

Weld-Riter® Silver-Streak® Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil Refills, Markal Pro Silver Streak Refills

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 5/24/2021 Revision date: 6/14/2021 Version: 2.0

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

1.1. Product identifier

Product form : Mixture
Trade name : Weld-Riter® Silver-Streak® Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil Refills, Markal Pro Silver Streak Refills

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

1.2.1. Relevant identified uses

Main use category : Professional use
Use of the substance/mixture : Marking.

1.2.2. Uses advised against

Restrictions on use : Any use not specified

1.3. Details of the supplier of the safety data sheet

LA-CO Industries Europe
Parc Industriel de la Plaine de l'Ain - Allée des Combes
01150 Blyes
France
T +33 474462323 - F +33 (0)4 74 46 23 29
info-europe@laco.com - www.markal-city.com



1.4. Emergency telephone number

Emergency number : 24-hour emergency: CHEMTREC- U.S. : 1-800-424-9300 International: +1-703-527-3887;
全国应急中心 0532 8388 9090

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

Weld-Riter® Silver-Streak® Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil Refills, Markal Pro Silver Streak Refills

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

EU Member State	Officieel adviesorgaan	Adres	Noodnummer
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

Adverse physicochemical, human health and environmental effects

No data 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

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

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]
Talc	CAS-No.: 14807-96-6	15 - 30	Not classified

Weld-Riter® Silver-Streak® Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil Refills, Markal Pro Silver Streak Refills

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
	EC-No.: 238-877-9		
Aluminium powder (stabilised) (Note T)	CAS-No.: 7429-90-5 EC-No.: 231-072-3 EC Index-No.: 013-002-00-1	15 - 25	Flam. Sol. 1, H228 Water-react. 2, H261
Paraffin waxes	CAS-No.: 8002-74-2 EC-No.: 232-315-6	10 - 20	Not classified
vinyl acetate (Note D)	CAS-No.: 108-05-4 EC-No.: 203-545-4 EC Index-No.: 607-023-00-0	<0.01	Flam. Liq. 2, H225 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Inhalation:dust,mist), H332 Carc. 2, H351 STOT SE 3, H335

Note D : Certain substances which are susceptible to spontaneous polymerisation or decomposition are generally placed on the market in a stabilised form. It is in this form that they are listed in Part 3. However, such substances are sometimes placed on the market in a non-stabilised form. In this case, the supplier must state on the label the name of the substance followed by the words 'non-stabilised'.

Note T : This substance may be marketed in a form which does not have the physical hazards as indicated by the classification in the entry in Part 3. If the results of the relevant method or methods in accordance with Part 2 of Annex I of this Regulation show that the specific form of substance marketed does not exhibit this physical property or these physical hazards, the substance shall be classified in accordance with the result or results of this test or these tests. Relevant information, including reference to the relevant test method(s) shall be included in the safety data sheet.

Full text of H- and EUH-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.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
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/doctor if you feel unwell.

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

Symptoms/effects	: Not expected to present a significant hazard under anticipated conditions of normal use.
------------------	--

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

Firefighting instructions	: Keep upwind.
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

General measures	: This product is not hazardous.
------------------	----------------------------------

6.1.1. For non-emergency personnel

Protective equipment	: Refer to section 8.2.
----------------------	-------------------------

Weld-Riter® Silver-Streak® Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil Refills, Markal Pro Silver Streak Refills

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Refer to section 8.2.

Emergency procedures : Ventilate area.

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

8.1.1 National occupational exposure and biological limit values

Talc (14807-96-6)	
Austria - Occupational Exposure Limits	
MAK [mg/m ³]	2 mg/m ³
Remark (AT)	(alveolengängige Fraktion)
Belgium - Occupational Exposure Limits	
Limit value [mg/m ³]	2 mg/m ³
Remark (BE)	(sans fibre d'amiante)
Czech Republic - Occupational Exposure Limits	
Local name	Mastek
Expoziční limity (PEL) (mg/m ³)	2 mg/m ³ (pro respirabilní frakci, ≤ 5 % křemen, kristobalit, tridymit nebo gama-oxid hlinitý) 10 mg/m ³ (pro celkovou koncentraci)
Remark	Prachy s převážně fibrogenným účinkem. d) Za přítomnosti početní koncentrace respirabilních vláken v pracovním ovzduší, musí být dodržen přípustný expoziční limit pro azbest.
Regulatory reference	Nařízení vlády č. 361/2007 Sb. (Předpis 41/2020 Sb.)
Denmark - Occupational Exposure Limits	
Local name	Talkum indeholdende fibre
Grænseværdi (8 timer) (mg/m ³)	0.3 fibers/cm ³
Remark	K (betyder, at stoffet anses for at kunne være kræftfremkaldende)
Regulatory reference	BEK nr 290 af 13/02/2021

Weld-Riter® Silver-Streak® Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil Refills, Markal Pro Silver Streak Refills

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Talc (14807-96-6)	
Finland - Occupational Exposure Limits	
Local name	Talkki
HTP-arvo (8h) (mg/m ³)	2 mg/m ³ (Talkki, rakeinen; hengittyvä pöly) 1 mg/m ³ (Talkki, rakeinen; alveolijae) 0.5 mg/m ³ (Talkki, kuitumainen)
HTP-arvo (15 min) (ppm)	2 ppm rakeinen, hengittyvä pöly 1 ppm rakeinen, alveolijae
Regulatory reference	HTP-ARVOT 2020 (Sosiaali- ja terveystieteiden ministeriö)
Hungary - Occupational Exposure Limits	
AK-érték	2 mg/m ³
Ireland - Occupational Exposure Limits	
OEL (8 hours ref) (mg/m ³)	10 mg/m ³ total inhalable dust 0.8 mg/m ³ respirable dust
Lithuania - Occupational Exposure Limits	
IPRV (mg/m ³)	2 mg/m ³ (ikvepiamoji frakcija) 1 mg/m ³ (alveolinė frakcija)
Netherlands - Occupational Exposure Limits	
Local name	Talk
Grenswaarde TGG 8H (mg/m ³)	0.25 mg/m ³
Remark	respirable aerosol
Regulatory reference	Arbeidsomstandighedenregeling 2021
Poland - Occupational Exposure Limits	
Local name	Talk
NDS (mg/m ³)	4 mg/m ³ frakcja wdychalna 1 mg/m ³ frakcja respirabilna
Remark	Frakcja wdychalna – frakcja aerozolu wnikaćca przez nos i usta, która po zdeponowaniu w drogach oddechowych stwarza zagrożenie dla zdrowia. Frakcja respirabilna – frakcja aerozolu wnikaćca do dróg oddechowych, która stwarza zagrożenie dla zdrowia po zdeponowaniu w obszarze wymiany gazowej. Obowiązuje jednoczesne oznaczenie stężeń włókien respirabilnych azbestu.
Regulatory reference	Dz. U. 2018 poz. 1286
Portugal - Occupational Exposure Limits	
Local name	Talco
OEL TWA (mg/m ³)	2 mg/m ³ Sem fibras de amianto. E (O valor aplica-se a partículas sem amianto e contendo menos de 1 % de sílica cristalina), R (Fração respirável) 2 mg/m ³ Com fibras de amianto. K (Partículas respiráveis) 0.1 fibers/cm ³ Com fibras de amianto
Remark	Sem fibras de amianto: A4 (Agente não classificável como carcinogénico no Homem). Com fibras de amianto: A1 (Agente carcinogénico confirmado no Homem)
Regulatory reference	Norma Portuguesa NP 1796:2014
Slovenia - Occupational Exposure Limits	
Local name	smuhec – brez azbestnih vlaken

