

WS-3/8 Paintstik® MARKER, WS-454 Paintstik® MARKER**Safety Data Sheet**

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EC) No. 453/2010

Date of issue: 13/07/2015

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Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Product form : Mixture
 Product name : WS-3/8 Paintstik® MARKER, WS-454 Paintstik® MARKER
 Synonyms : WS-3/8 Paintstik® MARKER - Red, White, Black, Yellow
 WS-454 Paintstik® MARKER - Green, Orange, White, Yellow

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

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 Combès.
 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/Antigifocentrum 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	Gifflinjen 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

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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]

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

EUH-statements : EUH210 - Safety data sheet available on request

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

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]
limestone	(CAS No) 1317-65-3 (EC no) 215-279-6	0 – 65	Not classified
titanium dioxide	(CAS No) 13463-67-7 (EC no) 236-675-5	0 – 20	Not classified
Paraffin waxes and Hydrocarbon waxes	(CAS No) 8002-74-2 (EC no) 232-315-6	0 – 20	Not classified
Triethanolamine	(CAS No) 102-71-6 (EC no) 203-049-8	0 – 20	Not classified
Carbon black	(CAS No) 1333-86-4 (EC no) 215-609-9	0 – 10	Carc. 2, H351 *bound
4-[[4-(aminocarbonyl)phenyl]azo]-N-(2-ethoxyphenyl)-3-hydroxynaphthalene-2-carboxamide, C.I. Pigment Red 170 (naphthol <1%)	(CAS No) 2786-76-7 (EC no) 220-509-3	0 – 6	Skin Sens. 1, H317
myristic acid	(CAS No) 544-63-8 (EC no) 208-875-2	0 – 2	Eye Irrit. 2, H319

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Aluminum hydroxide	(CAS No) 21645-51-2 (EC no) 244-492-7	0 – 1	Not classified
Aluminum oxide	(CAS No) 1344-28-1 (EC no) 215-691-6	0 – 1	Not classified
Diethanolamine	(CAS No) 111-42-2 (EC no) 203-868-0 (EC index no) 603-071-00-1	0 – 1	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT RE 2, H373
Iron oxide red	(CAS No) 1309-37-1 (EC no) 215-168-2	< 0.1	Aquatic Chronic 2, H411
Silicon dioxide (amorphous)	(CAS No) 7631-86-9 (EC no) 231-545-4	< 0.1	Not classified

Full text of R- and 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 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.
First-aid measures after eye contact : In case of contact, immediately flush eyes with plenty of water.
First-aid measures after ingestion : Drink plenty of water. Get medical advice/attention if you feel unwell.

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

- Symptoms/injuries after eye contact : May cause slight irritation.
Symptoms/injuries after ingestion : Diarrhea. Nausea.

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 : No particular fire or explosion hazard.

5.3. Advice for firefighters

- Firefighting instructions : Keep upwind.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Use self-contained breathing apparatus. EN469.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Avoid creating or spreading dust.

6.1.1. For non-emergency personnel

- Protective equipment : Chemical goggles or safety glasses.
Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Chemical goggles or safety glasses.
Emergency procedures : Ventilate area. Stop leak if safe to do so.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- For containment : Avoid generating dust. Sweep or shovel into suitable containers.

6.4. Reference to other sections

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.

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7.2. Conditions for safe storage, including any incompatibilities

Incompatible products	: Strong oxidizers.
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.

