

Safety Data Sheet

according to Regulation (EC) No. 453/2010

Date of issue: 18/09/2014

Revision date: 24/03/2015

Version: 1.1

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

1.1. Product identifier

Product form : Mixture
Trade name : Thermomelt® HEAT-STIK Markers 206 °F (97 °C), 550 °F (288 °C), 213 °F (100, 101 °C)

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 : Temperature indicator

1.2.2. Uses advised against

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 Minsk 220115	+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 Tottleben 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	Giflinjen 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

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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]

Skin Irrit. 2 H315

Eye Irrit. 2 H319

Full text of H-phrases: 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) :



GHS07

Signal word (CLP) :

Warning

Hazard statements (CLP) :

H315 - Causes skin irritation
H319 - Causes serious eye irritation

Precautionary statements (CLP) :

P264 - Wash hands thoroughly after handling
P280 - Wear eye protection, protective gloves
P302+P352 - IF ON SKIN: Wash with plenty of water
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P321 - Specific treatment (see First aid measures on this label)
P332+P313 - If skin irritation occurs: Get medical advice/attention
P337+P313 - If eye irritation persists: Get medical advice/attention
P362+P364 - Take off contaminated clothing and wash it before reuse

2.3. Other hazards

PBT: not yet assessed

vPvB: not yet assessed

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
azelaic acid	(CAS No) 123-99-9 (EC no) 204-669-1	0 – 90	Skin Irrit. 2, H315 Eye Irrit. 2, H319
5-nitroisophthalic acid	(CAS No) 618-88-2 (EC no) 210-568-3	0 – 15	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
undecanedioic acid	(CAS No) 1852-04-6 (EC no) 217-440-6	0 – 10	Skin Irrit. 2, H315 Eye Irrit. 2, H319
sebacic acid	(CAS No) 111-20-6 (EC no) 203-845-5	0 – 5	Not classified
suberic acid	(CAS No) 505-48-6 (EC no) 208-010-9	0 – 5	Eye Irrit. 2, H319
2-methoxy-1-methylethyl acetate	(CAS No) 108-65-6 (EC no) 203-603-9 (EC index no) 607-195-00-7	0 – 1	Flam. Liq. 3, H226
1-Methoxy-2-propanol	(CAS No) 107-98-2 (EC no) 203-539-1 (EC index no) 603-064-00-3	0 – 1	Flam. Liq. 3, H226 STOT SE 3, H336
1,2,4-trimethylbenzene	(CAS No) 95-63-6 (EC no) 202-436-9 (EC index no) 601-043-00-3	0 – 1	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 2, H411
cumene	(CAS No) 98-82-8 (EC no) 202-704-5 (EC index no) 601-024-00-X	0 – 0.1	Flam. Liq. 3, H226 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 2, H411

Full text of R- and H-phrases: 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 you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- First-aid measures after skin contact : Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.

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

- Symptoms/injuries after skin contact : Causes skin irritation.
- Symptoms/injuries after eye contact : Causes serious eye irritation.

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. Foam. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : No specific fire or explosion hazard.
- Hazardous decomposition products in case of fire : Burning produces irritating, toxic and noxious fumes. hydrogen chloride. Sulphur oxides. Carbon dioxide. Carbon monoxide. Oxides.

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. 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 fire/flame resistant/retardant clothing. Wear a self contained breathing apparatus. EN469.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Avoid contact with skin and eyes. Avoid creating or spreading dust.

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6.1.1. For non-emergency personnel

Protective equipment : Chemical goggles or safety glasses. Wear suitable gloves. rubber.
Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Chemical goggles or safety glasses. Wear suitable gloves. rubber.
Emergency procedures : Ventilate area.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Contain and collect as any solid. Avoid generating dust.
Methods for cleaning up : Take up in non-combustible absorbent material and shove into container for disposal. Minimize generation of dust.

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

Precautions for safe handling : Avoid breathing dust, fume.
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 : Store in a dry, cool and well-ventilated place.
Incompatible products : Strong acids. Strong oxidizers. Strong bases.

