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

1.1. Product identifier

Product form : Mixture

Trade name : Regular Soldering Flux Paste

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 : Soldering flux

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	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]

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]

Signal word (CLP) : -

Hazard statements (CLP) : H412 - Harmful to aquatic life with long lasting effects

Precautionary statements (CLP) : P273 - Avoid release to the environment
P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

Unknown hazards to the aquatic environment (CLP) : Contains 0.03 % of components with unknown hazards to the aquatic environment

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]
Ethanolamine hydrochloride	(CAS-No.) 2002-24-6 (EC-No.) 217-900-6	10 - 20	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
Poloxamer	(CAS-No.) 9003-11-6	10 - 20	Not classified
Polyethylene Glycol	(CAS-No.) 25322-68-3 (EC-No.) 500-038-2	10 - 20	Not classified
ammonium chloride	(CAS-No.) 12125-02-9 (EC-No.) 235-186-4 (EC Index-No.) 017-014-00-8	5 – 10	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319
2,6-Di-tert-butyl-4-methylphenol	(CAS-No.) 128-37-0 (EC-No.) 204-881-4	0.1 – 0.5	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Oleic acid	(CAS-No.) 112-80-1 (EC-No.) 204-007-1	0 - < 0.1	Not classified
Sodium hydroxide	(CAS-No.) 1310-73-2 (EC-No.) 215-185-5 (EC Index-No.) 011-002-00-6	0 - < 0.1	Skin Corr. 1A, H314

Specific concentration limits:

Name	Product identifier	Specific concentration limits
Sodium hydroxide	(CAS-No.) 1310-73-2 (EC-No.) 215-185-5 (EC Index-No.) 011-002-00-6	(0.5 =<C < 2) Eye Irrit. 2, H319 (0.5 =<C < 2) Skin Irrit. 2, H315 (2 =<C < 5) Skin Corr. 1B, H314 (C >= 5) Skin Corr. 1A, H314

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 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 : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

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

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.

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

Symptoms/effects : No significant signs or symptoms indicative of any health hazard are expected to occur.

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.

Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

Fire hazard : No specific fire or explosion hazard.

Explosion hazard : Product is not explosive.

Hazardous decomposition products in case of fire : Carbon monoxide. Carbon dioxide. ammonium oxides. hydrogen chloride.

5.3. Advice for firefighters

Firefighting instructions : Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers. 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

6.1.1. For non-emergency personnel

Protective equipment : Wear suitable protective clothing and gloves. Nitrile gloves. Chemical goggles or safety glasses. In case of inadequate ventilation wear respiratory protection.

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

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

6.3. Methods and material for containment and cleaning up

For containment : Stop the flow of material, if this is without risk. Contain and/or absorb spill with inert material, then place in suitable container.

Methods for cleaning up : Take up in non-combustible absorbent material and shove into container for disposal. On land, sweep or shovel into suitable containers.

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 : Do not eat, drink or smoke when using this product. Provide good ventilation in process area to prevent formation of vapour. Remove all sources of ignition.

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

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool well ventilated place. Keep container closed when not in use.

Incompatible products : Strong oxidizing agents. Strong acids. Strong bases. amines. Acid chlorides. metals. Cyanides and sulfide salts.

Prohibitions on mixed storage : Keep away from incompatible materials.

7.3. Specific end use(s)

Flux.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

2,6-Di-tert-butyl-4-methylphenol (128-37-0)		
Austria	MAK (mg/m³)	10 mg/m³
Belgium	Limit value (mg/m³)	2 mg/m³
Denmark	Local name	2,6-Di-tert-butyl-p-cresol (Butylhydroxytoluen)
Denmark	Grænseværdie (langvarig) (mg/m³)	10 mg/m³
Finland	Local name	2,6-Di-tert-butyyli-p-kresoli
Finland	HTP-arvo (8h) (mg/m³)	10 mg/m³
Finland	HTP-arvo (15 min)	20 mg/m³
France	Local name	2,6-Di-tert-butyl-p-crésol
France	VME (mg/m³)	10 mg/m³
France	Note (FR)	Valeurs recommandées/admises
Germany	Local name	2,6-Di-tert-butyl-p-kresol
Germany	TRGS 900 Occupational exposure limit value (mg/m³)	10 mg/m³ E (mg/m3)
Germany	Remark (TRGS 900)	DFG,Y,11
Ireland	OEL (8 hours ref) (mg/m³)	10 mg/m³
Netherlands	Grenswaarde TGG 8H (mg/m³)	10 mg/m³
Netherlands	Remark (MAC)	valeur limite de l'air
Portugal	Local name	Hidroxitoluenobutilado (2,6-Di-terc-butil-p-cresol) (BHT)

