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]
Not classified

Classification according to Directive 67/548/EEC or 1999/45/EC

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]

No labelling applicable

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. Mixture

Components with health hazards present above the applicable thresholds and/or with Exposure Limit values are shown. Exact composition withheld as trade secret.

Name	Product identifier	%	Classification according to Directive 67/548/EEC	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Ethanolamine hydrochloride	(CAS No) 2002-24-6 (EC no) 217-900-6	10 – 20	Xi; R36/37/38	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
Polyethylene Glycol	(CAS No) 25322-68-3 (EC no) 500-038-2	10 – 20	Not classified	Not classified
Poloxamer	(CAS No) 9003-11-6	10 – 20	Not classified	Not classified
ammonium chloride	(CAS No) 12125-02-9 (EC no) 235-186-4 (EC index no) 017-014-00-8	5 – 15	Xn; R22 Xi; R36	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 – 1	Not classified	STOT RE 2, H373 Aquatic Acute 1, H400
Oleic acid	(CAS No) 112-80-1 (EC no) 204-007-1	0 – 1	Not classified	Not classified

Name	Product identifier	%	Classification according to Directive 67/548/EEC	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Sodium hydroxide	(CAS No) 1310-73-2 (EC no) 215-185-5 (EC index no) 011-002-00-6	0.001 – 1	C; R35	Skin Corr. 1A, H314

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) Xi;R36/38 (2 =< C < 5) C;R34 (5 =< C) C;R35 (0.5 =< C < 2) Skin Irrit. 2, H315 (0.5 =< C < 2) Eye Irrit. 2, H319 (2 =< C < 5) Skin Corr. 1B, H314 (5 =< C) Skin Corr. 1A, H314

Full text of R-, H- and EUH-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 : 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/doctor/physician if you feel unwell.

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

Symptoms/injuries : 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. EN 469.

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	Local name	2,6-Di-tert-butyl-p-cresol
Austria	MAK (mg/m³)	10 mg/m³
Belgium	Local name	2,6-Di-tert-butyl-p-crésol (vapeur et aérosol)
Belgium	Limit value (mg/m³)	2 mg/m³
Bulgaria	Local name	Дибутилпаракрезол
Bulgaria	OEL TWA (mg/m³)	10 mg/m³
Bulgaria	OEL STEL (mg/m³)	50 mg/m³
France	Local name	2,6-Di-tert-butyl-p-crésol
France	VME (mg/m³)	10 mg/m³
Germany	Local name	2,6-Di-tert-butyl-p-kresol
Germany	TRGS 900 Occupational exposure limit value (mg/m³)	10 mg/m³
Greece	OEL TWA (mg/m³)	10 mg/m³
Italy - Portugal - USA ACGIH	Local name	Butylated hydroxytoluene
Italy - Portugal - USA ACGIH	ACGIH TWA (mg/m³)	2 mg/m³
Italy - Portugal - USA ACGIH	Remark (ACGIH)	URT irr
Spain	Local name	2,6- Diterc-butil-p-cresol
Spain	VLA-ED (mg/m³)	2 mg/m³
Switzerland	Local name	2,6-Di-tert-butyl-4-crésol
Switzerland	VME (mg/m³)	10 mg/m³
Switzerland	Remark (CH)	(einatembarer Staub)
The Netherlands	MAC TGG 8H (mg/m³)	10 mg/m³
The Netherlands	Remark (MAC)	valeur limite de l'air
United Kingdom	Local name	2,6-Di-tert-butyl-p-cresol
United Kingdom	WEL TWA (mg/m³)	10 mg/m³
Denmark	Local name	2,6-Di-tert-butyl-p-cresol (1994)
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
Ireland	Local name	2,6-Ditertiary-butyl-para- cresol
Ireland	OEL (8 hours ref) (mg/m3)	10 mg/m³
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
Croatia	Local name	2,6-Di-tert-butil-p-krezol
Croatia	GVI (granična vrijednost izloženosti) (mg/m³)	10 mg/m³

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)
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)
Switzerland	VME (ppm)	1000 ppm
Switzerland	Remark (CH)	(mittlere Molmasse 200–600)
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)
Slovakia	NPHV (priemerná) (mg/m3)	1000 mg/m³
Slovakia	Upozornenie (SK)	krátkodobý: kategória II.