Weld-Riter® Silver-Streak® Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil Refills, Markal Pro Silver Streak Refills

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Talc (14807-96-6)	
OEL TWA	2 mg/m ³
Spain - Occupational Exposure Limits	
Local name	Talco (con fibras de amianto)
VLA-ED (mg/m ³)	2 mg/m ³
Notes	d,e
Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2021. INSHT
Sweden - Occupational Exposure Limits	
Local name	Talk
Nivågränsvärde (NVG) (mg/m ³)	2 mg/m ³ total dust, 1 1 mg/m ³ respirable dust, 1
Remark	3 (Den respirabla fraktionen är de inhalerbara partiklar som når längst ner i luftvägarna, till alveolerna i lungorna. Med totaldamm menas de partiklar (aerosoler) som fastnar på ett filter i den provtagare som beskrivs i Metodserien, Provtagning av totaldamm och respirabelt damm, Metod nr 1010, Arbetarskyddsstyrelsen, numera Arbetsmiljöverket. Filterdiametern är normalt 37 mm, men kan även vara 25 mm. Trots sitt namn provtas inte den totala mängden luftburna partiklar med denna metod)
Regulatory reference	Hygieniska gränsvärden (AFS 2018:1)
Norway - Occupational Exposure Limits	
Grenseverdier (AN) (mg/m ³)	3 mg/m ³ (respirabelt støv) 6 mg/m ³ (totalstøv)
Switzerland - Occupational Exposure Limits	
VME [mg/m ³]	2 mg/m ³
Remark	(respirable aerosol)
vinyl acetate (108-05-4)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Vinyl acetate
IOEL TWA	17.6 mg/m ³
IOEL TWA [ppm]	5 ppm
IOELV STEL (mg/m ³)	35.2 mg/m ³ 35.2 mg/m ³
IOELV STEL (ppm)	10 ppm 10 ppm
Regulatory reference	COMMISSION DIRECTIVE 2009/161/EU COMMISSION DIRECTIVE 2009/161/EU
Austria - Occupational Exposure Limits	
MAK [mg/m ³]	17.6 mg/m ³ III B
MAK (OEL TWA) [ppm]	5 ppm III B
MAK Short time value [mg/m ³]	35.2 mg/m ³ max. 8x5 min./Schicht (gemessen als Momentanwert), (III B)
MAK Short time value [ppm]	10 ppm max. 8x5 min./Schicht (gemessen als Momentanwert), (III B)
Belgium - Occupational Exposure Limits	

Weld-Riter® Silver-Streak® Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil Refills, Markal Pro Silver Streak Refills

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

vinyl acetate (108-05-4)	
Limit value [mg/m ³]	17.6 mg/m ³
Limit value [ppm]	5 ppm
Short time value [mg/m ³]	35.2 mg/m ³
Short time value [ppm]	10 ppm
Czech Republic - Occupational Exposure Limits	
Local name	Vinylacetát (Ethenylester kyseliny octové)
Expoziční limity (PEL) (mg/m ³)	18 mg/m ³
Expoziční limity (PEL) (ppm)	5 ppm
Expoziční limity (NPK-P) (mg/m ³)	36 mg/m ³
Expoziční limity (NPK-P) (ppm)	10 ppm
Regulatory reference	Nařízení vlády č. 361/2007 Sb. (Předpis 41/2020 Sb.)
Denmark - Occupational Exposure Limits	
Local name	Vinylacetat
Grænseværdi (8 timer) (mg/m ³)	18 mg/m ³
Grænseværdi (8 timer) (ppm)	5 ppm
Remark	K (betyder, at stoffet anses for at kunne være kræftfremkaldende)
Regulatory reference	BEK nr 290 af 13/02/2021
Finland - Occupational Exposure Limits	
Local name	Vinyylisetaatti
HTP-arvo (8h) (mg/m ³)	18 mg/m ³
HTP-arvo (8h) (ppm)	5 ppm
HTP-arvo (15 min)	35 mg/m ³
HTP-arvo (15 min) (ppm)	10 ppm
Regulatory reference	HTP-ARVOT 2020 (Sosiaali- ja terveystieteiden ministeriö)
France - Occupational Exposure Limits	
Local name	Acétate de vinyle
VME [mg/m ³]	17.6 mg/m ³
VME (OEL TWA) [ppm]	5 ppm
VLE [mg/m ³]	35.2 mg/m ³
VLE [ppm]	10 ppm
Note (FR)	Valeurs réglementaires contraignantes
Regulatory reference	Article R4412-149 du Code du travail (réf.: INRS ED 984, 2016; Décret n° 2019-1487; Décret n° 2020-1546; Décret n°2021-434)
Germany - Occupational Exposure Limits (TRGS 900)	
Local name	Vinylacetat
Occupational exposure limit value (mg/m ³)	36 mg/m ³
Occupational exposure limit value (ppm)	10 ppm

Weld-Riter® Silver-Streak® Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil Refills, Markal Pro Silver Streak Refills

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

vinyl acetate (108-05-4)	
Limitation of exposure peaks (mg/m ³)	36 mg/m ³
Limitation of exposure peaks (ppm)	10 ppm
Peak exposure limitation factor	1;=2=(l)
Remark	DFG - Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG (MAK-Kommission); EU - Europäische Union (Von der EU wurde ein Luftgrenzwert festgelegt: Abweichungen bei Wert und Spitzenbegrenzung sind möglich); H - hautresorptiv; Y - Ein Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes (BGW) nicht befürchtet zu werden
Regulatory reference	TRGS900
Hungary - Occupational Exposure Limits	
Local name	VINIL-ACETÁT
AK-érték	17.6 mg/m ³
CK-érték	35.2 mg/m ³
Remark	EU3 (2009/161 /EK irányelvben közölt érték); N (Irritáló anyagok, egyszerű fojtógázok, csekély egészségkárosító hatással bíró anyagok)
Regulatory reference	5/2020. (II. 6.) ITM rendelet - A kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről
Ireland - Occupational Exposure Limits	
OEL (8 hours ref) (mg/m ³)	18 mg/m ³
OEL (8 hours ref) (ppm)	5 ppm
OEL (15 min ref) (mg/m ³)	35 mg/m ³
OEL (15 min ref) (ppm)	10 ppm
Italy - Occupational Exposure Limits	
Local name	Acetato di vinile
OEL TWA	17.6 mg/m ³
OEL TWA [ppm]	5 ppm
OEL STEL	35.2 mg/m ³
OEL STEL (ppm)	10 ppm
Regulatory reference	Allegato XXXVIII del D.Lgs. 9 aprile 2008, n. 81 e s.m.i.
Latvia - Occupational Exposure Limits	
Local name	Vinilacetāts (etiķskābes vinilesteris)
OEL TWA	17.6 mg/m ³
OEL TWA (ppm)	5 ppm
OEL STEL	35.2 mg/m ³
OEL STEL [ppm]	10 ppm
Regulatory reference	Ministru kabineta 2007. gada 15. maija noteikumiem Nr. 325 (Grozījumi Ministru kabineta 2011. gada 1. februārī noteikumiem Nr. 92)
Lithuania - Occupational Exposure Limits	
IPRV (mg/m ³)	17.6 mg/m ³

Weld-Riter® Silver-Streak® Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil Refills, Markal Pro Silver Streak Refills