2,6-Di-tert-butyl-4-methylphenol (128-37-0)		
Portugal	OEL TWA (mg/m³)	2 mg/m³ FIV (Fração inalável e vapor)
Slovenia	Local name	2,6-di-terc-butil-p-krezol
Slovenia	OEL TWA (mg/m³)	10 mg/m³
Spain	Local name	2,6-Diterc-butil-p-cresol
Spain	VLA-ED (mg/m³)	10 mg/m³
United Kingdom	WEL TWA (mg/m³)	10 mg/m³
Switzerland	VME (mg/m³)	10 mg/m³
Switzerland	Remark (CH)	(einatembarer Staub)

Polyethylene Glycol (25322-68-3)		
Austria	MAK (mg/m³)	1000 mg/m³ (einatembare Fraktion)
Austria	MAK Short time value (mg/m³)	4000 mg/m³ max. 4x15 min./Schicht (einatembare Fraktion)
Denmark	Grænseværdie (langvarig) (mg/m³)	1000 mg/m³
Denmark	Grænseværdie (kortvarig) (mg/m³)	2000 mg/m³
Denmark	Anmærkninger (DK)	(Polyethylenglycol (PEG) med middelmolvægt på 200-600)
Germany	TRGS 900 Occupational exposure limit value (mg/m³)	1000 mg/m³
Germany	TRGS 900 Limitation of exposure peaks (mg/m³)	8000 mg/m³
Germany	Remark (TRGS 900)	(einatembare Fraktion)
Slovakia	Local name	Polyetylénglykol
Slovakia	NPHV (priemerná) (mg/m³)	1000 mg/m³
Slovakia	Upozornenie (SK)	krátkodobý: kategória II.
Switzerland	MAK (ppm)	1000 ppm
Switzerland	Remark (CH)	(mittlere Molmasse 200–600)

ammonium chloride (12125-02-9)		
Belgium	Limit value (mg/m³)	10 mg/m³
Belgium	Short time value (mg/m³)	20 mg/m³
Belgium	Remark (BE)	(chloure d´, fumeés)
Czech Republic	Local name	Chlorid amonný (dýmy)
Czech Republic	Expoziční limity (PEL) (mg/m³)	5 mg/m³
Czech Republic	Expoziční limity (NPK-P) (mg/m³)	10 mg/m³
Czech Republic	Remark (CZ)	I
Denmark	Local name	Ammoniumchloridrøg
Denmark	Grænseværdie (langvarig) (mg/m³)	10 mg/m³
France	Local name	Chlorure d'ammonium
France	VME (mg/m³)	10 mg/m³
France	Note (FR)	Valeurs recommandées/admises
Ireland	OEL (8 hours ref) (mg/m³)	10 mg/m³
Ireland	OEL (15 min ref) (mg/m3)	20 mg/m³
Latvia	Local name	Amonijahlorīds
Latvia	OEL TWA (mg/m³)	10 mg/m³
Lithuania	IPRV (mg/m³)	10 mg/m³
Poland	Local name	Chlorek amonu (amonowy chlorek) pary i dymy
Poland	NDS (mg/m³)	10 mg/m³
Poland	NDSCh (mg/m³)	20 mg/m³
Poland	Remark (PL)	pary i dymy
Portugal	Local name	Cloreto de amónio, fumos
Portugal	OEL TWA (mg/m³)	10 mg/m³
Portugal	OEL STEL (mg/m³)	20 mg/m³
Spain	Local name	Cloruro amónico
Spain	VLA-ED (mg/m³)	10 mg/m³
Spain	VLA-EC (mg/m³)	20 mg/m³
United Kingdom	WEL TWA (mg/m³)	10 mg/m³

