8700 mg/kg
LD50 dermal rabbit	> 17800 mg/kg
LC50 inhalation rat (mg/l)	32 mg/l/4h

1-Methoxy-2-propanol (107-98-2)	
LD50 oral rat	4016 mg/kg bodyweight
LD50 dermal rat	> 2000 mg/kg bodyweight
LC50 inhalation rat (ppm)	> 7000 ppm 6 hr

bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate (41556-26-7)	
LD50 oral rat	2369 (2369 - 3920) mg/kg

Polyethylene glycol di[3-[3-(2H-benzotriazol-2- yl)-5-tert-butyl-4-hydroxyphenyl]- 1-oxopropyl] ether (104810-47-1)	
LD50 oral rat	> 5000 mg/kg bodyweight
LD50 dermal rat	> 2000 mg/kg bodyweight

Poly(oxy-1,2-ethanediyl), a-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-w-hydroxy- (104810-48-2)	
LD50 oral rat	> 5000 mg/kg bodyweight
LD50 dermal rat	> 2000 mg/kg bodyweight

C.I. Solvent Black 29 (117527-94-3)	
LD50 oral rat	> 5000 mg/kg bodyweight
LD50 dermal rat	> 2000 mg/kg bodyweight

ethanol (64-17-5)	
LD50 oral rat	10470 mg/kg
LD50 dermal rabbit	> 20000 mg/kg
LC50 inhalation rat (mg/l)	133.8 mg/l/4h

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)

Serious eye damage/irritation : Not classified (Based on available data, the classification criteria are not met)

Respiratory or skin sensitisation : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)

Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)

Reproductive toxicity : Not classified

STOT-single exposure : May cause drowsiness or dizziness.

STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met)

Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : May cause long lasting harmful effects to aquatic life.

(2-Methoxymethylethoxy)-propanol (34590-94-8)	
LC50 fish 1	> 1000 mg/l Poecilia reticulata
ErC50 (algae)	> 1000 mg/l

Ethyl acetate (141-78-6)	
LC50 fish 1	220 mg/l
EC50 Daphnia 1	1200 mg/l
NOEC chronic fish	< 9.35 mg/l

Isopropanol (67-63-0)	
LC50 fish 1	10000 mg/l

propyl acetate (109-60-4)	
LC50 fish 1	60 mg/l 96 h
EC50 Daphnia 1	91.5 mg/l 48 h

1-Methoxy-2-propanol (107-98-2)	
LC50 fish 1	20800 mg/l
EC50 Daphnia 1	23300 mg/l
ErC50 (algae)	> 1000 mg/l

bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate (41556-26-7)	
LC50 fish 1	0.97 mg/l 96 h
EC50 Daphnia 1	20 mg/l 24 h

Polyethylene glycol di[3-[3-(2H-benzotriazol-2- yl)-5-tert-butyl-4-hydroxyphenyl]- 1-oxopropyl] ether (104810-47-1)	
LC50 fish 1	2.8 mg/l Oncorhynchus mykiss
EC50 Daphnia 1	4 mg/l
ErC50 (algae)	> 9 mg/l
NOEC (chronic)	1 mg/l

Poly(oxy-1,2-ethanediyl), a-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-w-hydroxy- (104810-48-2)	
LC50 fish 1	2.8 mg/l Oncorhynchus mykiss
EC50 Daphnia 1	4 mg/l
ErC50 (algae)	> 9 mg/l
NOEC (chronic)	1 mg/l

C.I. Solvent Black 29 (117527-94-3)	
LC50 fish 1	2 mg/l 96 h

ethanol (64-17-5)	
LC50 fish 1	14200 mg/l
EC50 Daphnia 1	5012 mg/l

12.2. Persistence and degradability

(2-Methoxymethylethoxy)-propanol (34590-94-8)	
Persistence and degradability	Readily biodegradable.

Ethyl acetate (141-78-6)	
Persistence and degradability	Readily biodegradable.

Isopropanol (67-63-0)	
Persistence and degradability	Readily biodegradable.

propyl acetate (109-60-4)	
Persistence and degradability	Readily biodegradable.
Biodegradation	62 % 5 d

1-Methoxy-2-propanol (107-98-2)	
Persistence and degradability	Readily biodegradable.
Biodegradation	96 % 28 d

bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate (41556-26-7)	
Biodegradation	38 % 28 d

Polyethylene glycol di[3-[3-(2H-benzotriazol-2- yl)-5-tert-butyl-4-hydroxyphenyl]- 1-oxopropyl] ether (104810-47-1)	
Persistence and degradability	Not readily biodegradable.
Biodegradation	24 %

Poly(oxy-1,2-ethanediyl), a-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-w-hydroxy- (104810-48-2)	
Persistence and degradability	Not readily biodegradable.
Biodegradation	24 %

C.I. Solvent Black 29 (117527-94-3)	
Persistence and degradability	Not readily biodegradable.

ethanol (64-17-5)	
Biodegradation	> 96 % 28 d

12.3. Bioaccumulative potential

Ethyl acetate (141-78-6)	
Bioaccumulative potential	Not expected to bioaccumulate.