ammonium chloride (12125-02-9)		
Austria	Local name	Ammonium chloride (fume)
Belgium	Local name	Ammonium (chlorure d') (fumées)
Belgium	Limit value (mg/m³)	10 mg/m³
Belgium	Short time value (mg/m³)	20 mg/m³
Belgium	Remark*	(chloure d´, fumeés)
Bulgaria	Local name	Амониев хлорид
Bulgaria	OEL TWA (mg/m³)	10 mg/m³
France	Local name	Ammonium (chlorure d'),fumées
France	VME (mg/m³)	10 mg/m³
Greece	OEL TWA (mg/m³)	10 mg/m³
Greece	OEL STEL (mg/m³)	20 mg/m³
Italy - Portugal - USA ACGIH	Local name	Ammonium chloride fume
Italy - Portugal - USA ACGIH	ACGIH TWA (mg/m³)	10 mg/m³
Italy - Portugal - USA ACGIH	ACGIH STEL (mg/m³)	20 mg/m³
Italy - Portugal - USA ACGIH	Remark (ACGIH)	Eye & URT irr
Latvia	Local name	Amonijahlorīds
Latvia	OEL TWA (mg/m³)	10 mg/m³
Spain	VLA-ED (mg/m³)	10 mg/m³
Spain	VLA-EC (mg/m³)	20 mg/m³
Switzerland	Local name	Chlorure d'ammonium
Switzerland	VME (mg/m³)	3 mg/m³
Switzerland	Remark (CH)	(alveolengängiger Staub)
United Kingdom	Local name	Ammonium chloride, fume
United Kingdom	WEL TWA (mg/m³)	10 mg/m³
United Kingdom	WEL STEL (mg/m³)	20 mg/m³
United Kingdom	Remark (WEL)	(fume)
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
Ireland	Local name	Ammonium chloride, fume
Ireland	OEL (8 hours ref) (mg/m3)	10 mg/m³
Ireland	OEL (15 min ref) (mg/m3)	20 mg/m³

ammonium chloride (12125-02-9)		
Lithuania	Local name	Amonio chloridas
Lithuania	IPRV (mg/m3)	10 mg/m³
Norway	Local name	Ammoniumklorid
Norway	Gjennomsnittsverdier (AN) (mg/m3)	10 mg/m³
Norway	Merknader (NO)	1)
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
Romania	Local name	Clorura de amoniu
Romania	OEL TWA (mg/m³)	5 mg/m³
Romania	OEL STEL (mg/m³)	10 mg/m³
Portugal	Local name	Cloreto de amónio, fumos
Portugal	OEL TWA (mg/m³)	10 mg/m³
Portugal	OEL STEL (mg/m³)	20 mg/m³
Croatia	Local name	Amonijev klorid
Croatia	GVI (granična vrijednost izloženosti) (mg/m³)	10 mg/m³
Croatia	KGVI (kratkotrajna granična vrijednost izloženosti) (mg/m³)	20 mg/m³
Croatia	Naznake (HR)	Xn

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)

Oleic acid (112-80-1)		
Bulgaria	Local name	Олеинова киселина
Bulgaria	OEL TWA (mg/m³)	10 mg/m³

Sodium hydroxide (1310-73-2)		
Austria	MAK (mg/m³)	2 mg/m³
Austria	MAK Short time value (mg/m³)	4 mg/m³
Belgium	Local name	Sodium (hydroxyde de)
Belgium	Limit value (mg/m³)	2 mg/m³
Belgium	Remark*	M
Bulgaria	Local name	Натриева основа (алкални аерозоли)
Bulgaria	OEL TWA (mg/m³)	2 mg/m³
France	Local name	Sodium (hydroxyde de)
France	VLE (mg/m³)	2 mg/m³
France	VME (mg/m³)	2 mg/m³
Greece	OEL TWA (mg/m³)	2 mg/m³
Greece	OEL STEL (mg/m³)	2 mg/m³
Italy - Portugal - USA ACGIH	Local name	Sodium hydroxide
Italy - Portugal - USA ACGIH	ACGIH Ceiling (mg/m³)	2 mg/m³
Italy - Portugal - USA ACGIH	Remark (ACGIH)	URT, eye, & skin irr
Latvia	Local name	Nātrijahidroksīds (nātrijasārms, kaustiskāsoda)
Latvia	OEL TWA (mg/m³)	0.5 mg/m³
Spain	Local name	Hidróxido de sodio
Spain	VLA-EC (mg/m³)	2 mg/m³
Switzerland	Local name	Soude caustique
Switzerland	VLE (mg/m³)	2 mg/m³
Switzerland	VME (mg/m³)	2 mg/m³
Switzerland	Remark (CH)	15 min
United Kingdom	Local name	Sodium hydroxide
United Kingdom	WEL STEL (mg/m³)	2 mg/m³
Czech Republic	Local name	Hydroxid sodný
Czech Republic	Expoziční limity (PEL) (mg/m3)	1 mg/m³

