

SDS ATTACHMENT

PLEASE ATTACH THIS COMPLETED SHEET TO THE SDS FOR:

PRODUCT:

Tradegear Marking Spray 360°

DATE:

(SDS date)

26-Aug-21

1. Manufacturer/Supplier:

Tradegear Ltd
Level 1, 99 Clarence Street
Riccarton
Christchurch 8011
New Zealand
Phone: 0800 22 44 34 or +64 3 341 8055
Fax: 0800 22 11 51 or +64 9 522 8833
24 hr emergency contact: +64 21 510 622
Website: www.tradegear.co.nz
Email: office@tradegear.co.nz

Emergency Information:

National Poison Centre:

0800 764 766

2 & 15. Hazards Identification & Regulatory Requirements:

| | |
|--|---|
| Product Name: | Tradegear Marking Spray 360° |
| Group Standard, Approval # | Aerosols (Flammable) Group Standard 2017— HSR002515 |
| HSNO Classes (from GHS codes) | 2.1.2A, 6.1E, 6.3A, 6.4A, 6.9B, 6.9B(narcotic), 9.3C |
| Class 9 Hazard/Precautionary Statements | DANGER Extremely flammable aerosol. May be harmful if swallowed. May be harmful in contact with skin. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. May cause damage to organs (nervous system) through prolonged or repeated exposure. Harmful to terrestrial vertebrates. Avoid release into environment. Pressurised container: Do not pierce or burn, even after use. Read label and safety data sheet before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand. Beware: deliberately sniffing or inhaling concentrated contents can be harmful or fatal. |
| TEL or EEL applicable? | None |

Safety Data Sheet

According to Annex II to REACH - Regulation 2020/878

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

1.1. Product identifier

Code: V403
 Product name: 360° MARKER PAINT 500 ml AMBRO-SOL
 UFI: Q850-T0R1-N00H-0V7F

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

Intended use: 360° Marker Paint in aerosol.

| Identified Uses | Industrial | Professional | Consumer |
|------------------|------------|--------------|----------|
| Consumer | - | - | ✓ |
| Industrial Use | ✓ | - | - |
| Professional Use | - | ✓ | - |

1.3. Details of the supplier of the safety data sheet

Name: AMBRO-SOL S.R.L. SB
 Full address: Via per Pavone del Mella n.21
 District and Country: 25020 Cigole (BS)
 Italia
 Tel. +39 030 9959674
 Fax +39 030 959265

e-mail address of the competent person responsible for the Safety Data Sheet

regulatory@ambro-sol.com

1.4. Emergency telephone number

For urgent inquiries refer to

IT - Centro Antiveleni e Centro Nazionale di Informazione Tossicologica: Tel. 0382 24444 (IRCCS Fondazione Salvatore Maugeri - Pavia)
 IT - Centro Antiveleni di Milano: Tel. 02 66101029 (Ospedale Niguarda Ca' Granda - Milano)
 IT - Centro Antiveleni di Roma: Tel. 06 3054 343 (Policlinico Universitario A. Gemelli IRCCS - Roma)
 IT - Centro Antiveleni di Bergamo: Tel. 800 883300 (ASST Papa Giovanni XXIII - Bergamo)
 IT - Centro Antiveleni di Firenze: Tel. 055 794 7819 (Azienda Ospedaliera Universitaria Careggi - Firenze)
 IT - Centro Antiveleni di Napoli: Tel. 081 5453333 (Azienda Ospedaliera A. Cardarelli - Napoli)
 AT - Vergiftungsinformationszentrale (VIZ): Tel. +43 01 406 4343 (Austria)
 BE - Belgisch Antigifcentrum: Tel. 070 245245 (Belgium)
 BG - НАЦИОНАЛЕН ЦЕНТЪР ПО ТОКСИКОЛОГИЯ: Tel. +359 2 9154 233 (Bulgaria)
 HR - Centar za kontrolu otrovanja: Tel. +385 1 2348342 (Croatia)
 CY - Τμήμα Επιθεώρησης Εργασίας (TEE): Tel. 1401 (Cyprus)
 CZ - Toxikologické informační středisko (TIS): Tel. +420 224 919 293 or +420 224 915 402 (Czech Republic)
 DK - Giftlinjen: Ring 82 12 12 12 (Denmark)
 EE - Mürgistusteabekeskus: Tel. 16662 (Estonia)
 FI - Myrkytystietokeskus: Tel. 0800 147 111 or 09 471 977 (Finland)
 FR - ORFILA (INRS): Tél. +33 (0) 1 45 42 59 59 (France)
 DE - Giftnotruf der Charité Universitätsmedizin Berlin: Tel. +49 030 19240 (Germany)