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

vinyl acetate (108-05-4)	
IPRV (OEL TWA) [ppm]	5 ppm
TPRV (mg/m ³)	35.2 mg/m ³
TPRV (ppm)	10 ppm
Netherlands - Occupational Exposure Limits	
Local name	Vinylacetaat
Grenswaarde TGG 8H (mg/m ³)	18 mg/m ³
Grenswaarde TGG 15MIN (mg/m ³)	36 mg/m ³
Regulatory reference	Arbeidsomstandighedenregeling 2021
Poland - Occupational Exposure Limits	
Local name	Octan winylu
NDS (mg/m ³)	10 mg/m ³
NDSch (mg/m ³)	30 mg/m ³
Regulatory reference	Dz. U. 2018 poz. 1286
Portugal - Occupational Exposure Limits	
Local name	Acetato de vinilo
OEL TWA [ppm]	10 ppm
OEL STEL [ppm]	15 ppm
Remark	A3 (Agente carcinogénico confirmado nos animais de laboratorio con relevância desconhecida no Homem)
Regulatory reference	Norma Portuguesa NP 1796:2014
Slovakia - Occupational Exposure Limits	
Local name	Vinylacetát (octan vinylový)
NPHV (priemerná) (mg/m ³)	17.6 mg/m ³
NPHV (priemerná) (ppm)	5 ppm
NPHV (OEL STEL)	35.2 mg/m ³
NPHV (OEL STEL) [ppm]	10 ppm
Regulatory reference	Nariadenie vlády č. 355/2006 Z. z. (236/2020 Z. z.)
Slovenia - Occupational Exposure Limits	
Local name	vinilacetat
OEL TWA	17.6 mg/m ³
OEL TWA [ppm]	5 ppm
OEL STEL	35.2 mg/m ³
OEL STEL [ppm]	10 ppm
Remark	EU
Regulatory reference	Uradni list RS, št. 78/2019 z dne 20.12.2019
Spain - Occupational Exposure Limits	
Local name	Acetato de vinilo

Weld-Riter® Silver-Streak® Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil Refills, Markal Pro Silver Streak Refills

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

vinyl acetate (108-05-4)	
VLA-ED (mg/m ³)	17.6 mg/m ³
VLA-ED (ppm)	5 ppm
VLA-EC (mg/m ³)	35.2 mg/m ³
VLA-EC (ppm)	10 ppm
Notes	VLI (Agente químico para el que la U.E. estableció en su día un valor límite indicativo).
Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2021. INSHT
Sweden - Occupational Exposure Limits	
Local name	Vinylacetat
Nivågränsvärde (NVG) (mg/m ³)	18 mg/m ³
Nivågränsvärde (NVG) (ppm)	5 ppm
Kortidsvärde (KTV) (mg/m ³)	35 mg/m ³
Kortidsvärde (KTV) (ppm)	10 ppm
Regulatory reference	Hygieniska gränsvärden (AFS 2018:1)
Norway - Occupational Exposure Limits	
Local name	Vinylacetat
Grenseverdier (AN) (mg/m ³)	17.6 mg/m ³
Grenseverdier (AN) (ppm)	5 ppm
Korttidsverdi (OEL STEL)	35.2 mg/m ³
Korttidsverdi (OEL STEL) [ppm]	10 ppm
Remark	K: Kjemikalier som skal betraktes som kreftfremkallende; E: EU har en veiledende grenseverdi for stoffet.
Regulatory reference	FOR-2020-04-06-695
Switzerland - Occupational Exposure Limits	
VME [mg/m ³]	35 mg/m ³
MAK (ppm)	10 ppm
KZGW (mg/m ³)	35 mg/m ³
KZGW (ppm)	10 ppm
Paraffin waxes (8002-74-2)	
Belgium - Occupational Exposure Limits	
Limit value [mg/m ³]	2 mg/m ³
Remark (BE)	(cire de) (fumées)
Denmark - Occupational Exposure Limits	
Local name	Paraffinrøg
Grænseværdi (8 timer) (mg/m ³)	2 mg/m ³
Finland - Occupational Exposure Limits	
Local name	Parafiinihuurut
HTP-arvo (8h) (mg/m ³)	1 mg/m ³

Weld-Riter® Silver-Streak® Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil Refills, Markal Pro Silver Streak Refills

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Paraffin waxes (8002-74-2)	
France - Occupational Exposure Limits	
Local name	Cire de paraffine
VME [mg/m ³]	2 mg/m ³
Note (FR)	Valeurs recommandées/admises
Ireland - Occupational Exposure Limits	
OEL (8 hours ref) (mg/m ³)	2 mg/m ³
OEL (15 min ref) (mg/m ³)	6 mg/m ³
Poland - Occupational Exposure Limits	
Local name	Parafina stała dymy
NDS (mg/m ³)	2 mg/m ³
Portugal - Occupational Exposure Limits	
Local name	Parafina (cera), fumos
OEL TWA (mg/m ³)	2 mg/m ³
Slovakia - Occupational Exposure Limits	
Local name	Parafin, dymy
NPHV (priemerná) (mg/m ³)	2 mg/m ³
NPHV (OEL STEL)	6 mg/m ³
Spain - Occupational Exposure Limits	
Local name	Cera de parafina
VLA-ED (mg/m ³)	2 mg/m ³
Norway - Occupational Exposure Limits	
Local name	Parafin
Grenseverdier (AN) (mg/m ³)	2 mg/m ³
Switzerland - Occupational Exposure Limits	
VME [mg/m ³]	2 mg/m ³
Remark	(alveolengängiger Staub)
Aluminium powder (stabilised) (7429-90-5)	
Austria - Occupational Exposure Limits	
MAK [mg/m ³]	10 mg/m ³ (gemessen als einatembarer Aerosolanteil) 5 mg/m ³ (alveolengängiger Anteil)
MAK Short time value [mg/m ³]	20 mg/m ³ (gemessen als einatembarer Aerosolanteil) max. 2x60 min./Schicht 10 mg/m ³ (alveolengängiger Anteil) max. 2x60 min./Schicht
Belgium - Occupational Exposure Limits	
Limit value [mg/m ³]	1 mg/m ³
Remark (BE)	(Aluminium, métal et composés insolubles, fraction alvéolaire)
Denmark - Occupational Exposure Limits	
Local name	Aluminium, pulver og støv

Weld-Riter® Silver-Streak® Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil Refills, Markal Pro Silver Streak Refills

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Aluminium powder (stabilised) (7429-90-5)	
Grænseværdi (8 timer) (mg/m ³)	2 mg/m ³ (respirabel) 5 mg/m ³ (total)
Grænseværdi (STEL) (mg/m ³)	4 mg/m ³ (respirabel) 10 mg/m ³ (total)
Finland - Occupational Exposure Limits	
HTP-arvo (8h) (mg/m ³)	2 mg/m ³
France - Occupational Exposure Limits	
Local name	Aluminium métal
VME [mg/m ³]	5 mg/m ³ (pulvérulent) 10 mg/m ³ (metal)
Germany - Occupational Exposure Limits (TRGS 900)	
Local name	Aluminium
Germany - Biological limit values (TRGS 903)	
Biological limit value	200 µg/l
Remark	Aluminium (Urin; Expositionsende bzw. Schichtende)
Hungary - Occupational Exposure Limits	
Local name	ALUMÍNIUM, FÉM
AK-érték	6 mg/m ³
Ireland - Occupational Exposure Limits	
OEL (8 hours ref) (mg/m ³)	1 mg/m ³
Latvia - Occupational Exposure Limits	
Local name	Alumīnijsuntā sakausējumi(pēc alumīnija)
OEL TWA	2 mg/m ³
Lithuania - Occupational Exposure Limits	
IPRV (mg/m ³)	2 mg/m ³ (alveoline frakcija) 1 mg/m ³ (Aliuminis (metalas) ir jo tirpus junginiai, kaip Al) 5 mg/m ³ (ákvepiamoji frakcija)
Netherlands - Occupational Exposure Limits	
Grenswaarde TGG 8H (mg/m ³)	10 mg/m ³
Poland - Occupational Exposure Limits	
NDS (mg/m ³)	2.5 mg/m ³ (dymy, pyl calkowity) 1.2 mg/m ³ (dymy, pyl respirabilny)
Portugal - Occupational Exposure Limits	
Local name	Alumínio e compostos insolúveis, expresso em Al
OEL TWA (mg/m ³)	1 mg/m ³ R (Fração respirável)
Slovakia - Occupational Exposure Limits	
Local name	Hliník kovový
NPHV (priemerná) (mg/m ³)	2 mg/m ³
NPHV (priemerná) (ppm)	60 µg/g creatinine (Hliník, M,a)