7.3. Specific end use(s)

Marking.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Paraffin waxes and Hydrocarbon waxes (8002-74-2)		
Belgium	Remark (BE)	(cire de) (fumées)
Poland	Remark (PL)	dymy
Slovakia	NPHV (priemerná) (mg/m ³)	2 mg/m ³
Spain	VLA-ED (mg/m ³)	2 mg/m ³
United Kingdom	Remark (WEL)	(fume)
Switzerland	Remark (CH)	(alveolengängiger Staub)
Triethanolamine (102-71-6)		
Czech Republic	Remark (CZ)	D
Denmark	Grænseværdie (kortvarig) (mg/m ³)	6.2 mg/m ³
Denmark	Grænseværdie (kortvarig) (ppm)	1 ppm
Finland	HTP-arvo (8h) (ppm)	5 ppm
Sweden	nivågränsvärde (NVG) (mg/m ³)	5 mg/m ³
Sweden	nivågränsvärde (NVG) (ppm)	0.8 ppm
Sweden	kortidsvärde (KTV) (mg/m ³)	10 mg/m ³
Sweden	kortidsvärde (KTV) (ppm)	1.6 ppm
Sweden	Anmärkning (SE)	(H)
Diethanolamine (111-42-2)		
Denmark	Grænseværdie (kortvarig) (mg/m ³)	4 mg/m ³
Denmark	Grænseværdie (kortvarig) (ppm)	0.92 ppm
Finland	Huomautus (FI)	iho
Ireland	OEL (8 hours ref) (mg/m ³)	1 mg/m ³
Ireland	Notes (IE)	(Inhalable Fraction and Vapour)
Spain	Notes	via dérmica,f
Sweden	Anmärkning (SE)	H
United Kingdom	WEL TWA (mg/m ³)	13 mg/m ³
United Kingdom	WEL TWA (ppm)	3 ppm
United Kingdom	Remark (WEL)	The UK Advisory Committee on Toxic Substances has expressed concern that, for these OELs, health may not be adequately protected because of doubts that the limit was not soundly-based. These OELs were included in the published UK 2002 list and its 2003 supplement, but are omitted from the published 2005 list.
Carbon black (1333-86-4)		
Belgium	Limit value (mg/m ³)	3.5 mg/m ³
Denmark	Grænseværdie (langvarig) (mg/m ³)	3.5 mg/m ³
Denmark	Anmærkninger (DK)	K
Finland	HTP-arvo (8h) (mg/m ³)	3.5 mg/m ³
Finland	HTP-arvo (15 min)	7 mg/m ³
France	VME (mg/m ³)	3.5 mg/m ³
Ireland	OEL (8 hours ref) (mg/m ³)	3.5 mg/m ³
Ireland	OEL (15 min ref) (mg/m ³)	7 mg/m ³
Spain	VLA-ED (mg/m ³)	3.5 mg/m ³

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Carbon black (1333-86-4)		
Sweden	nivågränsvärde (NVG) (mg/m ³)	3 mg/m ³
United Kingdom	Local name	Carbon black
United Kingdom	WEL TWA (mg/m ³)	3.5 mg/m ³
United Kingdom	WEL STEL (mg/m ³)	7 mg/m ³
Norway	Grenseverdier (AN) (mg/m ³)	3.5 mg/m ³
Aluminum oxide (1344-28-1)		
Austria	MAK (mg/m ³)	10 mg/m ³ (gemessen als einatembarer Aerosolanteil) 5 mg/m ³ (alveolengängiger Anteil)
Austria	MAK Short time value (mg/m ³)	20 mg/m ³ (gemessen als einatembarer Aerosolanteil) max. 2x60 min./Schicht 10 mg/m ³ (alveolengängiger Anteil) max. 2x60 min./Schicht
Belgium	Limit value (mg/m ³)	10 mg/m ³
Belgium	Remark (BE)	(oxyde d') (en Al)
Denmark	Grænseværdie (langvarig) (mg/m ³)	5 mg/m ³ (total) 2 mg/m ³ (respirabel)
Denmark	Grænseværdie (kortvarig) (mg/m ³)	10 mg/m ³ (total) 4 mg/m ³ (respirabel)
France	VME (mg/m ³)	10 mg/m ³
France	Note (FR)	(respirable aerosol)
Germany	TRGS 900 Occupational exposure limit value (mg/m ³)	3 mg/m ³
Germany	Remark (TRGS 900)	(gemessen als alveolengängiger Staubanteil)
Hungary	AK-érték	6 mg/m ³
Hungary	Megjegyzések (HU)	(respirable aerosol)
Ireland	OEL (8 hours ref) (mg/m ³)	10 mg/m ³ (total inhalable dust) 4 mg/m ³ (respirable dust)
Lithuania	IPRV (mg/m ³)	2 mg/m ³
Lithuania	Remark (LT)	(alveolinė frakcija. biūrėk IX skyriaus 3 pastabà.)
Poland	NDS (mg/m ³)	2.5 mg/m ³ (dymy, pyl calkowity) 1.2 mg/m ³ (dymy, pyl respirabilny)
Slovakia	NPHV (priemerná) (mg/m ³)	1.5 mg/m ³ (respirabilná frakcia) 4 mg/m ³ (inhalovate¾ná frakcia)
Spain	VLA-ED (mg/m ³)	10 mg/m ³
Sweden	nivågränsvärde (NVG) (mg/m ³)	5 mg/m ³ (inhalable aerosol) 2 mg/m ³ (respirable aerosol)
United Kingdom	WEL TWA (mg/m ³)	10 mg/m ³ (inhalable aerosol) 4 mg/m ³ (respirable aerosol)
Norway	Grenseverdier (AN) (mg/m ³)	10 mg/m ³
Norway	Merknader (NO)	1)
Switzerland	VME (mg/m ³)	3 mg/m ³
Switzerland	Remark (CH)	(respirable aerosol)
Aluminum hydroxide (21645-51-2)		
Austria	MAK (ppm)	10 ppm (gemessen als einatembarer Aerosolanteil) 5 ppm (alveolengängiger Anteil)
Austria	MAK Short time value (ppm)	20 ppm (gemessen als einatembarer Aerosolanteil) max. 2x60 min./Schicht 10 ppm (alveolengängiger Anteil) max. 2x60 min./Schicht
Poland	NDS (mg/m ³)	2.5 mg/m ³ dymy, pyl calkowity 1.2 mg/m ³ dymy, pyl respirabilny
Slovakia	NPHV (priemerná) (mg/m ³)	1.5 mg/m ³ (respirabilná frakcia) 4 mg/m ³ (inhalovate¾ná frakcia)
Switzerland	VME (mg/m ³)	3 mg/m ³
Switzerland	Remark (CH)	(alveolengängige Fraktion)
titanium dioxide (13463-67-7)		
Belgium	Remark (BE)	(dioxyde de)
Denmark	Grænseværdie (kortvarig) (mg/m ³)	12 mg/m ³
France	Note (FR)	inhalable aerosol