ammonium chloride (12125-02-9)		
United Kingdom	WEL STEL (mg/m³)	20 mg/m³
United Kingdom	Remark (WEL)	(fume)
Norway	Local name	Ammoniumklorid
Norway	Grenseverdier (AN) (mg/m³)	10 mg/m³
Norway	Merknader (NO)	1)
Switzerland	VME (mg/m³)	3 mg/m³
Switzerland	Remark (CH)	(alveolengängiger Staub)
Poloxamer (9003-11-6)		
Germany	TRGS 900 Occupational exposure limit value (mg/m³)	1000 mg/m³
Germany	TRGS 900 Limitation of exposure peaks (mg/m³)	8000 mg/m³
Germany	Remark (TRGS 900)	(PEG mit mittlerer Molmasse 200-600)
Sodium hydroxide (1310-73-2)		
Czech Republic	Local name	Hydroxid sodný
Czech Republic	Expoziční limity (PEL) (mg/m³)	1 mg/m³
Czech Republic	Expoziční limity (NPK-P) (mg/m³)	2 mg/m³
Czech Republic	Remark (CZ)	I
Denmark	Local name	Natriumhydroxid
Denmark	Grænseværdie (langvarig) (mg/m³)	2 mg/m³
Denmark	Anmærkninger (DK)	L (markerer, at grænseværdien er en loftværdi, som ikke på noget tidspunkt må overskrides)
Finland	Local name	Natriumhydroksidi
Finland	HTP-arvo (15 min)	2 mg/m³
Finland	Huomautus (FI)	kattoarvo
France	Local name	Hydroxyde de sodium
France	VME (mg/m³)	2 mg/m³
France	VLE (mg/m³)	2 mg/m³
France	Note (FR)	Valeurs recommandées/admises
Hungary	Local name	NÁTRIUM-HIDROXID
Hungary	AK-érték	2 mg/m³
Hungary	CK-érték	2 mg/m³
Hungary	Megjegyzések (HU)	m; I.
Latvia	Local name	Nātrijahidroksīds (nātrijasārms, kaustiskāsoda)
Latvia	OEL TWA (mg/m³)	0.5 mg/m³
Poland	Local name	Wodorotlenek sodu
Poland	NDS (mg/m³)	0.5 mg/m³
Poland	NDSCh (mg/m³)	1 mg/m³
Portugal	Local name	Hidróxido de sódio
Portugal	OEL - Ceilings (mg/m³)	2 mg/m³
Slovakia	Local name	Hydroxid sodný
Slovakia	NPHV (priemerná) (mg/m³)	2 mg/m³
Slovenia	Local name	natrijev hidroksid
Slovenia	OEL TWA (mg/m³)	2 mg/m³
Slovenia	OEL STEL (mg/m³)	2 mg/m³
Spain	Local name	Hidróxido de sodio
Spain	VLA-EC (mg/m³)	2 mg/m³
Sweden	Local name	Natriumhydroxid
Sweden	nivågränsvärde (NVG) (mg/m³)	1 mg/m³ inhalerbart damm
Sweden	kortidsvärde (KTV) (mg/m³)	2 mg/m³ inhalerbart damm
Sweden	takgränsvärde (TGV) (mg/m³)	2 mg/m³
Sweden	Anmärkning (SE)	inhalable dust

Sodium hydroxide (1310-73-2)		
Norway	Local name	Natriumhydroksid
Norway	Grenseverdier (AN) (mg/m³)	2 mg/m³
Norway	Grenseverdier (Takverdi) (mg/m³)	2 mg/m³
Norway	Merknader (NO)	T (Takverdi er en øyeblikksverdi som angir maksimalkonsentrasjon av et kjemikalie i pustesonen som ikke skal overskrides)

8.2. Exposure controls

Appropriate engineering controls:

Provide local exhaust ventilation of closed transfer systems to minimize exposures.

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

It is a good industrial hygiene practice to minimize skin contact. Wear suitable gloves. Impermeable protective nitrile gloves. EN 374

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	:	Paste.
Colour	:	yellowish to white.
Odour	:	Faint.
Odour threshold	:	No data available
pH	:	6.5 - 7
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	> 204 °C (TOC)
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	:	1.1
Solubility	:	Soluble in water.
Log Pow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	Product is not explosive.
Oxidising properties	:	No oxidizing properties.
Explosive limits	:	No data available

9.2. Other information

VOC content : 0 %

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.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Contact with incompatible materials. Avoid excessive heat or cold.

10.5. Incompatible materials

Strong oxidizing agents. Strong bases. Strong acids. amines. aluminum and other metals. Cyanides and sulfide salts.

10.6. Hazardous decomposition products

Carbon dioxide. Carbon monoxide. ammonia. hydrogen chloride. Burning produces irritating, toxic and noxious fumes.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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

Regular Soldering Flux Paste	
LD50 oral rat	> 5000 mg/kg
LC50 inhalation rat (mg/l)	> 20 mg/l vapours, 1 hour exposure

2,6-Di-tert-butyl-4-methylphenol (128-37-0)	
LD50 oral rat	6000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg

Polyethylene Glycol (25322-68-3)	
LD50 oral rat	47000 mg/kg
LD50 dermal rat	> 20000 mg/kg

ammonium chloride (12125-02-9)	
LD50 oral rat	1410 mg/kg
LD50 dermal rat	> 2000 mg/kg

Oleic acid (112-80-1)	
LD50 oral rat	74000 mg/kg
LD50 dermal rat	> 2000 mg/kg (guinea pig >3000 mg/kg)

