

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

Product form : Mixture
 Product name : Quik Stik® TWIST PAINT MARKER Purple

1.2. Relevant identified uses of the substance or mixture and uses advised against**1.2.1. Relevant identified uses**

Main use category : Professional use
 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 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	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 Beratungstelle 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, Nagyváradi 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

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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
Skin Sens. 1 H317
Carc. 2 H351
Repr. 2 H361
STOT RE 1 H372

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

GHS08

Signal word (CLP) :

Danger

Hazardous ingredients :

4-tert-butylphenol, 1-butoxypropan-2-ol, butanone oxime, Stoddard solvent, Naphtha (petroleum), hydrosulfurized heavy

Hazard statements (CLP) :

H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H351 - Suspected of causing cancer
H361 - Suspected of damaging fertility or the unborn child
H372 - Causes damage to organs through prolonged or repeated exposure

Precautionary statements (CLP) :

P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P260 - Do not breathe vapours, dust, fume
P264 - Wash hands thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P272 - Contaminated work clothing should not be allowed out of the workplace
P280 - Wear eye protection, protective gloves, protective clothing
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
P314 - Get medical advice/attention if you feel unwell
P321 - Specific treatment (see First aid measures on this label)
P332+P313 - If skin irritation occurs: Get medical advice/attention

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P333+P313 - If skin irritation or rash 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
P405 - Store locked up
P501 - Dispose of contents/container in a safe manner in accordance with local/national regulations

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

Components with health hazards above the applicable thresholds or with Exposure Limits are shown. Specific concentrations withheld as trade secret.

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
1-butoxypropan-2-ol	(CAS No) 5131-66-8 (EC no) 225-878-4 (EC index no) 603-052-00-8	30 – 40	Skin Irrit. 2, H315 Eye Irrit. 2, H319
(2-Methoxymethylethoxy)-propanol	(CAS No) 34590-94-8 (EC no) 252-104-2	5 – 15	Not classified
Titanium dioxide	(CAS No) 13463-67-7 (EC no) 236-675-5	1 – 5	Not classified
N-Ethyl O/P Toluene Sulfonamides	(CAS No) 8047-99-2 (EC no) 232-465-2	1 – 5	Acute Tox. 3 (Dermal), H311
Distillates (petroleum), hydrotreated light	(CAS No) 64742-47-8 (EC no) 265-149-8 (EC index no) 649-422-00-2	0.1 – 3	Asp. Tox. 1, H304 (DMSO <3%)
Stoddard solvent	(CAS No) 8052-41-3 (EC no) 232-489-3 (EC index no) 649-345-00-4	0.1 – 3	Flam. Liq. 3, H226 STOT RE 1, H372 Asp. Tox. 1, H304 (benzene < 0.1%)
Naphtha (petroleum), hydrodesulfurized heavy	(CAS No) 64742-82-1 (EC no) 265-185-4 (EC index no) 649-330-00-2	0.1 – 3	STOT RE 1, H372 Asp. Tox. 1, H304 (benzene < 0.1%)
4-tert-butylphenol	(CAS No) 98-54-4 (EC no) 202-679-0	0.1 – 1	Skin Irrit. 2, H315 Eye Dam. 1, H318 Repr. 2, H361f STOT SE 3, H335 Aquatic Chronic 2, H411
Aluminum hydroxide	(CAS No) 21645-51-2 (EC no) 244-492-7	0 – 1	Not classified
butanone oxime	(CAS No) 96-29-7 (EC no) 202-496-6 (EC index no) 616-014-00-0	0.1 – 1	Acute Tox. 4 (Dermal), H312 Eye Dam. 1, H318 Skin Sens. 1, H317 Carc. 2, H351
Aluminum oxide	(CAS No) 1344-28-1 (EC no) 215-691-6	0 – 0.1	Not classified

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 : If inhaled and if breathing is difficult, 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 or rash 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. Do NOT induce vomiting. Get medical advice/attention if you feel unwell.

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

- Symptoms/injuries : Suspected of damaging fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure. Suspected of causing cancer.
- Symptoms/injuries after skin contact : Causes skin irritation. May cause an allergic skin reaction.
- Symptoms/injuries after eye contact : Causes serious eye irritation.

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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 : Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Combustible. Combustion generates : Carbon oxides (CO, CO₂). Nitrogen oxides. Sulphur oxides. Metallic oxides.

Explosion hazard : Product is not explosive.

5.3. Advice for firefighters

Firefighting instructions : 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 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 contact with skin and eyes. Avoid creating or spreading dust.