GR - Κέντρο Δηλητηριάσεων: Τηλ. 210 7793777 (Greece)
 HU - Egészségügyi Toxikológiai Tájékoztató Szolgálat (ETTSZ): Tel. +36 80 20 1199 (Hungary)
 IS - Eitrunarmiðstöð: Tel. 543 2222 (Iceland)
 IE - National Poisons Information Centre (NPIC): Tel. 01 8092566 or 01 8379964 (Republic of Ireland)
 LV - Latvian Poisons Information Centre: Tel. +371 67042473 (Latvia)
 LT - Apsinuodijimų Informacijos biuras: Tel. 8-5 236 2052 (Lithuania)
 LU - Giftinformationszentrum: Tel. +352 8002 5500 (Luxembourg)
 NL - Nationaal Vergiftigingen Informatie Centrum (NVIC): Tel. 030 274 88 88 (Netherlands)
 NO - Giftinformasjonen: Tel. 22 9 13 00 (Norway)
 PL - Pomorskie Centrum Toksykologii: Tel. +58 682 04 04 (Poland)
 PT - Centro de Informação Antivenenos (CIAV): Tel. 800 250 250 (Portugal)
 RO - Biroul RSI Si Informare Toxicologica: Tel. 021 318 36 06 (Romania)
 SK - Národné Toxikologické informačné centrum (NTIC): Tel. 02 5477 4166 (Slovakia)
 SI - Center za klinično toksikologijo in farmakologijo: Tel. 112 (Slovenia)
 ES - Servicio de Información Toxicológica (SIT) España: Tel.+34 91 562 04 20 (Spain)
 SE - Giftinformationscentralen: Tel. 112 (Sweden)
 CH - Schweizerisches Toxikologisches Informationszentrum (STIZ): Tel. +41 145 (Switzerland)
 GB - National Poisons Information Service (NPIS) Tel. 0344 892 0111 (United Kingdom)
 Members of the Public: NHS 111 (England), NHS 24 (Scotland) or NHS Direct (Wales)

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

| | | |
|--|--------------|---|
| Aerosol, category 1 | H222 H229 | Extremely flammable aerosol. Pressurised container: may burst if heated. |
| Eye irritation, category 2 | H319 | Causes serious eye irritation. |
| Skin irritation, category 2 | H315 | Causes skin irritation. |
| Specific target organ toxicity - single exposure, category 3 | H336 | May cause drowsiness or dizziness. |

2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:



Signal words:

Danger

Hazard statements:

V403 - 360° MARKER PAINT 500 ml AMBRO-SOL

| | |
|---------------|--|
| H222 | Extremely flammable aerosol. |
| H229 | Pressurised container: may burst if heated. |
| H319 | Causes serious eye irritation. |
| H315 | Causes skin irritation. |
| H336 | May cause drowsiness or dizziness. |
| EUH211 | Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist. |

Precautionary statements:

| | |
|------------------|--|
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P251 | Do not pierce or burn, even after use. |
| P410+P412 | Protect from sunlight. Do not expose to temperatures exceeding 50°C / 122°F. |
| P501 | Dispose of contents/container in accordance with local regulations. |
| P102 | Keep out of reach of children. |
| P211 | Do not spray on an open flame or other ignition source. |

| | |
|------------------|------------------|
| Contains: | Methyl acetate |
| | N-butyl acetate |
| | Isobutyl acetate |

VOC (Directive 2004/42/EC) :

Special finishes.

| | |
|---|--------|
| VOC given in g/litre of product in a ready-to-use condition : | 601,07 |
| Limit value: | 840,00 |

2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage \geq than 0,1%.

The product does not contain substances with endocrine disrupting properties in concentration \geq 0.1%.

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

| Identification | x = Conc. % | Classification 1272/2008 (CLP) |
|----------------------------------|--------------------|---|
| Methyl acetate | | |
| CAS 79-20-9 | $15 \leq x < 19$ | Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066 |
| EC 201-185-2 | | |
| INDEX 607-021-00-X | | |
| REACH Reg. 01-2119459211-47-XXXX | | |
| Propane | | |
| CAS 74-98-6 | $15 \leq x < 19$ | Flam. Gas 1A H220, Press. Gas (Liq.) H280, Classification note according to Annex VI to the CLP Regulation: U |
| EC 200-827-9 | | |
| INDEX 601-003-00-5 | | |
| REACH Reg. 01-2119486944-21-0046 | | |

V403 - 360° MARKER PAINT 500 ml AMBRO-SOL

Xylene (Mixture of isomers)

CAS 1330-20-7 $11 \leq x < 15$ Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Eye Irrit. 2 H319, Skin Irrit. 2 H315, Classification note according to Annex VI to the CLP
Regulation: C
LD50 Dermal: >1700 mg/kg, STA Inhalation vapours: 11 mg/l

EC 215-535-7

INDEX 601-022-00-9

REACH Reg. 01-2119488216-32-XXXX

Petroleum Resins

CAS 64742-16-1 $11 \leq x < 15$ Aquatic Chronic 4 H413

EC 265-116-8

INDEX -

N-butyl acetate

CAS 123-86-4 $7 \leq x < 9$ Flam. Liq. 3 H226, STOT SE 3 H336, EUH066

EC 204-658-1

INDEX 607-025-00-1

REACH Reg. 01-2119485493-29-XXXX

Butane

CAS 106-97-8 $7 \leq x < 9$ Flam. Gas 1A H220, Press. Gas (Liq.) H280, Classification note according to Annex VI to the CLP Regulation: C, U