Weld-Riter® Silver-Streak® Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil Refills, Markal Pro Silver Streak Refills

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Aluminium powder (stabilised) (7429-90-5)	
	25 µg/g creatinine (Celkový, M,,d) 150 µg/g creatinine (Celkový,M,b)
Spain - Occupational Exposure Limits	
Local name	Aluminio
VLA-ED (mg/m ³)	10 mg/m ³ (inhalable aerosol) 5 mg/m ³ (respirable aerosol)
Sweden - Occupational Exposure Limits	
Local name	Aluminium, lösliga föreningar (som Al)
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)
Norway - Occupational Exposure Limits	
Local name	Aluminiumpulver (pyroteknikk)
Grenseverdier (AN) (mg/m ³)	5 mg/m ³
Switzerland - Occupational Exposure Limits	
VME [mg/m ³]	3 mg/m ³
Remark	(alveolengängiger Staub)

8.1.2. Recommended monitoring procedures

No data available

8.1.3. Air contaminants formed

No data available

8.1.4. DNEL and PNEC

No data available

8.1.5. Control banding

No data available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:

Avoid all unnecessary exposure.

8.2.2.1. Eye and face protection

Eye protection:

None under normal use

8.2.2.2. Skin protection

Hand protection:

None under normal use.

8.2.2.3. Respiratory protection

Respiratory protection:

None under normal use

8.2.2.4. Thermal hazards

No data available

8.2.3. Environmental exposure controls

Weld-Riter® Silver-Streak® Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil Refills, Markal Pro Silver Streak Refills

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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
Colour	: Silver.
Appearance	: A solid crayon-like marker.
Odour	: Not available
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Not available
Explosive limits	: Not applicable
Lower explosive limit (LEL)	: Not applicable
Upper explosive limit (UEL)	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: Not available
pH	: Not available
pH solution	: Not available
Viscosity, kinematic	: Not applicable
Solubility	: Not available
Log Kow	: Not available
Vapour pressure	: Not available
Vapour pressure at 50 °C	: Not available
Density	: Not available
Relative density	: Not available
Relative vapour density at 20 °C	: Not applicable
Particle size	: Not available
Particle size distribution	: Not available
Particle shape	: Not available
Particle aspect ratio	: Not available
Particle aggregation state	: Not available
Particle agglomeration state	: Not available
Particle specific surface area	: Not available
Particle dustiness	: Not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No data available

9.2.2. Other safety characteristics

VOC content : 0 %

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.

Weld-Riter® Silver-Streak® Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil Refills, Markal Pro Silver Streak Refills

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

10.6. Hazardous decomposition products

None known.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

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

vinyl acetate (108-05-4)

LD50 Oral rat 3497 mg/kg

LD50 Dermal rabbit 2340 mg/kg

Paraffin waxes (8002-74-2)

LD50 Oral rat > 5000 mg/kg

LD50 Dermal rat > 2000 mg/kg

Aluminium powder (stabilised) (7429-90-5)

LD50 Oral rat > 15900 mg/kg

LC50 Inhalation rat > 2.3 mg/l/4h

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)
Serious eye damage/irritation : Not classified (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)

Talc (14807-96-6)

IARC group 3 - Not classifiable

vinyl acetate (108-05-4)

IARC group 2B - Possibly carcinogenic to humans

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)

vinyl acetate (108-05-4)

STOT-single exposure May cause respiratory irritation.

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

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties : None known

11.2.2. Other information

Other information : No data available

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

vinyl acetate (108-05-4)

Weld-Riter® Silver-Streak® Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil Refills, Markal Pro Silver Streak Refills

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

vinyl acetate (108-05-4)	
LC50 fish 1	18 mg/kg after 96 hours, Lepomis macrochirus
EC50 crustacea	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 (8002-74-2)	
LC50 fish 1	> 1000 mg/l

Aluminium powder (stabilised) (7429-90-5)	
LC50 fish 1	> 218.64 mg/l ASTM 2000; test material: aluminium chloride hexahydrate; Pimephales promelas
EC50 crustacea	1.4 mg/l OECD Guideline 202; test material: Aluminium hydroxide
LOEC (acute)	72.89 mg/l
NOEC (acute)	37.2 mg/l

12.2. Persistence and degradability

Weld-Riter® Silver-Streak® Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil Refills, Markal Pro Silver Streak Refills	
Persistence and degradability	Not established.

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

12.3. Bioaccumulative potential

Weld-Riter® Silver-Streak® Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil Refills, Markal Pro Silver Streak Refills	
Bioaccumulative potential	Not established.

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

Weld-Riter® Silver-Streak® Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil Refills, Markal Pro Silver Streak Refills	
Ecology - soil	Not established.

12.5. Results of PBT and vPvB assessment

Weld-Riter® Silver-Streak® Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil Refills, Markal Pro Silver Streak Refills	
PBT: not yet assessed	
vPvB: not yet assessed	

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : None known

Weld-Riter® Silver-Streak® Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil Refills, Markal Pro Silver Streak Refills

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

12.7. Other adverse effects

Additional information : No data 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.
European List of Waste (LoW) code : For disposal within the EC, the appropriate code according to the European Waste Catalogue (EWC) should be used.
HP Code : HP5 - "Specific Target Organ Toxicity (STOT)/Aspiration Toxicity:" waste which can cause specific target organ toxicity either from a single or repeated exposure, or which cause acute toxic effects following aspiration.

SECTION 14: Transport information

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

14.1. UN number or ID 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.

Weld-Riter® Silver-Streak® Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil Refills, Markal Pro Silver Streak Refills

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Transport by sea

Not regulated.

Air transport

Not regulated.

Inland waterway transport

Not regulated.

Rail transport

Not regulated.

14.7. Maritime transport in bulk according to IMO instruments

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

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	Entry title or description
40.	vinyl acetate	Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.
3(a)	vinyl acetate	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F
3(b)	vinyl acetate	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

VOC content : 0 %

15.1.2. National regulations

All ingredients are listed on the Canadian Domestic Substances List (DSL) or Non-Domestic Substances List (NDSL).

Germany

Water hazard class (WGK) : WGK 1, Slightly hazardous to water (Classification according to AwSV, Annex 1)

12th Ordinance Implementing the Federal : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Immission Control Act - 12.BImSchV

Netherlands

ABM category : A(4) - low hazard for aquatic organisms, may have longterm hazardous effects in aquatic environment

SZW-lijst van kankerverwekkende stoffen : Paraffin waxes is listed

SZW-lijst van mutagene stoffen : Paraffin waxes is listed

NIET-limitatieve lijst van voor de voortplanting : None of the components are listed

Weld-Riter® Silver-Streak® Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil Refills, Markal Pro Silver Streak Refills

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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

Switzerland

Storage class (LK) : NG - Non-hazardous

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Indication of changes:

GHS classification.

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 : 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. 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. European Chemicals Agency (ECHA) Registered Substances list. Accessed at <http://echa.europa.eu/>. National Fire Protection Association. Fire Protection Guide to Hazardous Materials; 10th edition. NIOSH Occupational Health Guide for chemical Substances - Vol. II, September, 1978.