6.1.1. For non-emergency personnel

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

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

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

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Contain and collect as any solid.

Methods for cleaning up : Sweep spilled substance into containers; if appropriate, moisten first to prevent dusting.

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 : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust, fume, vapours.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep away from ignition sources. Keep container closed when not in use. Protect from sunlight.

Incompatible products : Strong oxidizers. Acids.

Incompatible materials : Sources of ignition.

7.3. Specific end use(s)

Marking.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Titanium dioxide (13463-67-7)		
Belgium	Remark (BE)	(dioxyde de)
France	Note (FR)	inhalable aerosol
Italy - Portugal - USA ACGIH	Local name	Titanium dioxide
Italy - Portugal - USA ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³
Spain	VLA-ED (mg/m ³)	10 mg/m ³
Spain	Notes	inhalable aerosol

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Titanium dioxide (13463-67-7)		
Switzerland	Remark (CH)	(respirable aerosol)
United Kingdom	WEL TWA (mg/m ³)	10 mg/m ³ inhalable aerosol 4 mg/m ³ respirable aerosol
Denmark	Grænseværdie (kortvarig) (mg/m ³)	12 mg/m ³
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
Sweden	nivågränsvärde (NVG) (mg/m ³)	5 mg/m ³
Sweden	Anmärkning (SE)	total dust, 1

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)
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)
Spain	VLA-ED (mg/m ³)	10 mg/m ³
Switzerland	VME (mg/m ³)	3 mg/m ³
Switzerland	Remark (CH)	(respirable aerosol)
United Kingdom	WEL TWA (mg/m ³)	10 mg/m ³ (inhalable aerosol) 4 mg/m ³ (respirable aerosol)
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)
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.)
Norway	Gjennomsnittsverdier (AN) (mg/m ³)	10 mg/m ³
Norway	Merknader (NO)	1)
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 (inhalovateľná frakcia)
Sweden	nivågränsvärde (NVG) (mg/m ³)	5 mg/m ³ (inhalable aerosol) 2 mg/m ³ (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
Switzerland	VME (mg/m ³)	3 mg/m ³
Switzerland	Remark (CH)	(alveolengängige Fraktion)
Poland	NDS (mg/m ³)	2.5 mg/m ³ dymy, pyl calkowity 1.2 mg/m ³ dymy, pyl respirabilny

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Aluminum hydroxide (21645-51-2)		
Slovakia	NPHV (priemerná) (mg/m ³)	1.5 mg/m ³ (respirabilná frakcia) 4 mg/m ³ (inhalovateľná frakcia)

4-tert-butylphenol (98-54-4)		
Germany	TRGS 900 Limitation of exposure peaks (mg/m ³)	1 mg/m ³
Germany	TRGS 900 Limitation of exposure peaks (ppm)	0.16 ppm
Germany	TRGS 903 (BGW)	2 mg/l
Germany	Remark (TRGS 903)	PTBP (Urin; Expositionsende bzw. Schichtende)
Denmark	Grænseværdie (kortvarig) (mg/m ³)	1 mg/m ³
Denmark	Grænseværdie (kortvarig) (ppm)	0.16 ppm
Slovakia	NPHV (priemerná) (mg/m ³)	0.5 mg/m ³
Slovakia	NPHV (priemerná) (ppm)	0.05 ppm 2 ppm (p-terc-Butylfenol ptBF)

(2-Methoxymethylethoxy)-propanol (34590-94-8)		
France	Note (FR)	Peau
Germany	TRGS 900 Limitation of exposure peaks (mg/m ³)	310 mg/m ³
Germany	TRGS 900 Limitation of exposure peaks (ppm)	50 ppm
Italy - Portugal - USA ACGIH	ACGIH TWA (mg/m ³)	606 mg/m ³
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	100 ppm
Italy - Portugal - USA ACGIH	ACGIH STEL (mg/m ³)	909 mg/m ³
Italy - Portugal - USA ACGIH	ACGIH STEL (ppm)	150 ppm
Spain	VLA-ED (mg/m ³)	308 mg/m ³
Spain	VLA-ED (ppm)	50 ppm
Spain	Notes	via dérmica, VLI
Denmark	Grænseværdie (kortvarig) (mg/m ³)	600 mg/m ³
Denmark	Grænseværdie (kortvarig) (ppm)	100 ppm
Finland	Huomautus (FI)	iho
Slovakia	NPHV (priemerná) (mg/m ³)	308 mg/m ³
Slovakia	NPHV (priemerná) (ppm)	50 ppm
Slovakia	Upozornenie (SK)	poznámka K
Sweden	Anmärkning (SE)	H

