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

1.1. Product identifier

Product form : Mixture

Trade name : Pyromark® High Temperature Paint 1200 Metallic Aluminum

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 : Paint.

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]

Flam. Liq. 2	H225
Skin Irrit. 2	H315
Eye Dam. 1	H318
Carc. 2	H351
STOT RE 1	H372
Aquatic Chronic 3	H412

Full text of classification categories 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]

Hazard pictograms (CLP) :

GHS02 GHS05 GHS08

Signal word (CLP) : Danger

Hazardous ingredients : 1,4-diethylbenzene, Stoddard solvent (benzene < 0.1%)

Hazard statements (CLP) : H225 - Highly flammable liquid and vapour
H315 - Causes skin irritation
H318 - Causes serious eye damage
H351 - Suspected of causing cancer
H372 - Causes damage to organs through prolonged or repeated exposure
H412 - Harmful to aquatic life with long lasting effects

Precautionary statements (CLP) : P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P233 - Keep container tightly closed
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical, lighting, ventilating equipment
P260 - Do not breathe mist, vapours
P264 - Wash hands thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P273 - Avoid release to the environment
P280 - Wear eye protection, protective gloves

P302+P352 - IF ON SKIN: Wash with plenty of water
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a POISON CENTER/doctor
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
P362+P364 - Take off contaminated clothing and wash it before reuse
P370+P378 - In case of fire: Use foam, carbon dioxide (CO2), Dry powder. to extinguish
P403+P235 - Store in a well-ventilated place. Keep cool
P405 - Store locked up
P501 - Dispose of contents/container to an authorised waste collection point

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]
tert-Butylbenzene	(CAS No) 98-06-6	15 – 30	Flam. Liq. 3, H226 Skin Irrit. 2, H315
aluminium powder (pyrophoric)	(CAS No) 7429-90-5 (EC no) 231-072-3 (EC index no) 013-001-00-6	20 – 30	Pyr. Sol. 1, H250 Water-react. 2, H261
Stoddard solvent (benzene < 0.1%)	(CAS No) 8052-41-3 (EC no) 232-489-3 (EC index no) 649-345-00-4	5 – 15	Flam. Liq. 3, H226 STOT RE 1, H372 Asp. Tox. 1, H304
1,4-diethylbenzene	(CAS No) 105-05-5 (EC no) 203-265-2	3 – 15	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Solvent naphtha (petroleum), light arom., Low boiling point naphtha - unspecified (benzene <0.1%)	(CAS No) 64742-95-6 (EC no) 265-199-0 (EC index no) 649-356-00-4	1 – 10	Asp. Tox. 1, H304
1,2,3-Trimethylbenzene	(CAS No) 526-73-8 (EC no) 208-394-8	1 – 5	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
1,2,4-trimethylbenzene	(CAS No) 95-63-6 (EC no) 202-436-9 (EC index no) 601-043-00-3	1 – 5	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 2, H411
indan	(CAS No) 496-11-7 (EC no) 207-814-7	0.1 – 2	Flam. Liq. 3, H226 Asp. Tox. 1, H304
1,2,3,5-tetramethylbenzene	(CAS No) 527-53-7 (EC no) 208-417-1	0.1 – 2	Eye Irrit. 2, H319
m-diethylbenzene	(CAS No) 141-93-5	0.1 – 2	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Naphthalene	(CAS No) 91-20-3 (EC no) 202-049-5 (EC index no) 601-052-00-2	< 1	Acute Tox. 4 (Oral), H302 Carc. 2, H351 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
cumene	(CAS No) 98-82-8 (EC no) 202-704-5 (EC index no) 601-024-00-X	< 1	Flam. Liq. 3, H226 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 2, H411

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Toluene	(CAS No) 108-88-3 (EC no) 203-625-9 (EC index no) 601-021-00-3	< 0.1	Flam. Liq. 2, H225 Repr. 2, H361d Asp. Tox. 1, H304 STOT RE 2, H373 Skin Irrit. 2, H315 STOT SE 3, H336

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

First-aid measures after ingestion : Get medical advice/attention if you feel unwell. Rinse mouth. Do NOT induce vomiting.