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titanium dioxide (13463-67-7)		
Ireland	OEL (8 hours ref) (mg/m ³)	10 mg/m ³ total inhalable dust 4 mg/m ³ respirable dust
Slovakia	NPHV (priemerná) (mg/m ³)	5 mg/m ³
Spain	VLA-ED (mg/m ³)	10 mg/m ³
Spain	Notes	inhalable aerosol
Sweden	nivågränsvärde (NVG) (mg/m ³)	5 mg/m ³
Sweden	Anmärkning (SE)	total dust, 1
United Kingdom	WEL TWA (mg/m ³)	10 mg/m ³ inhalable aerosol 4 mg/m ³ respirable aerosol
Switzerland	Remark (CH)	(respirable aerosol)
limestone (1317-65-3)		
Belgium	Remark (BE)	(carbonate de)
Hungary	Megjegyzések (HU)	inhalable aerosol
Ireland	OEL (8 hours ref) (mg/m ³)	10 mg/m ³ total inhalable dust 4 mg/m ³ respirable dust
Spain	VLA-ED (mg/m ³)	10 mg/m ³
Spain	Notes	inhalable aerosol
United Kingdom	WEL TWA (mg/m ³)	10 mg/m ³ (total dust) 4 mg/m ³ (respirable dust)
Switzerland	Remark (CH)	(respirable aerosol)
Iron oxide red (1309-37-1)		
Belgium	Remark (BE)	(trioxyde de; fumées, en Fe)
Denmark	Grænseværdie (kortvarig) (mg/m ³)	7 mg/m ³
Denmark	Anmærkninger (DK)	(Jernoxid, total dust)
Finland	Huomautus (FI)	(Fe)
Hungary	Megjegyzések (HU)	(respirabilis por)
Ireland	OEL (8 hours ref) (mg/m ³)	5 mg/m ³ (Iron oxide, fume as Fe) 10 mg/m ³ (Rouge total inhalable dust) 4 mg/m ³ (Rouge total respirable dust)
Ireland	OEL (15 min ref) (mg/m ³)	10 mg/m ³ (Iron oxide, fume as Fe)
Lithuania	Remark (LT)	(Piūrėk IX skyriaus 3 pastabà.)
Poland	Remark (PL)	(dymy)
Slovakia	NPHV (priemerná) (mg/m ³)	1.5 mg/m ³ (respirabilná frakcia) 4 mg/m ³ (inhalovateľná frakcia)
Spain	Notes	(Óxido de hierro(III) (polvo y humos), como Fe)
Sweden	Anmärkning (SE)	(Järnoxid, respirabelt damm)
United Kingdom	WEL TWA (mg/m ³)	10 mg/m ³ (Rouge, inhalable fraction) 4 mg/m ³ (Rouge, respirable fraction) 5 mg/m ³ (fume, as Fe)
United Kingdom	WEL STEL (mg/m ³)	10 mg/m ³ (fume, as Fe)
Norway	Merknader (NO)	(Jern(III)oksid, beregnet som Fe)
Switzerland	Remark (CH)	(alveolengängiger Staub)
Silicon dioxide (amorphous) (7631-86-9)		
Austria	MAK (mg/m ³)	4 mg/m ³
Austria	Remark (AT)	(einatembare Fraktion)
Finland	HTP-arvo (8h) (mg/m ³)	5 mg/m ³
Germany	TRGS 900 Occupational exposure limit value (mg/m ³)	4 mg/m ³
Germany	Remark (TRGS 900)	(einatembare Fraktion)
Ireland	OEL (8 hours ref) (mg/m ³)	2.4 mg/m ³ 6 mg/m ³ (total inhalable dust)
Spain	VLA-ED (mg/m ³)	10 mg/m ³
Spain	Notes	(respirable aerosol)
United Kingdom	WEL TWA (mg/m ³)	6 mg/m ³ (inhalable aerosol) 2.4 mg/m ³ (respirable aerosol)
Switzerland	VME (mg/m ³)	4 mg/m ³
Switzerland	Remark (CH)	(einatembarer Staub)