Distillates (petroleum), hydrotreated light (64742-47-8)		
Germany	TRGS 900 Occupational exposure limit value (mg/m ³)	600 mg/m ³

Stoddard solvent (8052-41-3)		
Italy - Portugal - USA ACGIH	Local name	Stoddard solvent
Italy - Portugal - USA ACGIH	ACGIH TWA (mg/m ³)	572 mg/m ³
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	100 ppm
Italy - Portugal - USA ACGIH	Remark (ACGIH)	Eye, skin, & kidney dam;
Denmark	Grænseværdie (kortvarig) (mg/m ³)	290 mg/m ³
Denmark	Grænseværdie (kortvarig) (ppm)	50 ppm
Denmark	Anmærkninger (DK)	(Terpentin, mineralsk, max. 20 pct. aromater; 2)

Naphtha (petroleum), hydrodesulfurized heavy (64742-82-1)		
Germany	TRGS 900 Occupational exposure limit value (mg/m ³)	100 mg/m ³
Germany	TRGS 900 Limitation of exposure peaks (mg/m ³)	200 mg/m ³
Germany	Remark (TRGS 900)	(C9-C15 Aromaten)
Switzerland	VME (mg/m ³)	525 mg/m ³
Switzerland	VME (ppm)	100 ppm
Norway	Gjennomsnittsverdier (AN) (mg/m ³)	120 mg/m ³
Norway	Gjennomsnittsverdier (AN) (ppm)	25 ppm
Norway	Merknader (NO)	(White Spirit (aromatinnhold > 22 %))

8.2. Exposure controls

Appropriate engineering controls

: Either local exhaust or general room ventilation is usually required.

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Personal protective equipment	: Avoid all unnecessary exposure.
Hand protection	: Wear suitable gloves. Use rubber gloves. EN 374.
Eye protection	: Chemical goggles or safety glasses. EN 166.
Skin and body protection	: Wear suitable protective clothing. Long sleeved protective clothing.
Respiratory protection	: Where excessive vapour may result, wear approved mask. Use air-purifying respirator equipped with particulate filtering 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	: Solid
Appearance	: A solid crayon-like marker.
Colour	: Purple.
Odour	: Solvent.
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	: 62 °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	: 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: 50.72%

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

Heat. Direct sunlight.

10.5. Incompatible materials

Strong acids. Strong oxidizers.

10.6. Hazardous decomposition products

Carbon dioxide. Carbon monoxide. Nitrogen oxides. metallic oxides. Sulphur oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Titanium dioxide (13463-67-7)

LD50 oral rat > 5000 mg/kg

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LC50 inhalation rat (mg/l)	> 6.82 mg/l/4h
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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

N-Ethyl O/P Toluene Sulfonamides (8047-99-2)

LD50 oral rat	2250 mg/kg
LD50 dermal rabbit	1000 mg/kg
ATE CLP (oral)	2250.000 mg/kg bodyweight
ATE CLP (dermal)	1000.000 mg/kg bodyweight

4-tert-butylphenol (98-54-4)

LD50 oral rat	> 2000 mg/kg No mortality observed
LD50 dermal rabbit	> 16 g/kg No mortality observed
LC50 inhalation rat (mg/l)	5.6 mg/l/4h
ATE CLP (vapours)	5.600 mg/l/4h
ATE CLP (dust,mist)	5.600 mg/l/4h

1-butoxypropan-2-ol (5131-66-8)

LD50 oral rat	3300 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 inhalation rat (ppm)	> 651 ppm/4h
ATE CLP (oral)	3300.000 mg/kg bodyweight

(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

butanone oxime (96-29-7)

LD50 oral rat	> 900 mg/kg No mortality observed
LD50 dermal rabbit	> 1000 mg/kg No mortality observed
LC50 inhalation rat (mg/l)	> 4.83 mg/l/4h No mortality observed
ATE CLP (dermal)	1100.000 mg/kg bodyweight

Distillates (petroleum), hydrotreated light (64742-47-8)

LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (Dust/Mist - mg/l/4h)	> 5.28 mg/l/4h

Stoddard solvent (8052-41-3)

LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 10 mg/l/4h

Naphtha (petroleum), hydrodesulfurized heavy (64742-82-1)

LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 7630 mg/m ³

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified.
Carcinogenicity	: Suspected of causing cancer.