Other information : None.

Full text of H- and EUH-statements:

Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
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
Flam. Sol. 1	Flammable solids, Category 1
H225	Highly flammable liquid and vapour.
H228	Flammable solid.

Weld-Riter® Silver-Streak® Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil, Weld-Riter® Silver-Streak® Mechanical Pencil Refills, Markal Pro Silver Streak Refills

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Full text of H- and EUH-statements:	
H261	In contact with water releases flammable gases.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
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

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.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878
Issue date: 5/24/2021 Version: 1.0

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

Product form : Mixture
Trade name : Weld-Riter® Red Welders Pencil, Markal Pro Red Welders Refills

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

Main use category : Professional use
Use of the substance/mixture : Marking.

1.2.2. Uses advised against

Restrictions on use : Any use not specified

1.3. Details of the supplier of the safety data sheet

LA-CO Industries Europe
Parc Industriel de la Plaine de
l'Ain - Allée des Combes
01150 Blyes - France
T +33 474462323 - F +33 (0)4 74 46 23 29
info-europe@laco.com - www.markal-city.com

1.4. Emergency telephone number

Emergency number : 24-hour emergency: CHEMTREC- U.S. : 1-800-424-9300 International: +1-703-527-3887;
全国应急中心 0532 8388 9090

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 Minsk 220115	+375 (0)17 201 9158
BELGIUM	Centre Anti-Poisons/Antigifcentrum c/o Hôpital Central de la Base - Reine Astrid	Rue Bruyn 1 B -1120 Bruxelles/Brussel	+32 70 245 245
BULGARIA	Национален токсикологичен информационен център National Clinical Toxicology Centre, Emergency Medical Institute "Pirogov"	21 Totleben Boulevard 1606 SOFIA	+359 2 9154 409
CROATIA	Poisons Control Centre Institute of Medical Research & Occupational Health	Ksaverska Cesta 2 P.O. Box 291 HR-10000 Zagreb	+385 1 234 8342
CZECH REPUBLIC	Toxikologické informační středisko Clinic For Occupational Medicine, 1st Medical Faculty, Charles University	Na Bojišti 1 120 00 Praha 2	+42 2 2491 9293 +42 2 2491 5402
DENMARK	Gifflinjen Bispebjerg Hospital	Bispebjerg Bakke 23, 60, 1 DK-2400 København NV	+45 82 12 12 12 +45 35 31 55 55
ESTONIA	Mürgistusteabekeskus	Gonsiori 29 15027 Tallinn	+372 626 93 90
FINLAND	Myrkytystietokeskus	P.O.B 340 (Haartmaninkatu 4) HUS SF - 00029 Helsinki	+358 9 471 977
FRANCE	ORFILA		+33 1 45 42 59 59
GERMANY	Berliner Betrieb für Zentrale Gesundheitliche Aufgaben	Oranienburger Strasse 285 13437 Berlin	+49 30 19240
GERMANY	Informations und Beratungszentrum für Vergiftungsfälle	Kirrberger Straße, Gebäude 9 D-66421 Homburg/Saar	+49 6841 19240
GERMANY	Beratungstelle bei Vergiftungen, Klinische Toxikologie und 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

Weld-Riter® Red Welders Pencil, Markal Pro Red Welders Refills

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

EU Member State	Officieel adviesorgaan	Adres	Noodnummer
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

Adverse physicochemical, human health and environmental effects

No data available

2.2. Label elements

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

EUH-statements

: EUH208 - Contains 4-[[4-(aminocarbonyl)phenyl]azo]-N-(2-ethoxyphenyl)-3-hydroxynaphthalene-2-carboxamide, C.I. Pigment Red 170 (naphthol <1%)(2786-76-7).
May produce an allergic reaction.
EUH210 - Safety data sheet available on request.

2.3. Other hazards

PBT: not yet assessed

vPvB: not yet assessed

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

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]
Talc	CAS-No.: 14807-96-6 EC-No.: 238-877-9	15 - 35	Not classified

Weld-Riter® Red Welders Pencil, Markal Pro Red Welders Refills

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Paraffin waxes	CAS-No.: 8002-74-2 EC-No.: 232-315-6	5 - 15	Not classified
4-[[4-(aminocarbonyl)phenyl]azo]-N-(2-ethoxyphenyl)-3-hydroxynaphthalene-2-carboxamide, C.I. Pigment Red 170 (naphthol <1%)	CAS-No.: 2786-76-7 EC-No.: 220-509-3	<10	Skin Sens. 1, H317
vinyl acetate (Note D)	CAS-No.: 108-05-4 EC-No.: 203-545-4 EC Index-No.: 607-023-00-0	<0.01	Flam. Liq. 2, H225 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Inhalation:dust,mist), H332 Carc. 2, H351 STOT SE 3, H335

Specific concentration limits

Name	Product identifier	Specific concentration limits
4-[[4-(aminocarbonyl)phenyl]azo]-N-(2-ethoxyphenyl)-3-hydroxynaphthalene-2-carboxamide, C.I. Pigment Red 170 (naphthol <1%)	CAS-No.: 2786-76-7 EC-No.: 220-509-3	(10 ≤C ≤ 100) Skin Sens. 1, H317

Note D : Certain substances which are susceptible to spontaneous polymerisation or decomposition are generally placed on the market in a stabilised form. It is in this form that they are listed in Part 3. However, such substances are sometimes placed on the market in a non-stabilised form. In this case, the supplier must state on the label the name of the substance followed by the words 'non-stabilised'.

Full text of H- and EUH-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.
First-aid measures after inhalation	: Not applicable.
First-aid measures after skin contact	: Wash with plenty of 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.

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.
Symptoms/effects after ingestion	: Like any product not designed to be ingested, this product may cause stomach distress if ingested in large quantities.

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

No special procedures required.

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	: No specific fire or explosion hazard.
Hazardous decomposition products in case of fire	: Carbon oxides (CO, CO ₂).

5.3. Advice for firefighters

Firefighting instructions	: Keep upwind.
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

Weld-Riter® Red Welders Pencil, Markal Pro Red Welders Refills

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

General measures : This product is not hazardous.

6.1.1. For non-emergency personnel

Protective equipment : Refer to section 8.2.
Emergency procedures : None.

6.1.2. For emergency responders

Protective equipment : Refer to section 8.2.
Emergency procedures : None.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Contain and collect as any solid.
Methods for cleaning up : Sweep spilled substance into containers; if appropriate, moisten first to prevent dusting.

6.4. Reference to other sections

Section 13: disposal information. Section 7: safe handling.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Do not eat, drink or smoke when using this product.
Hygiene measures : 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

Incompatible products : Strong oxidizers.
Incompatible materials : Heat sources.
Prohibitions on mixed storage : Incompatible materials.
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

8.1.1. National occupational exposure and biological limit values

Talc (14807-96-6)	
Austria - Occupational Exposure Limits	
MAK [mg/m ³]	2 mg/m ³
Remark (AT)	(alveolengängige Fraktion)
Belgium - Occupational Exposure Limits	
Limit value [mg/m ³]	2 mg/m ³
Remark (BE)	(sans fibre d'amiante)
Czech Republic - Occupational Exposure Limits	
Local name	Mastek
Expoziční limity (PEL) (mg/m ³)	2 mg/m ³ (pro respirabilní frakci, ≤ 5 % křemen, kristobalit, tridymit nebo gama-oxid hlinitý) 10 mg/m ³ (pro celkovou koncentraci)
Remark	Prachy s převážně fibrogenným účinkem. d) Za přítomnosti početní koncentrace respirabilních vláken v pracovním ovzduší, musí být dodržen přípustný expoziční limit pro azbest.
Regulatory reference	Nařízení vlády č. 361/2007 Sb. (Předpis 41/2020 Sb.)