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8.2. Exposure controls

Appropriate engineering controls	: Ensure good ventilation of the work station.
Hand protection	: None under normal use.
Eye protection	: Chemical goggles or safety glasses.
Respiratory protection	: None under normal use.
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	: Variable.
Odour	: floral.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 93 °C
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	: Soluble 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
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 under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

Strong oxidizers.

10.6. Hazardous decomposition products

Thermal decomposition generates : Nitrogen oxides. Carbon oxides (CO, CO₂).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Not classified
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myristic acid (544-63-8)

LD50 oral rat	> 10000 mg/kg
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Paraffin waxes and Hydrocarbon waxes (8002-74-2)	
LD50 oral rat	> 5000 mg/kg No mortality observed
LD50 dermal rat	> 2000 mg/kg No mortality observed
Triethanolamine (102-71-6)	
LD50 oral rat	6400 mg/kg bodyweight
LD50 dermal rat	> 2000 mg/kg
ATE CLP (oral)	6400.000 mg/kg bodyweight
Diethanolamine (111-42-2)	
LD50 oral rat	1100 mg/kg
ATE CLP (oral)	1100.000 mg/kg bodyweight
Carbon black (1333-86-4)	
LD50 oral rat	> 8000 mg/kg
LC50 inhalation rat (mg/l)	> 4.6 mg/m ³ 4 h
4-[[4-(aminocarbonyl)phenyl]azo]-N-(2-ethoxyphenyl)-3-hydroxynaphthalene-2-carboxamide, C.I. Pigment Red 170 (naphthol <1%) (2786-76-7)	
LD50 oral rat	> 15000 mg/kg
LC50 inhalation rat (mg/l)	> 1580 mg/m ³ 4 h
Aluminum oxide (1344-28-1)	
LD50 oral rat	> 15900 mg/kg
LC50 inhalation rat (mg/l)	7.6 mg/l/4h
ATE CLP (vapours)	7.600 mg/l/4h
ATE CLP (dust,mist)	7.600 mg/l/4h
titanium dioxide (13463-67-7)	
LD50 oral rat	> 5000 mg/kg
LC50 inhalation rat (mg/l)	> 6.82 mg/l/4h
limestone (1317-65-3)	
LD50 oral rat	6450 mg/kg
ATE CLP (oral)	6450.000 mg/kg bodyweight
Iron oxide red (1309-37-1)	
LD50 oral rat	> 10000 mg/kg
Silicon dioxide (amorphous) (7631-86-9)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 58.8 mg/l/4h
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified.
titanium dioxide (13463-67-7)	
NOAEL (chronic, oral, animal/male, 2 years)	5 mg/kg bodyweight rat
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Diethanolamine (111-42-2)	
LOAEL (oral, rat, 90 days)	14 mg/kg bodyweight/day 14 mg/kg female; 25 mg/kg male
LOAEL (dermal, rat/rabbit, 90 days)	mg/kg bodyweight/day
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

myristic acid (544-63-8)	
LC50 fish 1	> 10000 mg/l 48 h
EC50 Daphnia 1	> 27 mg/l 16 h

