

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

Product form : Mixture
Trade name : Silver-Streak® Metal Marker

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

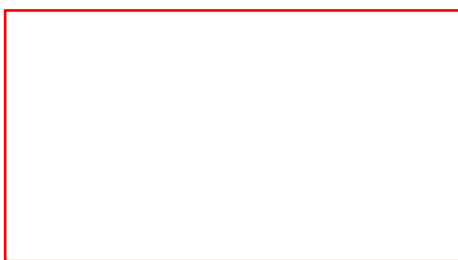
Use of the substance/mixture : Marking.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

LA-CO Industries Europe S.A.S.
Parc Industriel de la Plaine de
l'Ain - Allée des 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/Antigifocentrum c/o Hôpital Central de la Base - Reine Astrid	Rue Bruyn 1 B -1120 Bruxelles/Brussel	+32 70 245 245
BULGARIA	Национален токсикологичен информационен център National Clinical Toxicology Centre, Emergency Medical Institute "Pirogov"	21 Tottleben Boulevard 1606 SOFIA	+359 2 9154 409
CROATIA	Poisons Control Centre Institute of Medical Research & Occupational Health	Ksaverska Cesta 2 P.O. Box 291 HR-10000 Zagreb	+385 1 234 8342
CZECH REPUBLIC	Toxikologické informační středisko Clinic For Occupational Medicine, 1st Medical Faculty, Charles University	Na Bojišti 1 120 00 Praha 2	+42 2 2491 9293 +42 2 2491 5402
DENMARK	Gifflinjen Bispebjerg Hospital	Bispebjerg Bakke 23, 60, 1 DK-2400 København NV	+45 82 12 12 12 +45 35 31 55 55
ESTONIA	Mürgistusteabekeskus	Gonsiori 29 15027 Tallinn	+372 626 93 90
FINLAND	Myrkytystietokeskus	P.O.B 340 (Haartmaninkatu 4) HUS SF - 00029 Helsinki	+358 9 471 977
FRANCE	ORFILA		+33 1 45 42 59 59
GERMANY	Berliner Betrieb für Zentrale Gesundheitliche Aufgaben	Oranienburger Strasse 285 13437 Berlin	+49 30 19240
GERMANY	Informations und Beratungszentrum für Vergiftungsfälle	Kirrberger Straße, Gebäude 9 D-66421 Homburg/Saar	+49 6841 19240
GERMANY	Beratungstelle bei Vergiftungen, Klinische Toxikologie und Beratungsstelle bei Vergiftungen	Langenbeckstrasse 1 55131 Mainz	+49 6131 19240
GREECE	Poisons Information Centre	11527 Athens	+30 10 779 3777
HUNGARY	Országos Kémiai Biztonsági Intézet (National Institute of Chemical Safety) Egészségügyi Toxikológiai Tájékoztató Szolgálat (Health Toxicological Information Service)	1437 Budapest PO Box 839 1097 Budapest, Nagyváradi tér 2	+36 80 20 11 99
ICELAND	Eitrunarmiðstöðin	Eitrunarmiðstöðin 108 Reykjavik	+354 543 22 22
IRELAND	National Poisons Information Centre	Beaumont Hospital PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2166
LATVIA	Valsts Toksikoloģijas centra Saindēšanās un zāļu informācijas centrs	2 Hipocrate Street LV 1038 Riga	+371 67 04 24 73

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LITHUANIA	Apsinuodijimų kontrolės ir informacijos biuras	Siltnamiu 29 2043 Vilnius	+370 5 236 20 52/+370 687 53 378
MALTA	Medicines & Poisons Info Office	Mater Dei Hospital, Msida MSD 2090 Malta	25450000
NETHERLANDS	Nationaal Vergiftigingen Informatie Centrum National Institute for Public Health and the Environment, NB this service is only available to health professionals	Huispostnummer B.00.118, PO Box 85500 3508 GA Utrecht	+31 30 274 88 88
PORTUGAL	Centro de Informação Antivenenos Instituto Nacional de Emergência Médica (INEM)	Rua Almirante Barroso, 36 1000-013 Lisboa	808 250 143 (for use only in Portugal), +351 21 330 3284
ROMANIA	Biroul pentru Regulamentul Sanitar International si Informare Toxicologica	Str. Dr. Leonte Anastasievici Nr.1-3, Sector 5 50463 Bucuresti	+40 21 318 36 06
SLOVAKIA	Národné toxikologické informačné centrum University Hospital Bratislava	Limbová 5 833 05 Bratislava	+421 2 54 77 4 166
SPAIN	Servicio de Información Toxicológica Instituto Nacional de Toxicología, Departamento de Madrid	Calle Luis Cabrera 9 E-28002 Madrid	+34 91 562 04 20
SWEDEN	Giftinformationscentralen Swedish Poisons Information Centre, Karolinska Hospital	Box 60 500 SE-171 76 Stockholm	+46 8 33 12 31 (International) 112 (National)
SWITZERLAND	Centre Suisse d'Information Toxicologique	Freiestrasse 16 Postfach CH-8028 Zurich	+41 44 251 51 51 (International) 145 (National)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