EC 203-448-7

INDEX 601-004-00-0

REACH Reg. 01-2119474691-32-XXXX

2-methoxy-1-methylethyl acetate

CAS 108-65-6 $1 \leq x < 3$ Flam. Liq. 3 H226

EC 203-603-9

INDEX 607-195-00-7

REACH Reg. 01-2119475791-29-XXXX

Isobutane

CAS 75-28-5 $1 \leq x < 3$ Flam. Gas 1A H220, Press. Gas H280

EC 200-857-2

INDEX 601-004-00-0

REACH Reg. 01-2119485395-27-XXXX

Isobutyl acetate

CAS 110-19-0 $1 \leq x < 3$ Flam. Liq. 2 H225, STOT SE 3 H336, EUH066, Classification note according to Annex VI to the CLP Regulation: C

EC 203-745-1

INDEX 607-026-00-7

REACH Reg. 01-2119488971-22-XXXX

Methyl formate

CAS 107-31-3 $1 \leq x < 3$ Flam. Liq. 1 H224, Acute Tox. 4 H302, Acute Tox. 4 H332, Eye Irrit. 2 H319, STOT SE 3 H335

EC 203-481-7

INDEX 607-014-00-1

REACH Reg. 01-2119487303-38-XXXX

Methanol

LD50 Oral: 1500 mg/kg bw, STA Inhalation vapours: 11 mg/l

V403 - 360° MARKER PAINT 500 ml AMBRO-SOL

| | | |
|----------------------------------|------------------|---|
| CAS 67-56-1 | $0,5 \leq x < 1$ | Flam. Liq. 2 H225, Acute Tox. 3 H301, Acute Tox. 3 H311, Acute Tox. 3 H331, STOT SE 1 H370 |
| EC 200-659-6 | | STOT SE 2 H371: $\geq 3\%$ |
| INDEX 603-001-00-X | | STA Oral: 100 mg/kg, STA Dermal: 300 mg/kg, STA Inhalation vapours: 3 mg/l |
| REACH Reg. 01-2119433307-44-XXXX | | |
| Quartz | | |
| CAS 14808-60-7 | $0 \leq x < 0,5$ | STOT RE 2 H373 |
| EC 238-878-4 | | |
| INDEX - | | |
| Formaldehde | | |
| CAS 50-00-0 | $0 \leq x < 0,1$ | Carc. 1B H350, Muta. 2 H341, Acute Tox. 3 H301, Acute Tox. 3 H311, Acute Tox. 3 H331, Skin Corr. 1B H314, Eye Dam. 1 H318, STOT SE 3 H335, Skin Sens. 1 H317, Classification note according to Annex VI to the CLP Regulation: B, D |
| EC 200-001-8 | | Skin Corr. 1B H314: $\geq 25\%$, Skin Irrit. 2 H315: $\geq 5\%$, Skin Sens. 1 H317: $\geq 0,2\%$, Eye Dam. 1 H318: $\geq 25\%$, Eye Irrit. 2 H319: $\geq 5\%$, STOT SE 3 H335: $\geq 5\%$ |
| INDEX 605-001-00-5 | | STA Oral: 100 mg/kg, STA Dermal: 300 mg/kg, STA Inhalation mists/powders: 0,501 mg/l |
| REACH Reg. 01-2119459333-39-XXXX | | |

The full wording of hazard (H) phrases is given in section 16 of the sheet.

The product is an aerosol containing propellants. For the purposes of calculation of the health hazards, propellants are not considered (unless they have health hazards). The percentages indicated are inclusive of the propellants.

Percentage of propellants: 27,00 %

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately.

INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

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

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.
UNSUITABLE EXTINGUISHING EQUIPMENT
None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

If overheated, aerosol cans can deform, explode and be propelled considerable distances. Put a protective helmet on before approaching the fire. Do not breathe combustion products.

5.3. Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site. Send away individuals who are not suitably equipped. Wear protective gloves / protective clothing / eye protection / face protection.

6.2. Environmental precautions

Do not disperse in the environment.

6.3. Methods and material for containment and cleaning up

Use inert absorbent material to soak up leaked product. Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Avoid bunching of electrostatic charges. Do not spray on flames or incandescent bodies. Vapours may catch fire and an explosion may occur; vapour accumulation is therefore to be avoided by leaving windows and doors open and ensuring good cross ventilation. Do not eat, drink or smoke during use. Do not breathe spray.

7.2. Conditions for safe storage, including any incompatibilities

Store in a place where adequate ventilation is ensured, away from direct sunlight at a temperature below 50°C / 122°F, away from any combustion sources.