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

Symptoms/injuries : Causes damage to organs through prolonged or repeated exposure. Suspected of causing cancer.

Symptoms/injuries after skin contact : Causes skin irritation.

Symptoms/injuries after eye contact : Causes serious eye damage.

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 : Carbon dioxide. Dry chemical. Foam.

Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapour.

Explosion hazard : May form flammable/explosive vapour-air mixture.

Hazardous decomposition products in case of fire : Burning produces irritating, toxic and noxious fumes. Carbon oxides (CO, CO2).

5.3. Advice for firefighters

Firefighting instructions : Cool adjacent structures and containers with water spray to protect and prevent ignition. Eliminate all ignition sources if safe to do so. Exercise caution when fighting any chemical fire.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Use 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 : Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking. Avoid all eye and skin contact and do not breathe vapour and mist.

6.1.1. For non-emergency personnel

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

Emergency procedures : Evacuate unnecessary personnel. Eliminate ignition sources.

6.1.2. For emergency responders

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

Emergency procedures : Stop leak if safe to do so. Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Do not discharge into drains or the environment.

6.3. Methods and material for containment and cleaning up

For containment : Do not allow minor leaks or spills to accumulate on walking surfaces. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for cleaning up : Absorb and/or contain spill with inert material, then place in suitable container. Following recovery, flush area with water. Clean surface thoroughly to remove residual contamination.

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

Additional hazards when processed : Handle empty containers with care because residual vapours are flammable.

Precautions for safe handling : No open flames. No smoking. Use only non-sparking tools. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist, vapours.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash your hands immediately after handling this product, and once again before leaving the workplace.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical, lighting equipment.

Storage conditions : Keep in fireproof place. Keep container tightly closed.

Incompatible products : Strong oxidizers.

Incompatible materials : Heat sources.

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)

Paint.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

1,2,4-trimethylbenzene (95-63-6)		
Denmark	Grænseværdie (kortvarig) (mg/m³)	200 mg/m³
Denmark	Grænseværdie (kortvarig) (ppm)	40 ppm
Germany	TRGS 900 Limitation of exposure peaks (mg/m³)	200 mg/m³
Germany	TRGS 900 Limitation of exposure peaks (ppm)	40 ppm
Lithuania	IPRV (mg/m³)	100 mg/m³
Lithuania	IPRV (ppm)	20 ppm
Lithuania	Remark (LT)	Ta pati RV, iðreikðta mg/m3, yra taikoma kitiems polialkilbenzenams.
Netherlands	Grenswaarde TGG 8H (mg/m³)	100 mg/m³
Netherlands	Grenswaarde TGG 15MIN (mg/m³)	200 mg/m³
Slovakia	NPHV (priemerná) (mg/m³)	100 mg/m³
Slovakia	NPHV (priemerná) (ppm)	20 ppm
Sweden	kortidsvärde (KTV) (mg/m³)	170 mg/m³
Sweden	kortidsvärde (KTV) (ppm)	35 ppm
Sweden	Anmärkning (SE)	55
United Kingdom	WEL TWA (mg/m³)	125 mg/m³
United Kingdom	WEL TWA (ppm)	25 ppm

cumene (98-82-8)		
Denmark	Grænseværdie (kortvarig) (mg/m³)	200 mg/m³
Denmark	Grænseværdie (kortvarig) (ppm)	40 ppm
Finland	Huomautus (FI)	iho
France	Note (FR)	Peau
Germany	TRGS 900 Limitation of exposure peaks (mg/m³)	250 mg/m³
Germany	TRGS 900 Limitation of exposure peaks (ppm)	50 ppm

cumene (98-82-8)		
Germany	TRGS 903 (BGW)	2 mg/l Isopropylbenzol (Blut; Expositionsende bzw. Schichtende) 50 mg/l 2-Phenylpropan-2-ol (Urin; Expositionsende bzw. Schichtende)
Slovakia	NPHV (priemerná) (mg/m³)	100 mg/m³
Slovakia	NPHV (priemerná) (ppm)	20 ppm
Slovakia	Upozornenie (SK)	(K)
Spain	VLA-ED (mg/m³)	100 mg/m³
Spain	VLA-ED (ppm)	20 ppm
Spain	VLA-EC (mg/m³)	250 mg/m³
Spain	VLA-EC (ppm)	50 ppm
Spain	Notes	vía dérmica, VLI
Sweden	Anmärkning (SE)	H