7.3. Specific end use(s)

Temperature indicator.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

sebacic acid (111-20-6)		
Lithuania	IPRV (mg/m ³)	4 mg/m ³
1-Methoxy-2-propanol (107-98-2)		
EU	IOELV TWA (mg/m ³)	375 mg/m ³
EU	IOELV TWA (ppm)	100 ppm
EU	IOELV STEL (mg/m ³)	568 mg/m ³
EU	IOELV STEL (ppm)	150 ppm
EU	Notes	Skin
Austria	MAK (mg/m ³)	187 mg/m ³
Austria	MAK (ppm)	50 ppm
Austria	MAK Short time value (mg/m ³)	187 mg/m ³
Austria	MAK Short time value (ppm)	50 ppm
Austria	Remark (AT)	(gemessen als Momentanwert), (H)
Belgium	Limit value (mg/m ³)	375 mg/m ³
Belgium	Limit value (ppm)	100 ppm
Belgium	Short time value (mg/m ³)	568 mg/m ³
Belgium	Short time value (ppm)	150 ppm
Belgium	Remark (BE)	D
Czech Republic	Expoziční limity (PEL) (mg/m ³)	270 mg/m ³
Czech Republic	Expoziční limity (PEL) (ppm)	73.17 ppm
Czech Republic	Expoziční limity (NPK-P) (mg/m ³)	550 mg/m ³
Czech Republic	Expoziční limity (NPK-P) (ppm)	149.05 ppm
Czech Republic	Remark (CZ)	D
Denmark	Grænseværdie (langvarig) (mg/m ³)	185 mg/m ³
Denmark	Grænseværdie (langvarig) (ppm)	50 ppm
Denmark	Grænseværdie (kortvarig) (mg/m ³)	370 mg/m ³

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1-Methoxy-2-propanol (107-98-2)		
Denmark	Grænseværdie (kortvarig) (ppm)	100 ppm
Finland	HTP-arvo (8h) (mg/m ³)	370 mg/m ³
Finland	HTP-arvo (8h) (ppm)	100 ppm
Finland	HTP-arvo (15 min)	560 mg/m ³
Finland	HTP-arvo (15 min) (ppm)	150 ppm
Finland	Huomautus (FI)	iho
France	VME (mg/m ³)	188 mg/m ³
France	VME (ppm)	50 ppm
France	VLE (mg/m ³)	375 mg/m ³
France	VLE (ppm)	100 ppm
France	Note (FR)	Peau
Germany	TRGS 900 Occupational exposure limit value (mg/m ³)	370 mg/m ³
Germany	TRGS 900 Occupational exposure limit value (ppm)	100 ppm
Germany	TRGS 900 Limitation of exposure peaks (mg/m ³)	740 mg/m ³
Germany	TRGS 900 Limitation of exposure peaks (ppm)	200 ppm
Hungary	AK-érték	375 mg/m ³
Hungary	CK-érték	568 mg/m ³
Ireland	OEL (8 hours ref) (mg/m ³)	375 mg/m ³
Ireland	OEL (8 hours ref) (ppm)	100 ppm
Ireland	OEL (15 min ref) (mg/m ³)	568 mg/m ³
Ireland	OEL (15 min ref) (ppm)	150 ppm
Lithuania	IPRV (mg/m ³)	190 mg/m ³
Lithuania	IPRV (ppm)	50 ppm
Lithuania	TPRV (mg/m ³)	300 mg/m ³
Lithuania	TPRV (ppm)	75 ppm
Netherlands	Grenswaarde TGG 8H (mg/m ³)	375 mg/m ³
Netherlands	Grenswaarde TGG 15MIN (mg/m ³)	563 mg/m ³
Netherlands	Remark (MAC)	(H)
Poland	NDS (mg/m ³)	180 mg/m ³
Poland	NDSCh (mg/m ³)	360 mg/m ³
Slovakia	NPHV (priemerná) (mg/m ³)	375 mg/m ³
Slovakia	NPHV (priemerná) (ppm)	100 ppm
Slovakia	Upozornenie (SK)	(K)
Spain	VLA-ED (mg/m ³)	375 mg/m ³
Spain	VLA-ED (ppm)	100 ppm
Spain	VLA-EC (mg/m ³)	568 mg/m ³
Spain	VLA-EC (ppm)	150 ppm
Spain	Notes	vía dérmica, VLI
Sweden	nivågränsvärde (NVG) (mg/m ³)	190 mg/m ³
Sweden	nivågränsvärde (NVG) (ppm)	50 ppm
Sweden	kortidsvärde (KTV) (mg/m ³)	300 mg/m ³
Sweden	kortidsvärde (KTV) (ppm)	75 ppm
Sweden	Anmärkning (SE)	H
United Kingdom	WEL TWA (mg/m ³)	375 mg/m ³
United Kingdom	WEL TWA (ppm)	100 ppm
United Kingdom	WEL STEL (mg/m ³)	560 mg/m ³
United Kingdom	WEL STEL (ppm)	150 ppm
Norway	Gjennomsnittsverdier (AN) (mg/m ³)	180 mg/m ³
Norway	Gjennomsnittsverdier (AN) (ppm)	50 ppm
Norway	Merknader (NO)	H