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

| | | |
|-----|----------------|--|
| DEU | Deutschland | Technischen Regeln für Gefahrstoffe (TRGS 900) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte. MAK- und BAT-Werte-Liste 2020, Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe, Mitteilung 56 |
| ESP | España | Límites de exposición profesional para agentes químicos en España 2021 |
| FRA | France | Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS |
| GRC | Ελλάδα | Π.Δ. 26/2020 (ΦΕΚ 50/Α' 6.3.2020) Εναρμόνιση της ελληνικής νομοθεσίας προς τις διατάξεις των οδηγιών 2017/2398/ΕΕ, 2019/130/ΕΕ και 2019/983/ΕΕ «για την τροποποίηση της οδηγίας 2004/37/ΕΚ ``σχετικά με την προστασία των εργαζομένων από τους κινδύνους που συνδέονται με την έκθεση σε καρκινογόνους ή μεταλλαξιογόνους παράγοντες κατά την εργασία``» |
| ITA | Italia | Decreto Legislativo 9 Aprile 2008, n.81 |
| PRT | Portugal | Decreto-Lei n.º 1/2021 de 6 de janeiro, valores-limite de exposição profissional indicativos para os agentes químicos. Decreto-Lei n.º 35/2020 de 13 de julho, proteção dos trabalhadores contra os riscos ligados à exposição durante o trabalho a agentes cancerígenos ou mutagénicos |
| POL | Polska | Rozporządzenie ministra rozwoju, pracy i technologii z dnia 18 lutego 2021 r. Zmieniające rozporządzenie w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy |
| GBR | United Kingdom | EH40/2005 Workplace exposure limits (Fourth Edition 2020) |
| EU | OEL EU | Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC. |
| | TLV-ACGIH | ACGIH 2020 |

Methyl acetate

Threshold Limit Value

| Type | Country | TWA/8h | | STEL/15min | | Remarks / Observations |
|-----------|---------|--------|-----|------------|---------|------------------------|
| | | mg/m3 | ppm | mg/m3 | ppm | |
| AGW | DEU | 620 | 200 | 1240 (C) | 400 (C) | |
| MAK | DEU | 310 | 100 | 1240 | 400 | |
| VLA | ESP | 616 | 200 | 770 | 250 | |
| VLEP | FRA | 610 | 200 | 760 | 250 | SKIN |
| TLV | GRC | 610 | 200 | 760 | 250 | |
| NDS/NDSch | POL | 250 | | 600 | | |
| WEL | GBR | 616 | 200 | 770 | 250 | |
| TLV-ACGIH | | 606 | 200 | 757 | 250 | |

Predicted no-effect concentration - PNEC

| | | |
|------------------------------|-----|------|
| Normal value in fresh water | 120 | µg/l |
| Normal value in marine water | 12 | µg/l |

Health - Derived no-effect level - DNEL / DMEL

| Route of exposure | Effects on consumers | | | | Effects on workers | | | |
|-------------------|----------------------|----------------|---------------|------------------|--------------------|----------------|---------------|------------------|
| | Acute local | Acute systemic | Chronic local | Chronic systemic | Acute local | Acute systemic | Chronic local | Chronic systemic |
| Oral | | NPI | | 44 mg/kg bw/d | | | | |
| Inhalation | VND | VND | 152 mg/m3 | | VND | VND | 305 mg/m3 | 610 mg/m3 |
| Skin | | | NPI | 44 mg/kg bw/d | NPI | VND | NPI | 88 mg/kg bw/d |

Propane

AMBRO-SOL S.R.L. SB

Revision nr. 11

Dated 26/08/2021

V403 - 360° MARKER PAINT 500 ml AMBRO-SOL

Printed on 14/09/2021

Page n. 8/30

Replaced revision:10 (Dated: 10/10/2020)

Threshold Limit Value

| Type | Country | TWA/8h | | STEL/15min | | Remarks / Observations |
|-----------|---------|--------|------|------------|------|------------------------|
| | | mg/m3 | ppm | mg/m3 | ppm | |
| AGW | DEU | 1800 | 1000 | 7200 | 4000 | |
| MAK | DEU | 1800 | 1000 | 7200 | 4000 | |
| VLA | ESP | | 1000 | | | |
| TLV | GRC | 1800 | 1000 | | | |
| NDS/NDSch | POL | 1800 | | | | |

Xylene (Mixture of isomers)

Threshold Limit Value

| Type | Country | TWA/8h | | STEL/15min | | Remarks / Observations |
|-----------|---------|--------|-----|------------|-----|------------------------|
| | | mg/m3 | ppm | mg/m3 | ppm | |
| AGW | DEU | 440 | 100 | 880 | 200 | SKIN |
| MAK | DEU | 440 | 100 | 880 | 200 | SKIN |
| VLA | ESP | 221 | 50 | 442 | 100 | SKIN |
| VLEP | FRA | 221 | 50 | 442 | 100 | SKIN |
| TLV | GRC | 435 | 100 | 650 | 150 | |
| VLEP | ITA | 221 | 50 | 442 | 100 | SKIN |
| VLE | PRT | 221 | 50 | 442 | 100 | SKIN |
| NDS/NDSch | POL | 100 | | 200 | | SKIN |
| WEL | GBR | 220 | 50 | 441 | 100 | SKIN |
| OEL | EU | 221 | 50 | 442 | 100 | SKIN |
| TLV-ACGIH | | 434 | 100 | 651 | 150 | |