1,2,3-Trimethylbenzene (526-73-8)		
Denmark	Grænseværdie (kortvarig) (mg/m³)	200 mg/m³
Denmark	Grænseværdie (kortvarig) (ppm)	40 ppm
Lithuania	IPRV (mg/m³)	100 mg/m³
Lithuania	IPRV (ppm)	20 ppm
Lithuania	Remark (LT)	Ta pati RV, iðreikðta mg/m3, yra taikoma kitiems polialkilbenzenams.
Slovakia	NPHV (priemerná) (mg/m³)	100 mg/m³
Slovakia	NPHV (priemerná) (ppm)	20 ppm
Sweden	kortidsvärde (KTV) (mg/m³)	170 mg/m³
Sweden	kortidsvärde (KTV) (ppm)	35 ppm
Sweden	Anmärkning (SE)	55
United Kingdom	WEL TWA (mg/m³)	125 mg/m³
United Kingdom	WEL TWA (ppm)	25 ppm

Naphthalene (91-20-3)		
EU	IOELV TWA (mg/m³)	50 mg/m³
EU	IOELV TWA (ppm)	10 ppm
Denmark	Grænseværdie (kortvarig) (mg/m³)	100 mg/m³
Denmark	Grænseværdie (kortvarig) (ppm)	20 ppm
Germany	TRGS 900 Limitation of exposure peaks (mg/m³)	0.5 mg/m³
Germany	TRGS 900 Limitation of exposure peaks (ppm)	0.1 ppm
Slovakia	NPHV (priemerná) (mg/m³)	50 mg/m³
Slovakia	NPHV (priemerná) (ppm)	10 ppm
Slovakia	Upozornenie (SK)	(K)
United Kingdom	WEL TWA (mg/m³)	53 mg/m³
United Kingdom	WEL TWA (ppm)	10 ppm
United Kingdom	WEL STEL (mg/m³)	80 mg/m³
United Kingdom	WEL STEL (ppm)	15 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.

Stoddard solvent (benzene < 0.1%) (8052-41-3)		
Denmark	Grænseværdie (kortvarig) (mg/m³)	290 mg/m³
Denmark	Grænseværdie (kortvarig) (ppm)	50 ppm
Denmark	Anmærkninger (DK)	(Terpentin, mineralsk, max. 20 pct. aromater; 2)

aluminium powder (pyrophoric) (7429-90-5)		
Belgium	Limit value (mg/m³)	1 mg/m³
Belgium	Remark (BE)	(Aluminium, métal et composés insolubles, fraction alvéolaire)