Weld-Riter® Red Welders Pencil, Markal Pro Red Welders Refills

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Talc (14807-96-6)	
Denmark - Occupational Exposure Limits	
Local name	Talkum indeholdende fibre
Grænseværdi (8 timer) (mg/m ³)	0.3 fibers/cm ³
Remark	K (betyder, at stoffet anses for at kunne være kræftfremkaldende)
Regulatory reference	BEK nr 290 af 13/02/2021
Finland - Occupational Exposure Limits	
Local name	Talkki
HTP-arvo (8h) (mg/m ³)	0.5 fibers/cm ³ kuitumainen
HTP-arvo (15 min) (ppm)	2 ppm rakeinen, hengittyvä pöly 1 ppm rakeinen, alveolijae
Regulatory reference	HTP-ARVOT 2020 (Sosiaali- ja terveystieteiden ministeriö)
Hungary - Occupational Exposure Limits	
AK-érték	2 mg/m ³
Ireland - Occupational Exposure Limits	
OEL (8 hours ref) (mg/m ³)	10 mg/m ³ total inhalable dust 0.8 mg/m ³ respirable dust
Lithuania - Occupational Exposure Limits	
IPRV (mg/m ³)	2 mg/m ³ (ikvepiamoji frakcija) 1 mg/m ³ (alveolinė frakcija)
Netherlands - Occupational Exposure Limits	
Local name	Talk
Grenswaarde TGG 8H (mg/m ³)	0.25 mg/m ³ (respirabel)
Remark	respirable aerosol
Regulatory reference	Arbeidsomstandighedenregeling 2021
Poland - Occupational Exposure Limits	
Local name	Talk
NDS (mg/m ³)	4 mg/m ³ frakcja wdychalna 1 mg/m ³ frakcja respirabilna
Regulatory reference	Dz. U. 2018 poz. 1286
Portugal - Occupational Exposure Limits	
Local name	Talco
OEL TWA (mg/m ³)	2 mg/m ³ Sem fibras de amianto. E (O valor aplica-se a partículas sem amianto e contendo menos de 1 % de sílica cristalina), R (Fração respirável) 2 mg/m ³ Com fibras de amianto. K (Partículas respiráveis) 0.1 fibers/cm ³ Com fibras de amianto
Remark	Sem fibras de amianto: A4 (Agente não classificável como carcinogénico no Homem). Com fibras de amianto: A1 (Agente carcinogénico confirmado no Homem)

Weld-Riter® Red Welders Pencil, Markal Pro Red Welders Refills

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Talc (14807-96-6)	
Regulatory reference	Norma Portuguesa NP 1796:2014
Slovenia - Occupational Exposure Limits	
Local name	smukec – brez azbestnih vlaken
OEL TWA	2 mg/m ³
Spain - Occupational Exposure Limits	
Local name	Talco (con fibras de amianto)
VLA-ED (mg/m ³)	2 mg/m ³
Notes	d,e
Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2021. INSHT
Sweden - Occupational Exposure Limits	
Local name	Talk
Nivågränsvärde (NVG) (mg/m ³)	2 mg/m ³ totaldamm 1 mg/m ³ respirabel fraktion
Regulatory reference	Hygieniska gränsvärden (AFS 2018:1)
Norway - Occupational Exposure Limits	
Grenseverdier (AN) (mg/m ³)	3 mg/m ³ (respirabelt støv) 6 mg/m ³ (totalstøv)
Switzerland - Occupational Exposure Limits	
VME [mg/m ³]	2 mg/m ³
Remark	(respirable aerosol)
vinyl acetate (108-05-4)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Vinyl acetate
IOEL TWA	17.6 mg/m ³
IOEL TWA [ppm]	5 ppm
IOELV STEL (mg/m ³)	35.2 mg/m ³ 35.2 mg/m ³
IOELV STEL (ppm)	10 ppm 10 ppm
Regulatory reference	COMMISSION DIRECTIVE 2009/161/EU COMMISSION DIRECTIVE 2009/161/EU
Austria - Occupational Exposure Limits	
MAK [mg/m ³]	17.6 mg/m ³ III B
MAK (OEL TWA) [ppm]	5 ppm III B
MAK Short time value [mg/m ³]	35.2 mg/m ³ max. 8x5 min./Schicht (gemessen als Momentanwert), (III B)
MAK Short time value [ppm]	10 ppm max. 8x5 min./Schicht (gemessen als Momentanwert), (III B)
Belgium - Occupational Exposure Limits	

Weld-Riter® Red Welders Pencil, Markal Pro Red Welders Refills

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

vinyl acetate (108-05-4)	
Limit value [mg/m ³]	17.6 mg/m ³
Limit value [ppm]	5 ppm
Short time value [mg/m ³]	35.2 mg/m ³
Short time value [ppm]	10 ppm
Czech Republic - Occupational Exposure Limits	
Local name	Vinylacetát (Ethenylester kyseliny octové)
Expoziční limity (PEL) (mg/m ³)	18 mg/m ³
Expoziční limity (PEL) (ppm)	5 ppm
Expoziční limity (NPK-P) (mg/m ³)	36 mg/m ³
Expoziční limity (NPK-P) (ppm)	10 ppm
Regulatory reference	Nařízení vlády č. 361/2007 Sb. (Předpis 41/2020 Sb.)
Denmark - Occupational Exposure Limits	
Local name	Vinylacetat
Grænseværdi (8 timer) (mg/m ³)	18 mg/m ³
Grænseværdi (8 timer) (ppm)	5 ppm
Anmærkninger (DK)	K (betyder, at stoffet anses for at kunne være kræftfremkaldende)
Regulatory reference	BEK nr 290 af 13/02/2021
Finland - Occupational Exposure Limits	
Local name	Vinyliasettaatti
HTP-arvo (8h) (mg/m ³)	18 mg/m ³
HTP-arvo (8h) (ppm)	5 ppm
HTP-arvo (15 min)	35 mg/m ³
HTP-arvo (15 min) (ppm)	10 ppm
Regulatory reference	HTP-ARVOT 2020 (Sosiaali- ja terveystieteiden ministeriö)
France - Occupational Exposure Limits	
Local name	Acétate de vinyle
VME [mg/m ³]	17.6 mg/m ³
VME (OEL TWA) [ppm]	5 ppm
VLE [mg/m ³]	35.2 mg/m ³
VLE [ppm]	10 ppm
Note (FR)	Valeurs réglementaires contraignantes
Regulatory reference	Article R4412-149 du Code du travail (réf.: INRS ED 984, 2016; Décret n° 2019-1487; Décret n° 2020-1546; Décret n°2021-434)
Germany - Occupational Exposure Limits (TRGS 900)	
Local name	Vinylacetat
Occupational exposure limit value (mg/m ³)	36 mg/m ³
Occupational exposure limit value (ppm)	10 ppm
Limitation of exposure peaks (mg/m ³)	36 mg/m ³
Limitation of exposure peaks (ppm)	10 ppm