Predicted no-effect concentration - PNEC

| | | |
|--|-------|---------|
| Normal value in fresh water | 327 | µg/l |
| Normal value in marine water | 327 | µg/l |
| Normal value for fresh water sediment | 12,46 | mg/kg/d |
| Normal value for marine water sediment | 12,46 | mg/kg/d |
| Normal value of STP microorganisms | 6,58 | mg/l |
| Normal value for the terrestrial compartment | 2,31 | mg/kg/d |

Health - Derived no-effect level - DNEL / DMEL

| Route of exposure | Effects on consumers | | | Chronic systemic | Effects on workers | | |
|-------------------|----------------------|----------------|---------------|------------------|--------------------|----------------|----------------|
| | Acute local | Acute systemic | Chronic local | | Acute local | Acute systemic | Chronic local |
| Oral | | | | 1,6 mg/kg bw/d | | | |
| Inhalation | | | | 14,8 mg/m3 | | 289 mg/m3 | 77 mg/m3 |
| Skin | | | | 108 mg/kg bw/d | | | 180 mg/kg bw/d |

Talc

Predicted no-effect concentration - PNEC

| | | |
|---------------------------------------|--------|---------|
| Normal value in fresh water | 597,97 | mg/l |
| Normal value in marine water | 141,26 | mg/l |
| Normal value for fresh water sediment | 31,33 | mg/kg/d |

V403 - 360° MARKER PAINT 500 ml AMBRO-SOL

| | | |
|--|--------|---------|
| Normal value for marine water sediment | 3,13 | mg/kg/d |
| Normal value for water, intermittent release | 597,97 | mg/l |
| Normal value for the atmosphere | 10 | mg/m3 |

| Health - Derived no-effect level - DNEL / DMEL | | | | | | | | |
|--|----------------------|----------------|---------------|------------------|--------------------|----------------|---------------|------------------|
| Route of exposure | Effects on consumers | | | | Effects on workers | | | |
| | Acute local | Acute systemic | Chronic local | Chronic systemic | Acute local | Acute systemic | Chronic local | Chronic systemic |
| Oral | | 160 mg/kg bw/d | | 160 mg/kg bw/d | | | | |
| Inhalation | 1,8 mg/m3 | 1,08 mg/m3 | 1,8 mg/m3 | 1,08 mg/m3 | 3,6 mg/m3 | 2,16 mg/m3 | 3,6 mg/m3 | 2,16 mg/m3 |
| Skin | | | 2,27 mg/cm2 | 2,16 mg/kg bw/d | | | 4,54 mg/cm2 | 43,2 mg/kg bw/d |

N-butyl acetate

| Threshold Limit Value | | | | | | |
|-----------------------|---------|--------|-----|------------|---------|------------------------|
| Type | Country | TWA/8h | | STEL/15min | | Remarks / Observations |
| | | mg/m3 | ppm | mg/m3 | ppm | |
| AGW | DEU | 300 | 62 | 600 (C) | 124 (C) | |
| VLEP | FRA | 710 | 150 | 940 | 200 | |
| TLV | GRC | 710 | 150 | 950 | 200 | |
| VLE | PRT | 241 | 50 | 723 | 150 | |
| NDS/NDSCh | POL | 240 | | 720 | | |
| WEL | GBR | 724 | 150 | 966 | 200 | |
| OEL | EU | 241 | 50 | 723 | 150 | |
| TLV-ACGIH | | | 50 | | 150 | |

| Predicted no-effect concentration - PNEC | | |
|--|------|---------|
| Normal value in fresh water | 180 | µg/l |
| Normal value in marine water | 18 | µg/l |
| Normal value for fresh water sediment | 981 | µg/kg/d |
| Normal value for marine water sediment | 98,1 | µg/kg/d |
| Normal value of STP microorganisms | 35,6 | mg/l |
| Normal value for the terrestrial compartment | 90,3 | µg/kg/d |

| Health - Derived no-effect level - DNEL / DMEL | | | | | | | | |
|--|----------------------|----------------|---------------|------------------|--------------------|----------------|---------------|------------------|
| Route of exposure | Effects on consumers | | | | Effects on workers | | | |
| | Acute local | Acute systemic | Chronic local | Chronic systemic | Acute local | Acute systemic | Chronic local | Chronic systemic |
| Oral | | 2 mg/kg bw/d | | 2 mg/kg bw/d | | 2 | | 2 |
| Inhalation | 300 mg/m3 | 300 mg/m3 | 35,7 mg/m3 | 12 mg/m3 | 600 mg/m3 | 600 mg/m3 | 300 mg/m3 | 48 mg/m3 |
| Skin | NPI | 6 mg/kg bw/d | NPI | 3,4 mg/kg bw/d | NPI | 11 mg/kg bw/d | NPI | 7 mg/kg bw/d |