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1-Methoxy-2-propanol (107-98-2)		
Switzerland	VME (mg/m ³)	360 mg/m ³
Switzerland	VME (ppm)	100 ppm 20 ppm (urina; fine dell'esposizione / del turno)
Switzerland	VLE (mg/m ³)	720 mg/m ³
Switzerland	VLE (ppm)	200 ppm
1,2,4-trimethylbenzene (95-63-6)		
Denmark	Grænseværdie (kortvarig) (mg/m ³)	200 mg/m ³
Denmark	Grænseværdie (kortvarig) (ppm)	40 ppm
Germany	TRGS 900 Limitation of exposure peaks (mg/m ³)	200 mg/m ³
Germany	TRGS 900 Limitation of exposure peaks (ppm)	40 ppm
Lithuania	IPRV (mg/m ³)	100 mg/m ³
Lithuania	IPRV (ppm)	20 ppm
Lithuania	Remark (LT)	Ta pati RV, iðreikõta mg/m ³ , yra taikoma kitiems polialkilbenzenams.
Netherlands	Grenswaarde TGG 8H (mg/m ³)	100 mg/m ³
Netherlands	Grenswaarde TGG 15MIN (mg/m ³)	200 mg/m ³
Slovakia	NPHV (priemerná) (mg/m ³)	100 mg/m ³
Slovakia	NPHV (priemerná) (ppm)	20 ppm
Sweden	kortidsvärde (KTV) (mg/m ³)	170 mg/m ³
Sweden	kortidsvärde (KTV) (ppm)	35 ppm
Sweden	Anmärkning (SE)	55
United Kingdom	WEL TWA (mg/m ³)	125 mg/m ³
United Kingdom	WEL TWA (ppm)	25 ppm
cumene (98-82-8)		
Denmark	Grænseværdie (kortvarig) (mg/m ³)	200 mg/m ³
Denmark	Grænseværdie (kortvarig) (ppm)	40 ppm
Finland	Huomautus (FI)	iho
France	Note (FR)	Peau
Germany	TRGS 900 Limitation of exposure peaks (mg/m ³)	250 mg/m ³
Germany	TRGS 900 Limitation of exposure peaks (ppm)	50 ppm
Germany	TRGS 903 (BGW)	2 mg/l Isopropylbenzol (Blut; Expositionsende bzw. Schichtende) 50 mg/l 2-Phenylpropan-2-ol (Urin; Expositionsende bzw. Schichtende)
Slovakia	NPHV (priemerná) (mg/m ³)	100 mg/m ³
Slovakia	NPHV (priemerná) (ppm)	20 ppm
Slovakia	Upozornenie (SK)	(K)
Spain	VLA-ED (mg/m ³)	100 mg/m ³
Spain	VLA-ED (ppm)	20 ppm
Spain	VLA-EC (mg/m ³)	250 mg/m ³
Spain	VLA-EC (ppm)	50 ppm
Spain	Notes	vía dérmica, VLI
Sweden	Anmärkning (SE)	H
2-methoxy-1-methylethyl acetate (108-65-6)		
Denmark	Grænseværdie (kortvarig) (mg/m ³)	550 mg/m ³
Denmark	Grænseværdie (kortvarig) (ppm)	100 ppm
Finland	Huomautus (FI)	iho
France	Note (FR)	Peau
Germany	TRGS 900 Limitation of exposure peaks (mg/m ³)	270 mg/m ³
Germany	TRGS 900 Limitation of exposure peaks (ppm)	50 ppm
Slovakia	NPHV (priemerná) (mg/m ³)	275 mg/m ³
Slovakia	NPHV (priemerná) (ppm)	50 ppm
Slovakia	Upozornenie (SK)	(K)