aluminium powder (pyrophoric) (7429-90-5)		
Denmark	Grænseværdie (kortvarig) (mg/m³)	4 mg/m³ (respirabel) 10 mg/m³ (total)
Finland	HTP-arvo (8h) (mg/m³)	2 mg/m³
Finland	Huomautus (FI)	(Alumiini, liukoiset yhdisteet)
France	VME (mg/m³)	5 mg/m³ (pulvérulent) 10 mg/m³ (metal)
Germany	TRGS 903 (BGW)	200 µg/l
Germany	Remark (TRGS 903)	Aluminium (Urin; Expositionsende bzw. Schichtende)
Hungary	Megjegyzések (HU)	(respirábilis por)
Ireland	OEL (8 hours ref) (mg/m³)	1 mg/m³
Ireland	Notes (IE)	(respirable dust)
Lithuania	IPRV (mg/m³)	2 mg/m³ (alveoline frakcija) 1 mg/m³ (Aliuminis (metalas) ir jo tirpus junginiai, kaip Al) 5 mg/m³ (ákvepiamoji frakcija)
Netherlands	Grenswaarde TGG 8H (mg/m³)	10 mg/m³
Poland	NDS (mg/m³)	2.5 mg/m³ (dymy, pyl calkowity) 1.2 mg/m³ (dymy, pyl respirabilny)
Slovakia	NPHV (priemerná) (mg/m³)	2 mg/m³
Slovakia	NPHV (priemerná) (ppm)	60 µg/g creatinine (Hlinik, M,a) 25 µg/g creatinine (Celkový, M,,d) 150 µg/g creatinine (Celkový,M,b)
Spain	VLA-ED (mg/m³)	10 mg/m³ (inhalable aerosol) 5 mg/m³ (respirable aerosol)
Sweden	nivågränsvärde (NVG) (mg/m³)	1 mg/m³ (Aluminium, lösliga föreningar, som Al) 5 mg/m³ (totaldamm, som Al) 2 mg/m³ (respirabelt damm, som Al)
United Kingdom	WEL TWA (mg/m³)	10 mg/m³ (inhalable dust) 4 mg/m³ (respirable dust)
Norway	Merknader (NO)	(Aluminiumpulver, pyroteknikk)
Switzerland	VME (mg/m³)	3 mg/m³
Switzerland	Remark (CH)	(alveolengängiger Staub)

Toluene (108-88-3)		
EU	IOELV TWA (mg/m³)	192 mg/m³
EU	IOELV TWA (ppm)	50 ppm
EU	IOELV STEL (mg/m³)	384 mg/m³
EU	IOELV STEL (ppm)	100 ppm
EU	Notes	Skin
Denmark	Grænseværdie (kortvarig) (mg/m³)	188 mg/m³
Denmark	Grænseværdie (kortvarig) (ppm)	50 ppm
France	Note (FR)	Peau
Germany	TRGS 903 (BGW)	3 mg/l o-Kresol (Urin; bei Langzeitexposition/Expositionsende bzw. Schichtende) 1 mg/l Toluol (Blut; Expositionsende bzw. Schichtende)
Slovakia	NPHV (priemerná) (mg/m³)	192 mg/m³ (K)
Slovakia	NPHV (priemerná) (ppm)	50 ppm (K) 600 ppm (Toluén) 1.5 ppm (O-krezol) 2401 ppm (Kyselina hippurová)
Sweden	Anmärkning (SE)	(B,H)

8.2. Exposure controls

Appropriate engineering controls : Avoid splashing. Ensure good ventilation of the work station.

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection : Wear suitable gloves. Use rubber gloves. EN374.

Eye protection : Chemical goggles or safety glasses. EN166.

Respiratory protection	:	In case of inadequate ventilation wear respiratory protection. Supplied air respirator if working in a confined area. EN 12083.
Environmental exposure controls	:	Prevent leakage or spillage.
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	:	Opaque liquid.
Colour	:	Gray. Metallic.
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	:	111 °C
Flash point	:	6 °C
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	Highly flammable liquid and vapour
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	:	1000 - 2000 cSt @ 40 °C
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	:	696 g/l

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known.

10.2. Chemical stability

Highly flammable liquid and vapour. May form flammable/explosive vapour-air mixture.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Open flame. Direct sunlight.

10.5. Incompatible materials

Strong oxidizers.