Weld-Riter® Red Welders Pencil, Markal Pro Red Welders Refills

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

vinyl acetate (108-05-4)	
Peak exposure limitation factor	1;=2=(I)
Remark	DFG;EU;H;Y
Regulatory reference	TRGS900
Hungary - Occupational Exposure Limits	
Local name	VINIL-ACETÁT
AK-érték	17.6 mg/m ³
CK-érték	35.2 mg/m ³
Megjegyzések (HU)	EU3 (2009/161 /EK irányelvben közölt érték); N (Irritáló anyagok, egyszerű fojtógázok, csekély egészségkárosító hatással bíró anyagok)
Regulatory reference	5/2020. (II. 6.) ITM rendelet - A kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről
Ireland - Occupational Exposure Limits	
OEL (8 hours ref) (mg/m ³)	18 mg/m ³
OEL (8 hours ref) (ppm)	5 ppm
OEL (15 min ref) (mg/m ³)	35 mg/m ³
OEL (15 min ref) (ppm)	10 ppm
Italy - Occupational Exposure Limits	
Local name	Acetato di vinile
OEL TWA	17.6 mg/m ³
OEL TWA [ppm]	5 ppm
OEL STEL	35.2 mg/m ³
OEL STEL (ppm)	10 ppm
Regulatory reference	Allegato XXXVIII del D.Lgs. 9 aprile 2008, n. 81 e s.m.i.
Latvia - Occupational Exposure Limits	
Local name	Vinilacetāts (etiķskābes vinilesteris)
OEL TWA	17.6 mg/m ³
OEL TWA (ppm)	5 ppm
OEL STEL	35.2 mg/m ³
OEL STEL [ppm]	10 ppm
Regulatory reference	Ministru kabineta 2007. gada 15. maija noteikumiem Nr. 325 (Grozījumi Ministru kabineta 2011. gada 1. februārī noteikumiem Nr. 92)
Lithuania - Occupational Exposure Limits	
IPRV (mg/m ³)	17.6 mg/m ³
IPRV (OEL TWA) [ppm]	5 ppm
TPRV (mg/m ³)	35.2 mg/m ³
TPRV (ppm)	10 ppm
Netherlands - Occupational Exposure Limits	
Local name	Vinylacetaat
Grenswaarde TGG 8H (mg/m ³)	18 mg/m ³
Grenswaarde TGG 15MIN (mg/m ³)	36 mg/m ³

Weld-Riter® Red Welders Pencil, Markal Pro Red Welders Refills

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

vinyl acetate (108-05-4)	
Regulatory reference	Arbeidsomstandighedenregeling 2021
Poland - Occupational Exposure Limits	
Local name	Octan winylu
NDS (mg/m ³)	10 mg/m ³
NDSCh (mg/m ³)	30 mg/m ³
Regulatory reference	Dz. U. 2018 poz. 1286
Portugal - Occupational Exposure Limits	
Local name	Acetato de vinilo
OEL TWA [ppm]	10 ppm
OEL STEL [ppm]	15 ppm
Remark	A3 (Agente carcinogénico confirmado nos animais de laboratorio con relevância desconhecida no Homem)
Regulatory reference	Norma Portuguesa NP 1796:2014
Slovakia - Occupational Exposure Limits	
Local name	Vinylacetát (octan vinylový)
NPHV (priemerná) (mg/m ³)	17.6 mg/m ³
NPHV (priemerná) (ppm)	5 ppm
NPHV (OEL STEL)	35.2 mg/m ³
NPHV (OEL STEL) [ppm]	10 ppm
Regulatory reference	Nariadenie vlády č. 355/2006 Z. z. (236/2020 Z. z.)
Slovenia - Occupational Exposure Limits	
Local name	vinilacetat
OEL TWA	17.6 mg/m ³
OEL TWA [ppm]	5 ppm
OEL STEL	35.2 mg/m ³
OEL STEL [ppm]	10 ppm
Remark (SI)	EU
Regulatory reference	Uradni list RS, št. 78/2019 z dne 20.12.2019
Spain - Occupational Exposure Limits	
Local name	Acetato de vinilo
VLA-ED (mg/m ³)	17.6 mg/m ³
VLA-ED (ppm)	5 ppm
VLA-EC (mg/m ³)	35.2 mg/m ³
VLA-EC (ppm)	10 ppm
Notes	VLI (Agente químico para el que la U.E. estableció en su día un valor límite indicativo).
Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2021. INSHT
Sweden - Occupational Exposure Limits	
Local name	Vinylacetat
Nivågränsvärde (NVG) (mg/m ³)	18 mg/m ³

Weld-Riter® Red Welders Pencil, Markal Pro Red Welders Refills

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

vinyl acetate (108-05-4)	
Nivågränsvärde (NVG) (ppm)	5 ppm
Kortidsvärde (KTV) (mg/m ³)	35 mg/m ³
Kortidsvärde (KTV) (ppm)	10 ppm
Anmärkning (SE)	V (Vägledande korttidsgränsvärde ska användas som ett rekommenderat högsta värde som inte bör överskridas)
Regulatory reference	Hygieniska gränsvärden (AFS 2018:1)
United Kingdom - Occupational Exposure Limits	
WEL TWA (mg/m ³)	17.6 mg/m ³
WEL TWA (ppm)	5 ppm
WEL STEL (mg/m ³)	35.2 mg/m ³
WEL STEL (OEL STEL) [ppm]	10 ppm
Norway - Occupational Exposure Limits	
Local name	Vinylacetat
Grenseverdier (AN) (mg/m ³)	17.6 mg/m ³
Grenseverdier (AN) (ppm)	5 ppm
Korttidsverdi (OEL STEL)	35.2 mg/m ³
Korttidsverdi (OEL STEL) [ppm]	10 ppm
Merknader (NO)	K: Kjemikalier som skal betraktes som kreftfremkallende; E: EU har en veiledende grenseverdi for stoffet.
Regulatory reference	FOR-2020-04-06-695
Switzerland - Occupational Exposure Limits	
VME [mg/m ³]	35 mg/m ³
MAK (ppm)	10 ppm
KZGW (mg/m ³)	35 mg/m ³
KZGW (ppm)	10 ppm
Paraffin waxes (8002-74-2)	
Belgium - Occupational Exposure Limits	
Limit value [mg/m ³]	2 mg/m ³
Remark (BE)	(cire de) (fumées)
Denmark - Occupational Exposure Limits	
Local name	Paraffinrøg
Grænseværdi (8 timer) (mg/m ³)	2 mg/m ³
Finland - Occupational Exposure Limits	
Local name	Parafiinihuurut
HTP-arvo (8h) (mg/m ³)	1 mg/m ³
France - Occupational Exposure Limits	
Local name	Cire de paraffine
VME [mg/m ³]	2 mg/m ³
Note (FR)	Valeurs recommandées/admises
Ireland - Occupational Exposure Limits	

Weld-Riter® Red Welders Pencil, Markal Pro Red Welders Refills

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Paraffin waxes (8002-74-2)	
OEL (8 hours ref) (mg/m ³)	2 mg/m ³
OEL (15 min ref) (mg/m ³)	6 mg/m ³
Poland - Occupational Exposure Limits	
Local name	Parafina stała dymy
NDS (mg/m ³)	2 mg/m ³
Remark (PL)	dymy
Portugal - Occupational Exposure Limits	
Local name	Parafina (cera), fumos
OEL TWA (mg/m ³)	2 mg/m ³
Slovakia - Occupational Exposure Limits	
Local name	Parafin, dymy
NPHV (priemerná) (mg/m ³)	2 mg/m ³
NPHV (OEL STEL)	6 mg/m ³
Spain - Occupational Exposure Limits	
Local name	Cera de parafina
VLA-ED (mg/m ³)	2 mg/m ³
United Kingdom - Occupational Exposure Limits	
WEL TWA (mg/m ³)	2 mg/m ³
WEL STEL (mg/m ³)	6 mg/m ³
Remark (WEL)	(fume)
Norway - Occupational Exposure Limits	
Local name	Parafin
Grønseverdier (AN) (mg/m ³)	2 mg/m ³
Switzerland - Occupational Exposure Limits	
VME [mg/m ³]	2 mg/m ³
Remark	(alveolengängiger Staub)

8.1.2. Recommended monitoring procedures

No data available

8.1.3. Air contaminants formed

No data available

8.1.4. DNEL and PNEC

No data available

8.1.5. Control banding

No data available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Weld-Riter® Red Welders Pencil, Markal Pro Red Welders Refills

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

8.2.2.1. Eye and face protection

Eye protection:

None under normal use

8.2.2.2. Skin protection

Hand protection:

None under normal use.