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2-methoxy-1-methylethyl acetate (108-65-6)		
Spain	VLA-ED (mg/m ³)	275 mg/m ³
Spain	VLA-ED (ppm)	50 ppm
Spain	VLA-EC (mg/m ³)	550 mg/m ³
Spain	VLA-EC (ppm)	100 ppm
Spain	Notes	VLI
Sweden	Anmärkning (SE)	H

8.2. Exposure controls

Appropriate engineering controls	: Avoid dispersal of dust in the air (ie, clearing dust surfaces with compressed air). Either local exhaust or general room ventilation is usually required.
Personal protective equipment	: Avoid all unnecessary exposure.
Hand protection	: Wear suitable gloves. rubber. Wear thermal protective gloves when working around hot surfaces. EN 374.
Eye protection	: Chemical goggles or safety glasses. EN 166.
Respiratory protection	: In case of inadequate ventilation wear respiratory protection. Use air-purifying respirator equipped with particulate filtering cartridges. EN 12083.
Thermal hazard protection	: Flame retardant clothing should be used when handling in molten state.
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	: Solid
Appearance	: A solid crayon-like marker.
Colour	: white.
Odour	: No data available
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: Varies per product
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 215 °C (206 °F Marker)
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
Solubility	: No data available
Log Pow	: < 1
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	: 0 %
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SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known.

10.2. Chemical stability

Stable at ambient temperature and under normal conditions of use.

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10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Avoid creating or spreading dust. Contact with incompatible materials.

10.5. Incompatible materials

Strong oxidizing agents. Strong bases. Strong acids.

10.6. Hazardous decomposition products

Burning produces irritating, toxic and noxious fumes. Carbon oxides (CO, CO₂). hydrogen chloride. Potassium oxides. Sulphur oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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

5-nitroisophthalic acid (618-88-2)	
LD50 oral rat	5000 mg/kg 14 d
LC50 inhalation rat (mg/l)	> 11370 mg/m ³ 3 h
ATE CLP (oral)	5000.000 mg/kg bodyweight

sebacic acid (111-20-6)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 2000 mg/kg

azelaic acid (123-99-9)	
LD50 oral rat	> 2000 mg/kg read-across Octanoic Acid (mixed isomers)
LD50 dermal rabbit	> 2000 mg/kg read-across stearic acid
LC50 inhalation rat (mg/l)	> 0.1621 mg/l/4h read-across Octanoic Acid (mixed isomers)

undecanedioic acid (1852-04-6)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 6000 mg/kg

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
ATE CLP (oral)	4016.000 mg/kg bodyweight

1,2,4-trimethylbenzene (95-63-6)	
LD50 oral rat	3415 mg/kg
LD50 dermal rat	3440 mg/kg
LC50 inhalation rat (ppm)	954 ppm
ATE CLP (oral)	3415.000 mg/kg bodyweight
ATE CLP (dermal)	3440.000 mg/kg bodyweight
ATE CLP (dust,mist)	1.500 mg/l/4h

cumene (98-82-8)	
LD50 oral rat	4000 mg/kg
LD50 dermal rabbit	10600 mg/kg
LC50 inhalation rat (mg/l)	22.1 mg/l
LC50 inhalation rat (ppm)	4510 ppm/4h
ATE CLP (oral)	4000.000 mg/kg bodyweight
ATE CLP (dermal)	10600.000 mg/kg bodyweight
ATE CLP (gases)	4510.000 ppmv/4h
ATE CLP (vapours)	22.100 mg/l/4h
ATE CLP (dust,mist)	22.100 mg/l/4h

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
ATE CLP (oral)	8532.000 mg/kg bodyweight

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Causes serious eye irritation.

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Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met)
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 (Based on available data, the classification criteria are not met)
Specific target organ toxicity (single exposure)	: Not classified (Based on available data, the classification criteria are not met)
Specific target organ toxicity (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