10.6. Hazardous decomposition products

May release flammable gases. Burning produces irritating, toxic and noxious fumes. Carbon oxides (CO, CO2).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Solvent naphtha (petroleum), light arom., Low boiling point naphtha - unspecified (benzene <0.1%) (64742-95-6)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 5610 mg/l/4h

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

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

Naphthalene (91-20-3)	
LD50 oral rat	490 mg/kg
LD50 dermal rabbit	20 g/kg
LC50 inhalation rat (mg/l)	> 340 mg/m³ 1 hour
ATE CLP (oral)	490.000 mg/kg bodyweight
ATE CLP (dermal)	20000.000 mg/kg bodyweight

1,4-diethylbenzene (105-05-5)	
LD50 oral rat	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 5 mg/l/4h

Stoddard solvent (benzene < 0.1%) (8052-41-3)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 10 mg/l/4h

aluminium powder (pyrophoric) (7429-90-5)	
LD50 oral rat	> 15900 mg/kg bodyweight
LC50 inhalation rat (Dust/Mist - mg/l/4h)	> 10 mg/l/4h

Toluene (108-88-3)	
LD50 oral rat	5580 mg/kg EU Method B.1 (Acute Toxicity (Oral))
LC50 inhalation rat (mg/l)	> 20 mg/l/4h OECD Guideline 403 (Acute Inhalation Toxicity)
ATE CLP (oral)	5580.000 mg/kg bodyweight

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Causes serious eye damage.

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Suspected of causing cancer.

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Causes damage to organs through prolonged or repeated exposure.

Toluene (108-88-3)	
LOAEL (inhalation, rat, gas, 90 days)	1250 ppmv/6h/day
NOAEL (oral, rat, 90 days)	625 mg/kg bodyweight/day EU Method B.26. Increased relative weights of liver and kidney are interpreted as toxicologically insignificant differences in the absence of histological findings.
NOAEL (inhalation, rat, gas, 90 days)	300 ppmv/6h/day OECD Guideline 453

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Harmful to aquatic life with long lasting effects.

Solvent naphtha (petroleum), light arom., Low boiling point naphtha - unspecified (benzene <0.1%) (64742-95-6)	
LC50 fish 1	8.2 mg/l
EC50 Daphnia 1	4.5 mg/l
EC50 other aquatic organisms 1	3.7 mg/l
NOEC (acute)	0.5 mg/l

1,2,4-trimethylbenzene (95-63-6)	
LC50 fish 1	7.72 mg/l
LC50 other aquatic organisms 1	3.6 mg/l
EC50 other aquatic organisms 1	2.356 mg/l

cumene (98-82-8)	
LC50 fish 1	4.8 mg/l
EC50 other aquatic organisms 1	2.14 mg/l
NOEC (acute)	1.9 mg/l

Naphthalene (91-20-3)	
LC50 fish 1	> 0.91 (0.91 - 2.82) mg/l Oncornhynchus mykiss (From Koppers SDS)
EC50 Daphnia 1	>= 1.96 mg/l From Koppers SDS
EC50 other aquatic organisms 1	33 mg/l From Sigma-Aldrich SDS
LC50 fish 2	> 1 (1 - 6.5) mg/l Pimpephales promelas (From Sigma-Aldrich SDS)
LOEC (acute)	3.2 mg/l From Sigma-Aldrich SDS
NOEC (acute)	1.8 mg/l From Sigma-Aldrich SDS

1,4-diethylbenzene (105-05-5)	
LC50 fish 1	2.5 mg/l 24 h

Toluene (108-88-3)	
LC50 fish 1	5.5 mg/l
EC50 Daphnia 2	3.78 mg/l
ErC50 (algae)	134 mg/l
LOEC (chronic)	2.77 mg/l
NOEC chronic fish	1.39 mg/l
NOEC chronic crustacea	0.74 mg/l

12.2. Persistence and degradability

Pyromark® High Temperature Paint 1200 Metallic Aluminum	
Persistence and degradability	May cause long-term adverse effects in the environment.

Solvent naphtha (petroleum), light arom., Low boiling point naphtha - unspecified (benzene <0.1%) (64742-95-6)	
Persistence and degradability	Not established.

cumene (98-82-8)	
Persistence and degradability	May cause long-term adverse effects in the environment.

1,4-diethylbenzene (105-05-5)	
Biodegradation	-0.7 % 14 d

Toluene (108-88-3)	
Persistence and degradability	Readily biodegradable.