8.2.2.3. Respiratory protection

Respiratory protection:

None under normal use

8.2.2.4. Thermal hazards

No data available

8.2.3. Environmental exposure controls

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
Colour	: red.
Appearance	: A solid crayon-like marker.
Odour	: wax like.
Odour threshold	: Not available
Melting point	: 50 – 65 °C
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Not available
Explosive limits	: Not applicable
Lower explosive limit (LEL)	: Not applicable
Upper explosive limit (UEL)	: Not applicable
Flash point	: 200 °C
Auto-ignition temperature	: 245 °C
Decomposition temperature	: Not available
pH	: Not available
pH solution	: Not available
Viscosity, kinematic	: Not applicable
Solubility	: insoluble in water.
Log Kow	: Not available
Vapour pressure	: Not available
Vapour pressure at 50 °C	: Not available
Density	: Not available
Relative density	: Not available
Relative vapour density at 20 °C	: Not applicable
Particle size	: Not available
Particle size distribution	: Not available
Particle shape	: Not available
Particle aspect ratio	: Not available
Particle aggregation state	: Not available
Particle agglomeration state	: Not available
Particle specific surface area	: Not available
Particle dustiness	: Not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No data available

9.2.2. Other safety characteristics

VOC content : 0 %

Weld-Riter® Red Welders Pencil, Markal Pro Red Welders Refills

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Heat.

10.5. Incompatible materials

Strong oxidizers.

10.6. Hazardous decomposition products

Thermal decomposition generates : Carbon oxides (CO, CO₂).

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

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

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

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

vinyl acetate (108-05-4)

LD50 Oral rat 3497 mg/kg

LD50 Dermal rabbit 2340 mg/kg

Paraffin waxes (8002-74-2)

LD50 Oral rat > 5000 mg/kg

LD50 Dermal rat > 2000 mg/kg

4-[[4-(aminocarbonyl)phenyl]azo]-N-(2-ethoxyphenyl)-3-hydroxynaphthalene-2-carboxamide, C.I. Pigment Red 170 (naphthol <1%) (2786-76-7)

LD50 Oral rat > 15000 mg/kg

LC50 Inhalation rat > 1580 mg/m³ 4 h

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

Serious eye damage/irritation : Not classified (Based on available data, the classification criteria are not met)

Respiratory or skin sensitisation : Not classified. (4-[[4-(aminocarbonyl)phenyl]azo]-N-(2-ethoxyphenyl)-3-hydroxynaphthalene-2-carboxamide, C.I. Pigment Red 170 (naphthol <1%) not sensitizing <10%)

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)

Talc (14807-96-6)

IARC group 3 - Not classifiable, 2B - Possibly carcinogenic to humans

vinyl acetate (108-05-4)

IARC group 2B - Possibly carcinogenic to humans

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)

vinyl acetate (108-05-4)

STOT-single exposure May cause respiratory irritation.

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

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

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Weld-Riter® Red Welders Pencil, Markal Pro Red Welders Refills

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Adverse health effects caused by endocrine disrupting properties : None known

11.2.2. Other information

Other information : No data available

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

vinyl acetate (108-05-4)

LC50 fish 1 18 mg/kg after 96 hours, Lepomis macrochirus

EC50 crustacea 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 (8002-74-2)

LC50 fish 1 > 1000 mg/l

4-[[4-(aminocarbonyl)phenyl]azo]-N-(2-ethoxyphenyl)-3-hydroxynaphthalene-2-carboxamide, C.I. Pigment Red 170 (naphthol <1%) (2786-76-7)

LC50 fish 1 > 500 mg/l 96 h

EC50 crustacea > 110 mg/l 48 h

12.2. Persistence and degradability

Weld-Riter® Red Welders Pencil, Markal Pro Red Welders Refills

Persistence and degradability Not established.

vinyl acetate (108-05-4)

Persistence and degradability Readily biodegradable.

Biodegradation 82 – 98 % after 14 days

4-[[4-(aminocarbonyl)phenyl]azo]-N-(2-ethoxyphenyl)-3-hydroxynaphthalene-2-carboxamide, C.I. Pigment Red 170 (naphthol <1%) (2786-76-7)

Persistence and degradability Not readily biodegradable.

Biodegradation 0 % 28 d

12.3. Bioaccumulative potential

Weld-Riter® Red Welders Pencil, Markal Pro Red Welders Refills

Bioaccumulative potential Not established.

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.

4-[[4-(aminocarbonyl)phenyl]azo]-N-(2-ethoxyphenyl)-3-hydroxynaphthalene-2-carboxamide, C.I. Pigment Red 170 (naphthol <1%) (2786-76-7)

BCF fish 1 53 l/kg

Log Pow 1.28

12.4. Mobility in soil

Weld-Riter® Red Welders Pencil, Markal Pro Red Welders Refills

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Weld-Riter® Red Welders Pencil, Markal Pro Red Welders Refills

Ecology - soil	Not established.
----------------	------------------

12.5. Results of PBT and vPvB assessment

Weld-Riter® Red Welders Pencil, Markal Pro Red Welders Refills

PBT: not yet assessed

vPvB: not yet assessed

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : None known

12.7. Other adverse effects

Additional information : No data 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.
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 / IMDG / IATA / ADN / RID

14.1. UN number or ID 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

Weld-Riter® Red Welders Pencil, Markal Pro Red Welders Refills

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

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. Maritime transport in bulk according to IMO instruments

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

EU restriction list (REACH Annex XVII)

Reference code	Applicable on	Entry title or description
3(a)	vinyl acetate	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F
3(b)	vinyl acetate	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10
40.	vinyl acetate	Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

VOC content : 0 %

15.1.2. National regulations

Germany

Water hazard class (WGK) : WGK 1, Slightly hazardous to water (Classification according to AwSV, Annex 1)

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

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

ABM category : A(4) - low hazard for aquatic organisms, may have longterm hazardous effects in aquatic environment

Weld-Riter® Red Welders Pencil, Markal Pro Red Welders Refills

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

SZW-lijst van kankerverwekkende stoffen	: Paraffin waxes is listed
SZW-lijst van mutagene stoffen	: Paraffin waxes is 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	
Danish National Regulations	: Young people below the age of 18 years are not allowed to use the product Pregnant/breastfeeding women working with the product must not be in direct contact with the product

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

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 : 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. 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. European Chemicals Agency (ECHA) Registered Substances list. Accessed at <http://echa.europa.eu/>. National Fire Protection Association. Fire Protection Guide to Hazardous Materials; 10th edition. NIOSH Occupational Health Guide for chemical Substances - Vol. II, September, 1978.

Other information : None.

Full text of H- and EUH-statements

Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
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
Skin Sens. 1	Skin sensitisation, Category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H225	Highly flammable liquid and vapour.
H317	May cause an allergic skin reaction.

Weld-Riter® Red Welders Pencil, Markal Pro Red Welders Refills

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Full text of H- and EUH-statements	
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
EUH208	Contains 4-[[4-(aminocarbonyl)phenyl]azo]-N-(2-ethoxyphenyl)-3-hydroxynaphthalene-2-carboxamide, C.I. Pigment Red 170 (naphthol <1%)(2786-76-7). May produce an allergic reaction.
EUH210	Safety data sheet available on request.

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.