Isopropanol (67-63-0)	
Bioaccumulative potential	Not expected to bioaccumulate.

propyl acetate (109-60-4)	
Log Pow	1.23

1-Methoxy-2-propanol (107-98-2)	
Bioaccumulative potential	Not expected to bioaccumulate.

bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate (41556-26-7)	
Log Pow	0.37

Polyethylene glycol di[3-[3-(2H-benzotriazol-2- yl)-5-tert-butyl-4-hydroxyphenyl]- 1-oxopropyl] ether (104810-47-1)	
Bioconcentration factor (BCF REACH)	34

Poly(oxy-1,2-ethanediyl), a-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-w-hydroxy- (104810-48-2)	
Bioconcentration factor (BCF REACH)	34

C.I. Solvent Black 29 (117527-94-3)	
Log Pow	< 3.7 @ 20 °C

ethanol (64-17-5)	
Bioaccumulative potential	Not expected to bioaccumulate.

12.4. Mobility in soil

Dura-Ink 80	
Ecology - soil	Not established.

12.5. Results of PBT and vPvB assessment

Dura-Ink 80
PBT: not yet assessed
vPvB: not yet assessed

Component	
Ethyl acetate (141-78-6)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

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.

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.
08 00 00 - WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS
08 01 00 - wastes from MFSU and removal of paint and varnish
08 01 13* - sludges from paint or varnish containing organic solvents or other dangerous substances

HP Code	:	HP13 - “Sensitising:” waste which contains one or more substances known to cause sensitising effects to the skin or the respiratory organs. HP14 - “Ecotoxic:” waste which presents or may present immediate or delayed risks for one or more sectors of the environment 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.

SECTION 14: Transport information

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

14.1. UN number

UN-No. (ADR)	:	1210
UN-No. (IMDG)	:	1210
UN-No. (IATA)	:	1210
UN-No. (ADN)	:	1210
UN-No. (RID)	:	1210

14.2. UN proper shipping name

Proper Shipping Name (ADR)	:	PRINTING INK
Proper Shipping Name (IMDG)	:	PRINTING INK
Proper Shipping Name (IATA)	:	PRINTING INK
Proper Shipping Name (ADN)	:	PRINTING INK
Proper Shipping Name (RID)	:	PRINTING INK
Transport document description (ADR)	:	UN 1210 PRINTING INK, 3, II, (D/E)
Transport document description (IMDG)	:	UN 1210 PRINTING INK, 3, II
Transport document description (IATA)	:	UN 1210 PRINTING INK, 3, II
Transport document description (ADN)	:	UN 1210 PRINTING INK, 3, II
Transport document description (RID)	:	UN 1210 PRINTING INK, 3, II

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) : II

Packing group (IMDG) : II

Packing group (IATA) : II

Packing group (ADN) : II

Packing group (RID) : II

14.5. Environmental hazards

Dangerous for the environment : No

Marine pollutant : No

Other information : No supplementary information available

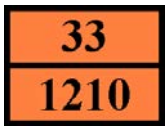
14.6. Special precautions for user

- Overland transport

Classification code (ADR) : F1

Hazard identification number (Kemler No.) : 33

Orange plates :



Tunnel restriction code (ADR) : D/E

- Transport by sea

EmS-No. (Fire) : F-E

EmS-No. (Spillage) : S-D

Stowage category (IMDG) : B

Properties and observations (IMDG) : Fluid or viscous liquid containing colouring matter in solution or suspension. Miscibility with water depends upon the solvent.

- 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

VOC content : 72 % / 6.3 lbs/gal / 756 g/L

15.1.2. National regulations

All ingredients are listed in the Toxic Substances Control Act (TSCA).
All ingredients are listed on the Canadian Domestic Substances List (DSL) or Non-Domestic Substances List (NDSL).

Germany

VwVwS Annex reference	: Water hazard class (WGK) 1, low hazard to waters (Classification according to VwVwS, Annex 4)
WGK remark	: Classification based on the components in compliance withVerwaltungsvorschrift wassergefährdender Stoffe (VwVwS)
Storage class (LGK)	: LGK 3 - Flammable liquids
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	: ethanol is listed
SZW-lijst van mutagene stoffen	: None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding	: ethanol is listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid	: ethanol is listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling	: ethanol is listed

Denmark

Class for fire hazard	: Class I-1
Store unit	: 1 liter
Classification remarks	: F <Flam. Liq. 2>; Emergency management guidelines for the storage of flammable liquids must be followed
Recommendations Danish Regulation	: 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:
Composition/information on ingredients.

Abbreviations and acronyms:

	ACGIH (American Conference of Government Industrial Hygienists)
	ATE: Acute Toxicity Estimate

	CAS (Chemical Abstracts Service) number
	CLP: Classification, Labelling, Packaging.
	DNEL: Derived No Effect Level
	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
	NOEC: No Observable Effect Concentration
	OSHA: Occupational Safety & Health Administration
	PBT: Persistent, Bioaccumulative, Toxic
	PNEC: Predicted No Effect Level
	STEL: Short Term Exposure Limits
	TSCA: Toxic Substances Control Act
	TWA: Time Weighted Average

Data sources : ESIS (European chemincal Substances Information System; accessed at: http://esis.jrc.ec.europa.eu/index.php?PGM=cla.

European Chemicals Agency (ECHA) Registered Substances list. Accessed at http://echa.europa.eu/.

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.

OSHA 29CFR 1910.1200 Hazard Communication Standard.

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.

TSCA Chemical Substance Inventory. Accessed at http://www.epa.gov/oppt/existingchemicals/pubs/tscainventory/howto.html.

Other information : None.

Full text of H- and EUH-statements:

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
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Skin Sens. 1	Skin sensitisation, Category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H225	Highly flammable liquid and vapour
H226	Flammable liquid and vapour
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness
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
H412	Harmful 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. 2	H225	On basis of test data
Skin Sens. 1	H317	Expert judgment
STOT SE 3	H336	Calculation method
Aquatic Chronic 3	H412	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