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Paraffin waxes and Hydrocarbon waxes (8002-74-2)	
LC50 fish 1	> 1000 mg/l
Triethanolamine (102-71-6)	
LC50 fish 1	11800 mg/l
Diethanolamine (111-42-2)	
LC50 fish 1	1460 mg/l 96 h
EC50 Daphnia 1	30.1 mg/l 48 h
ErC50 (algae)	2.2 mg/l 96 h
4-[[4-(aminocarbonyl)phenyl]azo]-N-(2-ethoxyphenyl)-3-hydroxynaphthalene-2-carboxamide, C.I. Pigment Red 170 (naphthol <1%) (2786-76-7)	
LC50 fish 1	> 500 mg/l 96 h
EC50 Daphnia 1	> 110 mg/l 48 h
Aluminum oxide (1344-28-1)	
EC50 Daphnia 1	> 1470 mg/l
NOEC (acute)	> 50 mg/l
limestone (1317-65-3)	
LC50 fish 1	> 200 mg/l
Iron oxide red (1309-37-1)	
EC50 Daphnia 1	> 100 mg/l
Silicon dioxide (amorphous) (7631-86-9)	
LC50 fish 1	> 10000 mg/l
EC50 Daphnia 1	> 1000 mg/l

12.2. Persistence and degradability

myristic acid (544-63-8)	
Persistence and degradability	Readily biodegradable.
Biodegradation	99 % 15 d
Diethanolamine (111-42-2)	
Persistence and degradability	Readily biodegradable.
Carbon black (1333-86-4)	
Persistence and degradability	Not readily biodegradable.
4-[[4-(aminocarbonyl)phenyl]azo]-N-(2-ethoxyphenyl)-3-hydroxynaphthalene-2-carboxamide, C.I. Pigment Red 170 (naphthol <1%) (2786-76-7)	
Persistence and degradability	Not readily biodegradable.
Biodegradation	0 % 28 d
limestone (1317-65-3)	
Persistence and degradability	Not readily biodegradable.
Silicon dioxide (amorphous) (7631-86-9)	
Persistence and degradability	Product persists.

12.3. Bioaccumulative potential

myristic acid (544-63-8)	
Log Pow	5.2 (5.2 - 6.11)
Triethanolamine (102-71-6)	
Log Pow	-1.75
Diethanolamine (111-42-2)	
Log Pow	-1.71
Bioaccumulative potential	Not expected to bioaccumulate.
4-[[4-(aminocarbonyl)phenyl]azo]-N-(2-ethoxyphenyl)-3-hydroxynaphthalene-2-carboxamide, C.I. Pigment Red 170 (naphthol <1%) (2786-76-7)	
BCF fish 1	53 l/kg
Log Pow	1.28
limestone (1317-65-3)	
Bioaccumulative potential	Does not bioaccumulate significantly.

12.4. Mobility in soil

No additional information available

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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

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

European List of Waste (LoW) code : For disposal within the EC, the appropriate code according to the European Waste Catalogue (EWC) should be used.

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

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 REACH 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) : nwg - Non-hazardous to water

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. 1907/2006 (REACH) with its amendment Regulation (EC) No. 453/2010

Indication of changes:

Original Document.

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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 Weight Average
	TSCA: Toxic Substances Control Act

Data sources

: ESIS (European chemical 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>.
Kristen 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 R-, H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Carc. 2	Carcinogenicity, Category 2
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Sensitisation — Skin, category 1
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
H302	Harmful if swallowed
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H351	Suspected of causing cancer
H373	May cause damage to organs through prolonged or repeated exposure
H411	Toxic to aquatic life with long lasting effects
EUH208	Contains . May produce an allergic reaction
EUH210	Safety data sheet available on request
R22	Harmful if swallowed
R36	Irritating to eyes
R38	Irritating to skin
R40	Limited evidence of a carcinogenic effect
R41	Risk of serious damage to eyes
R43	May cause sensitisation by skin contact
R48/22	Harmful: danger of serious damage to health by prolonged exposure if swallowed
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
N	Dangerous for the environment
Xi	Irritant
Xn	Harmful

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