Titanium dioxide (13463-67-7)

NOAEL (chronic, oral, animal/male, 2 years)	5 mg/kg bodyweight rat
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butanone oxime (96-29-7)

NOAEL (chronic, oral, animal/male, 2 years)	270 mg/kg bodyweight mg/m3
NOAEL (chronic, oral, animal/female, 2 years)	1350 mg/kg bodyweight mg/m3

Reproductive toxicity	: Suspected of damaging fertility or the unborn child.
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Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

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

4-tert-butylphenol (98-54-4)	
LC50 fishes 1	> 1 mg/l 96 h
EC50 Daphnia 1	4.8 mg/l 48 h

1-butoxypropan-2-ol (5131-66-8)	
LC50 fishes 1	> 560 (560 - 1000) mg/l 96 h
EC50 Daphnia 1	> 1000 mg/l 48 h

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

butanone oxime (96-29-7)	
LC50 fishes 1	> 100 mg/l 96 h
EC50 Daphnia 1	201 mg/l 48 h

12.2. Persistence and degradability

4-tert-butylphenol (98-54-4)	
Biodegradation	60 % 28 d

1-butoxypropan-2-ol (5131-66-8)	
Persistence and degradability	Readily biodegradable.

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

butanone oxime (96-29-7)	
Biodegradation	70 % 18 d

12.3. Bioaccumulative potential

4-tert-butylphenol (98-54-4)	
Log Pow	3

1-butoxypropan-2-ol (5131-66-8)	
Log Pow	1.2

butanone oxime (96-29-7)	
Log Pow	0.63

Distillates (petroleum), hydrotreated light (64742-47-8)	
Log Kow	2.1 - 5
Bioaccumulative potential	Bioaccumulative potential.

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.

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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	: H10 - 'Toxic for reproduction': substances and preparations which, if they are inhaled or ingested or if they penetrate the skin, may induce non-hereditary congenital malformations or increase their incidence. H13 - 'Sensitizing': substances and preparations which, if they are inhaled or if they penetrate the skin, are capable of eliciting a reaction of hypersensitization such that on further exposure to the substance or preparation, characteristic adverse effects are produced. H4 - 'Irritant': non-corrosive substances and preparations which, through immediate, prolonged or repeated contact with the skin or mucous membrane, can cause inflammation. H5 - 'Harmful': substances and preparations which, if they are inhaled or ingested or if they penetrate the skin, may involve limited health risks. H7 - 'Carcinogenic': substances and preparations which, if they are inhaled or ingested or if they penetrate the skin, may induce cancer or increase its incidence.

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 substances with Annex XVII restrictions

Quik Stik® TWIST PAINT MARKER Purple is not on the REACH Candidate List

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

15.1.2. National regulations

Germany

Water hazard class (WGK) : 3 - severe 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

Indication of changes:

Original Document.

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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>.

Abbreviations and acronyms

: ACGIH (American Conference of Government Industrial Hygienists).

ATE: Acute Toxicity Estimate.

CAS (Chemical Abstracts Service) number.

CLP: Classification, Labelling, Packaging.

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.

STEL: Short Term Exposure Limits.

TSCA: Toxic Substances Control Act.

TWA: Time Weight Average.

Other information

: None.

Full text of R-, H- and EUH-phrases:

Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
Carc. 1B	Carcinogenicity, Category 1B
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
Flam. Liq. 3	Flammable liquids, Category 3
Muta. 1B	Germ cell mutagenicity, Category 1B
Repr. 2	Reproductive toxicity, Category 2
Repr. 2	Reproductive toxicity, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Sensitisation — Skin, category 1
STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H226	Flammable liquid and vapour
H304	May be fatal if swallowed and enters airways
H311	Toxic in contact with skin
H312	Harmful in contact with skin
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H340	May cause genetic defects
H350	May cause cancer
H351	Suspected of causing cancer
H361	Suspected of damaging fertility or the unborn child
H361f	Suspected of damaging fertility
H372	Causes damage to organs through prolonged or repeated exposure

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H411	Toxic to aquatic life with long lasting effects
R21	Harmful in contact with skin
R36/38	Irritating to eyes and skin
R37/38	Irritating to respiratory system and skin
R40	Limited evidence of a carcinogenic effect
R41	Risk of serious damage to eyes
R43	May cause sensitisation by skin contact
R45	May cause cancer
R46	May cause heritable genetic damage
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R62	Possible risk of impaired fertility
R65	Harmful: may cause lung damage if swallowed
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
Skin Sens. 1	H317	Calculation method
Carc. 2	H351	Calculation method
Repr. 2	H361	Calculation method
STOT RE 1	H372	Calculation method

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LA-CO EU CLP SDS

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