Butane

| Threshold Limit Value | | | | | | |
|-----------------------|---------|--------|------|------------|------|------------------------|
| Type | Country | TWA/8h | | STEL/15min | | Remarks / Observations |
| | | mg/m3 | ppm | mg/m3 | ppm | |
| AGW | DEU | 2400 | 1000 | 9600 | 4000 | |
| MAK | DEU | 2400 | 1000 | 9600 | 4000 | |
| VLA | ESP | | 1000 | | | Gases |
| VLEP | FRA | 1900 | 800 | | | |

AMBRO-SOL S.R.L. SB

Revision nr. 11

Dated 26/08/2021

V403 - 360° MARKER PAINT 500 ml AMBRO-SOL

Printed on 14/09/2021

Page n. 10/30

Replaced revision:10 (Dated: 10/10/2020)

| | | | | | |
|-----------|-----|------|------|------|------|
| TLV | GRC | 2350 | 1000 | | |
| NDS/NDSCh | POL | 1900 | | 3000 | |
| WEL | GBR | 1450 | 600 | 1810 | 750 |
| WEL | GBR | | 4 | | RESP |
| TLV-ACGIH | | | | | 1000 |

2-methoxy-1-methylethyl acetate

Threshold Limit Value

| Type | Country | TWA/8h | | STEL/15min | | Remarks / Observations |
|-----------|---------|--------|-----|------------|-----|------------------------|
| | | mg/m3 | ppm | mg/m3 | ppm | |
| AGW | DEU | 270 | 50 | 270 | 50 | |
| MAK | DEU | 270 | 50 | 270 | 50 | |
| VLA | ESP | 275 | 50 | 550 | 100 | SKIN |
| VLEP | FRA | 275 | 50 | 550 | 100 | SKIN |
| TLV | GRC | 275 | 50 | 550 | 100 | |
| VLEP | ITA | 275 | 50 | 550 | 100 | SKIN |
| VLE | PRT | 275 | 50 | 550 | 100 | SKIN |
| NDS/NDSCh | POL | 260 | | 520 | | SKIN |
| WEL | GBR | 274 | 50 | 548 | 100 | SKIN |
| OEL | EU | 275 | 50 | 550 | 100 | SKIN |

Predicted no-effect concentration - PNEC

| | | | | |
|--|--|------|--|---------------|
| Normal value in fresh water | | 635 | | µg/l |
| Normal value in marine water | | 63,5 | | µg/l |
| Normal value for fresh water sediment | | 3,29 | | mg/kg/d |
| Normal value for marine water sediment | | 329 | | µg/kg/d |
| Normal value of STP microorganisms | | 100 | | mg/l |
| Normal value for the terrestrial compartment | | 290 | | µg/kg soil dw |

Health - Derived no-effect level - DNEL / DMEL

| Route of exposure | Effects on consumers | | | Effects on workers | | | | |
|-------------------|----------------------|----------------|---------------|--------------------|-------------|----------------|---------------|------------------|
| | Acute local | Acute systemic | Chronic local | Chronic systemic | Acute local | Acute systemic | Chronic local | Chronic systemic |
| Oral | | NPI | | 36 mg/kg bw/d | | | | |
| Inhalation | NPI | NPI | 33 mg/m3 | 33 mg/m3 | 550 mg/m3 | NPI | NPI | 275 mg/m3 |
| Skin | NPI | NPI | NPI | 320 mg/kg bw/d | NPI | NPI | NPI | 796 mg/kg bw/d |

Isobutane

Threshold Limit Value

| Type | Country | TWA/8h | | STEL/15min | | Remarks / Observations |
|-----------|---------|--------|-----|------------|-----|------------------------|
| | | mg/m3 | ppm | mg/m3 | ppm | |
| TLV-ACGIH | | | 800 | | | |

Isobutyl acetate

Threshold Limit Value

| Type | Country | TWA/8h | | STEL/15min | | Remarks / Observations |
|------|---------|--------|-----|------------|-----|------------------------|
| | | mg/m3 | ppm | mg/m3 | ppm | |