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

Additional information : Edema score: 0

Serious eye damage/irritation : Slightly irritant but not relevant for classification (Based on available data, the classification criteria are not met)

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)

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

STOT-repeated exposure : Not classified

2,6-Di-tert-butyl-4-methylphenol (128-37-0)	
NOAEL (oral, rat, 90 days)	25 mg/kg bodyweight/day Digestive, live, urogenital, kidneys, glandular, thyroids, adrenal gland.

ammonium chloride (12125-02-9)	
NOAEL (subchronic, oral, animal/male, 90 days)	>= 580 mg/kg bodyweight 56 days

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

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Avoid undiluted product to come into sewer or superficial water.

2,6-Di-tert-butyl-4-methylphenol (128-37-0)	
LC50 fish 1	0.199
EC50 Daphnia 1	0.48 mg/l
EC50 other aquatic organisms 1	0.758 mg/l

2,6-Di-tert-butyl-4-methylphenol (128-37-0)	
NOEC (acute)	0.15 mg/l

Polyethylene Glycol (25322-68-3)	
LC50 fish 1	> 100 mg/l
LC50 other aquatic organisms 1	1000 mg/l

ammonium chloride (12125-02-9)	
LC50 fish 1	209 mg/l 96 h
EC50 Daphnia 1	101 mg/l 48 h

Unknown hazards to the aquatic environment (CLP) : Contains 0.03 % of components with unknown hazards to the aquatic environment

12.2. Persistence and degradability

Regular Soldering Flux Paste	
Persistence and degradability	Not readily biodegradable. May cause long-term adverse effects in the environment.

2,6-Di-tert-butyl-4-methylphenol (128-37-0)	
Persistence and degradability	Not readily biodegradable. May cause long-term adverse effects in the environment.

Oleic acid (112-80-1)	
Persistence and degradability	Readily biodegradable.
Biodegradation	Ref: Official Bulletin of Ministry of International Trade and Industry

12.3. Bioaccumulative potential

Regular Soldering Flux Paste	
Bioaccumulative potential	Not established.

2,6-Di-tert-butyl-4-methylphenol (128-37-0)	
Log Pow	5.2
Bioaccumulative potential	This product is not bioaccumulating.

12.4. Mobility in soil

2,6-Di-tert-butyl-4-methylphenol (128-37-0)	
Ecology - soil	Absorbs to soil particles and will not be mobile.

12.5. Results of PBT and vPvB assessment

Regular Soldering Flux Paste
PBT: not yet assessed
vPvB: not yet assessed

12.6. Other adverse effects

Additional information : No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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.

SECTION 14: Transport information

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

14.1. UN number

UN-No. (ADR) : Not regulated.

UN-No. (IMDG) : Not regulated.

UN-No. (IATA) : Not regulated.

UN-No. (ADN) : Not regulated.

UN-No. (RID) : Not regulated.

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not regulated.

Proper Shipping Name (IMDG) : Not regulated.

Proper Shipping Name (IATA) : Not regulated.

Proper Shipping Name (ADN) : Not regulated.
Proper Shipping Name (RID) : Not regulated.

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : Not regulated.

IMDG

Transport hazard class(es) (IMDG) : Not regulated.

IATA

Transport hazard class(es) (IATA) : Not regulated.

ADN

Transport hazard class(es) (ADN) : Not regulated.

RID

Transport hazard class(es) (RID) : Not regulated.

14.4. Packing group

Packing group (ADR) : Not regulated.
Packing group (IMDG) : Not regulated.
Packing group (IATA) : Not regulated.
Packing group (ADN) : Not regulated.
Packing group (RID) : Not regulated.

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

Not regulated.

- Transport by sea

Not regulated.

- Air transport

Not regulated.

- Inland waterway transport

Not regulated.

- Rail transport

Not regulated.

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 : 0 %

15.1.2. National regulations

Germany

VwVwS Annex reference	:	Water hazard class (WGK) nwg, Non-hazardous to water (Classification according to VwVwS, Annex 4)
WGK remark	:	Classification based on the R-phrases in compliance withVerwaltungsvorschrift wassergefährdender Stoffe (VwVwS)
Storage class (LGK)	:	LGK 10 - Combustible liquids
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV	:	Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen	:	None of the components are listed
SZW-lijst van mutagene stoffen	:	None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding	:	None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid	:	None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling	:	None of the components are listed

Denmark

Recommendations Danish Regulation	:	Pregnant/breastfeeding women working with the product must not be in direct contact with the product

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Indication of changes:
Classification. Regulatory information.

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 Weighted Average

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

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:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4

Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
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]:

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