5-nitroisophthalic acid (618-88-2)	
LC50 fish 1	3861.279 mg/l 96 h
EC50 Daphnia 1	2044.325 mg/l 48 h
sebacic acid (111-20-6)	
LC50 fish 1	> 100 mg/l Danio rerio 96 h; no mortality was observed
EC50 Daphnia 1	> 100 mg/l 48 h
azelaic acid (123-99-9)	
LC50 fish 1	> 16 mg/l 96 h; read-across decanoic acid
EC50 Daphnia 1	> 20 mg/l 48 h; read-across decanoic acid
NOEC chronic fish	6.4 mg/l danio rerio 28 days; read-across sodium laurate
undecanedioic acid (1852-04-6)	
LC50 fish 1	> 100 mg/l 96 h
EC50 Daphnia 1	> 100 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
1,2,4-trimethylbenzene (95-63-6)	
LC50 fish 1	7.72 mg/l
LC50 other aquatic organisms 1	3.6 mg/l
EC50 other aquatic organisms 1	2.356 mg/l
cumene (98-82-8)	
LC50 fish 1	4.8 mg/l
EC50 other aquatic organisms 1	2.14 mg/l
NOEC (acute)	1.9 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

12.2. Persistence and degradability

5-nitroisophthalic acid (618-88-2)	
Biodegradation	50 % 38 d
sebacic acid (111-20-6)	
Persistence and degradability	Readily biodegradable.
azelaic acid (123-99-9)	
Persistence and degradability	Readily biodegradable.
undecanedioic acid (1852-04-6)	
Persistence and degradability	Readily biodegradable.
1-Methoxy-2-propanol (107-98-2)	
Persistence and degradability	Readily biodegradable.
Biodegradation	96 % 28 d

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cumene (98-82-8)	
Persistence and degradability	May cause long-term adverse effects in the environment.
2-methoxy-1-methylethyl acetate (108-65-6)	
Persistence and degradability	Readily biodegradable.
Biodegradation	89 % 10 d

12.3. Bioaccumulative potential

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Log Pow	< 1
5-nitroisophthalic acid (618-88-2)	
BCF fish 1	3.2
Log Pow	1.5735
Bioaccumulative potential	Not expected to bioaccumulate.
sebacic acid (111-20-6)	
Log Pow	1.5
azelaic acid (123-99-9)	
Log Pow	1.7
Bioaccumulative potential	May bioaccumulate.
undecanedioic acid (1852-04-6)	
Log Pow	2.8
1-Methoxy-2-propanol (107-98-2)	
Bioaccumulative potential	Not expected to bioaccumulate.
cumene (98-82-8)	
Bioaccumulative potential	Not established.
2-methoxy-1-methylethyl acetate (108-65-6)	
Log Pow	0.43

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

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PBT: not yet assessed	
vPvB: not yet assessed	

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Sewage disposal recommendations	: Do not dispose of waste into sewer.
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.
H code	: H4 - 'Irritant': non-corrosive substances and preparations which, through immediate, prolonged or repeated contact with the skin or mucous membrane, can cause inflammation.

SECTION 14: Transport information

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

14.1. UN number

Not considered a dangerous good for transport regulations

14.2. UN proper shipping name

Proper Shipping Name (ADR) :

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

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14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

14.6.1. Overland transport

No additional information available

14.6.2. Transport by sea

No additional information available

14.6.3. Inland waterway transport

Carriage prohibited (ADN) : No

14.7. Transport in bulk according to Annex II of MARPOL 73/78 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 substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

VOC content : 0 %

15.1.2. National regulations

Germany

Water hazard class (WGK) : 1 - low hazard to waters

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

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

according to Regulation (EC) No. 453/2010

Indication of changes:

Revision : Added. 213 °F.

Abbreviations and acronyms:

	ACGIH (American Conference of Government Industrial Hygienists)
	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
	PNEC: Predicted No Effect Level
	STEL: Short Term Exposure Limits
	TSCA: Toxic Substances Control Act
	TWA: Time Weight Average

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Data sources

: ACGIH 2000.

Canadian Centre for Occupational Health and Safety. Accessed at: http://www.ccohs.ca/oshanswers/legisl/whmis_classifi.html.

ESIS (European chemical 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 R-, H- and EUH-phrases:

Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H226	Flammable liquid and vapour
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H411	Toxic to aquatic life with long lasting effects
R10	Flammable
R20	Harmful by inhalation
R36	Irritating to eyes
R36/37/38	Irritating to eyes, respiratory system and skin
R36/38	Irritating to eyes and skin
R37	Irritating to respiratory system
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R65	Harmful: may cause lung damage if swallowed
R67	Vapours may cause drowsiness and dizziness
N	Dangerous for the environment
Xi	Irritant
Xn	Harmful

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Skin Irrit. 2	H315	Calculation method
Eye Irrit. 2	H319	Calculation method

LA-CO EU CLP SDS

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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