AMBRO-SOL S.R.L. SB

Revision nr. 11

Dated 26/08/2021

V403 - 360° MARKER PAINT 500 ml AMBRO-SOL

Printed on 14/09/2021

Page n. 11/30

Replaced revision:10 (Dated: 10/10/2020)

| | | | | | |
|-----------|-----|-----|-----|---------|---------|
| AGW | DEU | 300 | 62 | 600 (C) | 124 (C) |
| VLA | ESP | 724 | 150 | | |
| VLEP | FRA | 710 | 150 | 940 | 200 |
| TLV | GRC | 950 | 200 | 950 | 200 |
| VLE | PRT | 241 | 50 | 723 | 150 |
| NDS/NDSch | POL | 240 | | 720 | |
| WEL | GBR | 724 | 150 | 903 | 187 |
| OEL | EU | 241 | 50 | 723 | 150 |
| TLV-ACGIH | | | 50 | | 150 |

| | | | | | |
|--|--|--|--|------|---------|
| Predicted no-effect concentration - PNEC | | | | | |
| Normal value in fresh water | | | | 170 | µg/l |
| Normal value in marine water | | | | 17 | µg/l |
| Normal value for fresh water sediment | | | | 877 | µg/kg/d |
| Normal value for marine water sediment | | | | 87,7 | µg/kg/d |
| Normal value of STP microorganisms | | | | 200 | mg/l |
| Normal value for the terrestrial compartment | | | | 75,5 | µg/kg/d |

| Health - Derived no-effect level - DNEL / DMEL | | | | | | | | |
|--|----------------------|----------------|---------------|------------------|--------------------|----------------|---------------|------------------|
| Route of exposure | Effects on consumers | | | | Effects on workers | | | |
| | Acute local | Acute systemic | Chronic local | Chronic systemic | Acute local | Acute systemic | Chronic local | Chronic systemic |
| Oral | | 5 mg/kg bw/d | | 5 mg/kg bw/d | | | | |
| Inhalation | 300 mg/m3 | | 35,7 mg/m3 | 35,7 mg/m3 | 600 mg/m3 | 600 mg/m3 | 300 mg/m3 | 300 mg/m3 |
| Skin | NPI | 5 mg/kg bw/d | NPI | 5 mg/kg bw/d | NPI | 10 mg/kg bw/d | NPI | 10 mg/kg bw/d |

Methyl formate
Threshold Limit Value

| Type | Country | TWA/8h | STEL/15min | Remarks / Observations |
|-----------|---------|--------|------------|------------------------|
| | | mg/m3 | ppm | |
| TLV-ACGIH | | 246 | 100 | |

| | | | | | |
|--|--|--|--|------|------|
| Predicted no-effect concentration - PNEC | | | | | |
| Normal value in fresh water | | | | 115 | µg/l |
| Normal value in marine water | | | | 11,5 | µg/l |

| Health - Derived no-effect level - DNEL / DMEL | | | | | | | | |
|--|----------------------|----------------|---------------|------------------|--------------------|----------------|---------------|------------------|
| Route of exposure | Effects on consumers | | | | Effects on workers | | | |
| | Acute local | Acute systemic | Chronic local | Chronic systemic | Acute local | Acute systemic | Chronic local | Chronic systemic |
| Inhalation | | | | 14,29 mg/m3 | | VND | | |
| Skin | | | | | VND | VND | NPI | |

Methanol
Threshold Limit Value

| Type | Country | TWA/8h | STEL/15min | Remarks / Observations | | |
|------|---------|--------|------------|------------------------|-----|------|
| | | mg/m3 | ppm | | | |
| AGW | DEU | 270 | 200 | 1080 | 800 | SKIN |
| MAK | DEU | 130 | 100 | 260 | 200 | SKIN |
| VLA | ESP | 266 | 200 | | | SKIN |

AMBRO-SOL S.R.L. SB

Revision nr. 11

Dated 26/08/2021

V403 - 360° MARKER PAINT 500 ml AMBRO-SOL

Printed on 14/09/2021

Page n. 12/30

Replaced revision:10 (Dated: 10/10/2020)

| | | | | | | | |
|-----------|-----|-----|-----|------|------|------|----|
| VLEP | FRA | 260 | 200 | 1300 | 1000 | SKIN | 11 |
| TLV | GRC | 260 | 200 | 325 | 250 | | |
| VLEP | ITA | 260 | 200 | | | SKIN | |
| VLE | PRT | 260 | 200 | | | SKIN | |
| NDS/NDSch | POL | 100 | | 300 | | SKIN | |
| WEL | GBR | 266 | 200 | 333 | 250 | SKIN | |
| OEL | EU | 260 | 200 | | | | |
| TLV-ACGIH | | 262 | 200 | 328 | 250 | SKIN | |

| | | | | | | | |
|--|--|--|--|------|---------|--|--|
| Predicted no-effect concentration - PNEC | | | | | | | |
| Normal value in fresh water | | | | 20,8 | mg/l | | |
| Normal value in marine water | | | | 2,08 | mg/l | | |
| Normal value for fresh water sediment | | | | 77 | mg/kg/d | | |
| Normal value for marine water sediment | | | | 7,7 | mg/kg/d | | |
| Normal value for water, intermittent release | | | | 1,54 | g/l | | |
| Normal value of STP microorganisms | | | | 100 | mg/l | | |
| Normal value for the terrestrial compartment | | | | 100 | mg/kg/d | | |