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. 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]
Talc	(CAS No) 14807-96-6 (EC no) 238-877-9	15 – 30	Not classified
aluminium powder (pyrophoric)	(CAS No) 7429-90-5 (EC no) 231-072-3 (EC index no) 013-001-00-6	10 – 20	Pyr. Sol. 1, H250 Water-react. 2, H261
Paraffin waxes and Hydrocarbon waxes	(CAS No) 8002-74-2 (EC no) 232-315-6	10 – 15	Not classified
vinyl acetate	(CAS No) 108-05-4 (EC no) 203-545-4 (EC index no) 607-023-00-0	< 0.1	Flam. Liq. 2, H225 Acute Tox. 4 (Inhalation:dust,mist), H332 Carc. 2, H351 STOT SE 3, H335

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.

First-aid measures after inhalation

: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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First-aid measures after skin contact : Gently wash with plenty of soap and water.
First-aid measures after eye contact : In case of contact, immediately flush eyes with plenty of water.
First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting unless directed to do so by medical personnel. Call a POISON CENTER or doctor/physician if you feel unwell.

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

Symptoms/injuries : None known.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

Fire hazard : No particular fire or explosion hazard.

5.3. Advice for firefighters

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Use self-contained breathing apparatus. Fire-resistant protective clothing. EN469.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : This product is not hazardous.

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Contain and collect as any solid.

Methods for cleaning up : Wipe up with absorbent material (for example cloth).

6.4. Reference to other sections

Section 13: disposal information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage area : Store in dry, cool, well-ventilated area.

7.3. Specific end use(s)

Marking.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Talc (14807-96-6)		
Austria	Remark (AT)	(alveolengängige Fraktion)
Belgium	Remark (BE)	(sans fibre d'amiante)
Finland	HTP-arvo (8h) (mg/m ³)	2 mg/m ³ (Talkki, rakeinen; hengittävää pöly) 1 mg/m ³ (Talkki, rakeinen; alveolijae) 0.5 mg/m ³ (Talkki, kuitumainen)
Hungary	AK-érték	2 mg/m ³
Hungary	Megjegyzések (HU)	respirable aerosol
Ireland	OEL (8 hours ref) (mg/m ³)	10 mg/m ³ total inhalable dust 0.8 mg/m ³ respirable dust

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Talc (14807-96-6)		
Lithuania	IPRV (mg/m ³)	2 mg/m ³ (ikvepiamoji frakcija) 1 mg/m ³ (alveolinė frakcija)
Netherlands	Remark (MAC)	respirable aerosol
Sweden	nivågränsvärde (NVG) (mg/m ³)	2 mg/m ³ total dust, 1 1 mg/m ³ respirable dust, 1
United Kingdom	Local name	Talc
United Kingdom	WEL TWA (mg/m ³)	1 mg/m ³
United Kingdom	Remark (WEL)	respirable aerosol
Norway	Grenseverdier (AN) (mg/m ³)	3 mg/m ³ (respirabelt støv) 6 mg/m ³ (totalstøv)
Switzerland	Remark (CH)	(respirable aerosol)
aluminium powder (pyrophoric) (7429-90-5)		
Belgium	Limit value (mg/m ³)	1 mg/m ³
Belgium	Remark (BE)	(Aluminium, métal et composés insolubles, fraction alvéolaire)
Denmark	Grænseværdie (kortvarig) (mg/m ³)	4 mg/m ³ (respirabel) 10 mg/m ³ (total)
Finland	HTP-arvo (8h) (mg/m ³)	2 mg/m ³
Finland	Huomautus (FI)	(Alumiini, liukoiset yhdisteet)
France	VME (mg/m ³)	5 mg/m ³ (pulvérulent) 10 mg/m ³ (metal)
Germany	TRGS 903 (BGW)	200 µg/l
Germany	Remark (TRGS 903)	Aluminium (Urin; Expositionsende bzw. Schichtende)
Hungary	Megjegyzések (HU)	(respirabilis por)
Ireland	OEL (8 hours ref) (mg/m ³)	1 mg/m ³
Ireland	Notes (IE)	(respirable dust)
Lithuania	IPRV (mg/m ³)	2 mg/m ³ (alveoline frakcija) 1 mg/m ³ (Aluminis (metalas) ir jo tirpus junginiai, kaip Al) 5 mg/m ³ (ákvepiamoji frakcija)
Netherlands	Grenswaarde TGG 8H (mg/m ³)	10 mg/m ³
Poland	NDS (mg/m ³)	2.5 mg/m ³ (dymy, pyl calkowity) 1.2 mg/m ³ (dymy, pyl respirabilny)
Slovakia	NPHV (priemerná) (mg/m ³)	2 mg/m ³
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/m ³)	10 mg/m ³ (inhalable aerosol) 5 mg/m ³ (respirable aerosol)
Sweden	nivågränsvärde (NVG) (mg/m ³)	1 mg/m ³ (Aluminium, lösliga föreningar, som Al) 5 mg/m ³ (totaldamm, som Al) 2 mg/m ³ (respirabelt damm, som Al)
United Kingdom	WEL TWA (mg/m ³)	10 mg/m ³ (inhalable dust) 4 mg/m ³ (respirable dust)
Norway	Merknader (NO)	(Aluminiumpulver, pyroteknikk)
Switzerland	VME (mg/m ³)	3 mg/m ³
Switzerland	Remark (CH)	(alveolengängiger Staub)
vinyl acetate (108-05-4)		
France	VLE (mg/m ³)	35.2 mg/m ³
France	VLE (ppm)	10 ppm
Germany	TRGS 900 Limitation of exposure peaks (mg/m ³)	36 mg/m ³
Germany	TRGS 900 Limitation of exposure peaks (ppm)	10 ppm
Slovakia	NPHV (priemerná) (mg/m ³)	17.6 mg/m ³
Slovakia	NPHV (priemerná) (ppm)	5 ppm
Spain	Notes	(VLI)
Paraffin waxes and Hydrocarbon waxes (8002-74-2)		
Belgium	Remark (BE)	(cire de) (fumées)
Poland	Remark (PL)	dymy