12.3. Bioaccumulative potential

Solvent naphtha (petroleum), light arom., Low boiling point naphtha - unspecified (benzene <0.1%) (64742-95-6)	
Bioaccumulative potential	Not established.

cumene (98-82-8)	
Bioaccumulative potential	Not established.

Naphthalene (91-20-3)	
BCF fish 1	>= 427 (427 - 1158)

1,4-diethylbenzene (105-05-5)	
Log Pow	4.06

Stoddard solvent (benzene < 0.1%) (8052-41-3)	
Log Pow	3.16 - 7.15

Toluene (108-88-3)	
Bioconcentration factor (BCF REACH)	90
Log Kow	2.73

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Pyromark® High Temperature Paint 1200 Metallic Aluminum
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.

Additional information : Handle empty containers with care because residual vapours are flammable.

European List of Waste (LoW) code : For disposal within the EC, the appropriate code according to the European Waste Catalogue (EWC) should be used.
20 01 27* - paint, inks, adhesives and resins containing dangerous substances

H code : H14 - 'Ecotoxic': waste which presents or may present immediate or delayed risks for one or more sectors of the environment.
H3-A - 'Highly flammable' :
— liquid substances and preparations having a flash point below 21 °C (including extremely flammable liquids), or
— substances and preparations which may become hot and finally catch fire in contact with air at ambient temperature without any application of energy, or
— solid substances and preparations which may readily catch fire after brief contact with a source of ignition and which continue to burn or to be consumed after removal of the source of ignition, or
— gaseous substances and preparations which are flammable in air at normal pressure, or
— substances and preparations which, in contact with water or damp air, evolve highly flammable gases in dangerous quantities.
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

UN-No. (ADR) : 1263

UN-No. (IATA) : 1263

UN-No. (IMDG) : 1263

UN-No. (ADN) : 1263

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Paint

Proper Shipping Name (IATA) : Paint

Proper Shipping Name (IMDG) : PAINT

Proper Shipping Name (ADN) : PAINT

Transport document description (ADR) : UN 1263 PAINT, 3, II, (D/E)

14.3. Transport hazard class(es)

Class (ADR) : 3

Classification code (ADR) : F1

Class (IATA) : 3

Class (IMDG) : 3

Class (ADN) : 3

Classification code (ADN) : F1

14.4. Packing group

Packing group (ADR) : II

Packing group (IATA) : II

Packing group (IMDG) : II

Packing group (ADN) : II

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

14.6.1. Overland transport

Hazard identification number (Kemler No.) : 33

Classification code (ADR) : F1

Orange plates :

Tunnel restriction code (ADR) : D/E

EAC code : •3YE

14.6.2. Transport by sea

EmS-No. (Fire) : F-E

EmS-No. (Spillage) : S-E

Stowage category (IMDG) : B

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 : 696 g/l

15.1.2. National regulations

Germany

Water hazard class (WGK) : 3 - severe hazard to waters

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

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

according to Regulation (EU) 2015/830

Indication of changes:
Original Document.

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 Weighted Average
	TSCA: Toxic Substances Control Act

Data sources	:	ESIS (European chemincal 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. 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. 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 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
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 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Asp. Tox. 1	Aspiration hazard, Category 1
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. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Pyr. Sol. 1	Pyorphoric Solids, Category 1
Repr. 2	Reproductive toxicity, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1
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
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
Water-react. 2	Substances and Mixtures which, in contact with water, emit flammable gases, Category 2
H225	Highly flammable liquid and vapour
H226	Flammable liquid and vapour
H250	Catches fire spontaneously if exposed to air
H261	In contact with water releases flammable gases
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H351	Suspected of causing cancer
H361d	Suspected of damaging the unborn child
H372	Causes damage to organs through prolonged or repeated exposure
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
H411	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]:

Flam. Liq. 2	H225	On basis of test data
Skin Irrit. 2	H315	Calculation method
Eye Dam. 1	H318	Calculation method
Carc. 2	H351	Expert judgment
STOT RE 1	H372	Calculation method

Aquatic Chronic 3	H412	Calculation method

LA-CO EU CLP SDS

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product