Sodium hydroxide (1310-73-2)		
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
Finland	Local name	Natriumhydroksidi
Finland	HTP-arvo (15 min)	2 mg/m³
Hungary	Local name	NÁTRIUM-HIDROXID
Hungary	AK-érték	2 mg/m³
Hungary	CK-érték	2 mg/m³
Hungary	Megjegyzések (HU)	m; I.
Ireland	Local name	Sodium hydroxide
Ireland	OEL (15 min ref) (mg/m3)	2 mg/m³
Lithuania	Local name	Natrio hidroksidas
Lithuania	NRV (mg/m3)	2 mg/m³
Lithuania	Remark (LT)	Ū
Norway	Local name	Natriumhydroksid
Norway	Gjennomsnittsverdier (AN) (mg/m3)	2 mg/m³
Norway	Gjennomsnittsverdier (Takverdi) (mg/m3)	2 mg/m³
Norway	Merknader (NO)	T
Poland	Local name	Wodorotlenek sodu
Poland	NDS (mg/m3)	0.5 mg/m³
Poland	NDSCh (mg/m3)	1 mg/m³
Romania	Local name	Hidroxizi alcalini exprimati în hidroxid de sodium
Romania	OEL TWA (mg/m³)	1 mg/m³
Romania	OEL STEL (mg/m³)	3 mg/m³
Slovakia	NPHV (priemerná) (mg/m3)	2 mg/m³
Sweden	Local name	Sodium hydroxide inhalable dust
Sweden	nivågränsvärde (NVG) (mg/m3)	2 mg/m³
Sweden	takgränsvärde (TGV) (mg/m3)	2 mg/m³
Sweden	Anmärkning (SE)	inhalable dust
Portugal	Local name	Hidróxido de sódio
Portugal	OEL - Ceilings (mg/m³)	2 mg/m³
Croatia	Local name	Natrijev hidroksid; (kaustična soda)
Croatia	KGVI (kratkotrajna granična vrijednost izloženosti) (mg/m³)	2 mg/m³
Croatia	Naznake (HR)	C

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)
Self 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
ATE (oral)	6000.000 mg/kg bodyweight

Polyethylene Glycol (25322-68-3)	
LD50 oral rat	47000 mg/kg
LD50 dermal rat	> 20000 mg/kg
ATE (oral)	47000.000 mg/kg bodyweight

ammonium chloride (12125-02-9)	
LD50 oral rat	1410 mg/kg
LD50 dermal rat	> 2000 mg/kg
ATE (oral)	1410.000 mg/kg bodyweight

Oleic acid (112-80-1)	
LD50 oral rat	74000 mg/kg
LD50 dermal rat	> 2000 mg/kg (guinea pig >3000 mg/kg)
ATE (oral)	74000.000 mg/kg bodyweight

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

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)

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 fishes 1	0.199
EC50 Daphnia 1	0.48 mg/l
EC50 other aquatic organisms 1	0.758 mg/l
NOEC (acute)	0.15 mg/l

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

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

12.2. Persistence and degradability

Regular Soldering Flux Paste	
Persistence and degradability	Not readily biodegradable.

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

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.

EURLW 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 / ADNR / IMDG / ICAO / IATA

14.1. UN number

Not considered a dangerous good for transport regulations

14.2. UN proper shipping name

Not applicable

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. Air transport

No additional information available

14.6.4. 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

No REACH Annex XVII restrictions

Contains no REACH candidate substance

VOC content : 0%

15.1.2. National regulations

Germany

Water hazard class (WGK) : nwg - non-hazardous to water

WGK remark : Classification based on the R-phrases in compliance withVerwaltungsvorschrift wassergefährdender Stoffe (VwVwS)

Storage class (LGK) : LGK 10 - Combustible liquids

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Indication of changes:
GHS classification information. Revised sections: 1 - 16.

Data sources : ACGIH 2000.

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.

Abbreviations and acronyms : ACGIH (American Conference of Governement 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.

Other information : None.

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

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
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
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
R22	Harmful if swallowed.
R35	Causes severe burns.
R36	Irritating to eyes.
R36/37/38	Irritating to eyes, respiratory system and skin.
C	Corrosive
Xi	Irritant
Xn	Harmful.

Regular Soldering Flux Paste classification:

Not classified	☒ On basis of test data	☐ 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.