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Paraffin waxes and Hydrocarbon waxes (8002-74-2)		
Slovakia	NPHV (priemerná) (mg/m ³)	2 mg/m ³
Spain	VLA-ED (mg/m ³)	2 mg/m ³
United Kingdom	Remark (WEL)	(fume)
Switzerland	Remark (CH)	(alveolengängiger Staub)

8.2. Exposure controls

Appropriate engineering controls	: Ensure good ventilation of the work station.
Personal protective equipment	: Avoid all unnecessary exposure.
Hand protection	: None under normal use.
Eye protection	: None under normal use.
Respiratory protection	: None under normal use.
Other information	: Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: A solid crayon-like marker.
Colour	: Silver.
Odour	: No data available
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

VOC content	: 0 %
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SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

Acids. Alkali. Oxidizer.

10.6. Hazardous decomposition products

None known.

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

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

vinyl acetate (108-05-4)	
LD50 oral rat	3497 mg/kg
LD50 dermal rabbit	2340 mg/kg
ATE CLP (oral)	3497.000 mg/kg bodyweight
ATE CLP (dermal)	2340.000 mg/kg bodyweight
ATE CLP (dust,mist)	1.500 mg/l/4h

Paraffin waxes and Hydrocarbon waxes (8002-74-2)	
LD50 oral rat	> 5000 mg/kg No mortality observed
LD50 dermal rat	> 2000 mg/kg No mortality observed

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

vinyl acetate (108-05-4)	
LC50 fish 1	18 mg/kg after 96 hours, Lepomis macrochirus
EC50 Daphnia 1	52 mg/l After 24 hours
EC50 other aquatic organisms 1	45 mg/l After 45 hours, Artemia salina
ErC50 (algae)	35 mg/l

Paraffin waxes and Hydrocarbon waxes (8002-74-2)	
LC50 fish 1	> 1000 mg/l

12.2. Persistence and degradability

vinyl acetate (108-05-4)	
Persistence and degradability	Readily biodegradable.
Biodegradation	82 - 98 % after 14 days

12.3. Bioaccumulative potential

vinyl acetate (108-05-4)	
BCF fish 1	2.09 - 2.34 at 20 degrees C
Log Pow	0.21 - 0.73
Bioaccumulative potential	Not expected to bioaccumulate.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Silver-Streak® Metal Marker	
PBT: not yet assessed	
vPvB: not yet assessed	

12.6. Other adverse effects

No additional information available

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

SECTION 14: Transport information

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

14.1. UN number

Not considered a dangerous good for transport regulations

14.2. UN proper shipping name

Proper Shipping Name (ADR) :

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

14.6.1. Overland transport

No additional information available

14.6.2. Transport by sea

No additional information available

14.6.3. Inland waterway transport

Carriage prohibited (ADN) : No

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

VOC content : 0 %

15.1.2. National regulations

Germany

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

15.2. Chemical safety assessment

No additional information available

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

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	OSHA: Occupational Safety & Health Administration
	PBT: Persistent, Bioaccumulative, Toxic
	TWA: Time Weighted Average
	TSCA: Toxic Substances Control Act

Data sources : ESIS (European chemical Substances Information System; accessed at: <http://esis.jrc.ec.europa.eu/index.php?PGM=cla>.
European Chemicals Agency (ECHA) C&L Inventory database. Accessed at <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>.
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
Carc. 2	Carcinogenicity, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Pyr. Sol. 1	Pyrophoric Solids, Category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
Water-react. 2	Substances and Mixtures which, in contact with water, emit flammable gases, Category 2
H225	Highly flammable liquid and vapour
H250	Catches fire spontaneously if exposed to air
H261	In contact with water releases flammable gases
H332	Harmful if inhaled
H335	May cause respiratory irritation
H351	Suspected of causing cancer

LA-CO EU CLP SDS

SDS Prepared by: The Redstone Group, LLC
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www.redstonegrp.com

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