| Health - Derived no-effect level - DNEL / DMEL | | | | | | | | |
|--|----------------------|----------------|---------------|------------------|--------------------|----------------|---------------|------------------|
| Route of exposure | Effects on consumers | | | | Effects on workers | | | |
| | Acute local | Acute systemic | Chronic local | Chronic systemic | Acute local | Acute systemic | Chronic local | Chronic systemic |
| Oral | | 8 mg/kg bw/d | | 8 mg/kg bw/d | | | | |
| Inhalation | 50 mg/m3 | 50 mg/m3 | 50 mg/m3 | 50 mg/m3 | 260 mg/m3 | 260 mg/m3 | 260 mg/m3 | 260 mg/m3 |
| Skin | | 8 mg/kg bw/d | | 8 mg/kg bw/d | | 40 mg/kg bw/d | | 40 mg/kg bw/d |

| Quartz Threshold Limit Value | | | | | | |
|---------------------------------|---------|--------|------------|------------------------|-----|------|
| Type | Country | TWA/8h | STEL/15min | Remarks / Observations | | |
| | | mg/m3 | ppm | mg/m3 | ppm | |
| VLA | ESP | | 0,05 | | | RESP |
| VLEP | FRA | 0,1 | | | | RESP |
| VLEP | ITA | 0,1 | | | | RESP |
| NDS/NDSch | POL | 0,1 | | | | RESP |
| OEL | EU | 0,1 | | | | RESP |

| C.I. Basic Red 1:1 | | |
|---|--|--------------|
| Predicted no-effect concentration - PNEC | | |
| Normal value in fresh water | | 23 ng/L |
| Normal value in marine water | | 2,3 ng/L |
| Normal value for fresh water sediment | | 989 µg/kg/d |
| Normal value for marine water sediment | | 98,9 µg/kg/d |
| Normal value for water, intermittent release | | 230 ng/L |
| Normal value of STP microorganisms | | 330 µg/L |
| Normal value for the food chain (secondary poisoning) | | 100 µg/kg |
| Normal value for the terrestrial compartment | | 198 µg/kg/d |

| Health - Derived no-effect level - DNEL / DMEL | |
|--|------------|
| Effects on | Effects on |

V403 - 360° MARKER PAINT 500 ml AMBRO-SOL

| Route of exposure | consumers | | | workers | | | | |
|-------------------|-------------|----------------|---------------|------------------|-------------|-----------------|---------------|------------------|
| | Acute local | Acute systemic | Chronic local | Chronic systemic | Acute local | Acute systemic | Chronic local | Chronic systemic |
| Inhalation | | | | | | 200 µg/m³ | | 60 µg/m³ |
| Skin | | | | | 250 µg/cm² | 60 µg/kg bw/day | 125 µg/cm² | 20 µg/kg bw/day |

Copper phthalocyanine
Threshold Limit Value

| Type | Country | TWA/8h | Chronic local | Chronic systemic | STEL/15min | Remarks / Observations |
|--|---------|--------|---------------|------------------|------------|------------------------|
| | | mg/m3 | ppm | | mg/m3 | ppm |
| WEL | GBR | 1 | | | 2 | As Cu |
| Predicted no-effect concentration - PNEC | | | | | | |
| Normal value for fresh water sediment | | | | | 10 | mg/kg/d |
| Normal value for marine water sediment | | | | | 1 | mg/kg/d |
| Normal value for the terrestrial compartment | | | | | 1 | mg/kg/d |
| Normal value for the atmosphere | | | | | NPI | |

Health - Derived no-effect level - DNEL / DMEL

| Route of exposure | Effects on consumers | | | | Effects on workers | | | |
|-------------------|----------------------|----------------|---------------|------------------|--------------------|----------------|----------------|------------------|
| | Acute local | Acute systemic | Chronic local | Chronic systemic | Acute local | Acute systemic | Chronic local | Chronic systemic |
| Oral | | | | | | | | 45 mg/kg bw/d |
| Inhalation | | | | | | | | 4 mg/m3 |
| Skin | | | | | | | 450 mg/kg bw/d | 225 mg/kg bw/d |

Polychloro copper phthalocyanine
Threshold Limit Value

| Type | Country | TWA/8h | Chronic local | Chronic systemic | STEL/15min | Remarks / Observations |
|------|---------|--------|---------------|------------------|------------|------------------------|
| | | mg/m3 | ppm | | mg/m3 | ppm |
| VLEP | ITA | 1 | | | | |

Formaldehyde

Threshold Limit Value

| Type | Country | TWA/8h | Chronic local | Chronic systemic | STEL/15min | Remarks / Observations |
|--|---------|--------|---------------|------------------|------------|------------------------|
| | | mg/m3 | ppm | | mg/m3 | ppm |
| AGW | DEU | 0,37 | 0,3 | | 0,74 | 0,6 |
| VLA | ESP | 0,37 | 0,3 | | 0,74 | 0,6 |
| VLEP | FRA | 0,37 | 0,3 | | 0,74 | 0,6 |
| VLEP | ITA | 0,37 | 0,3 | | 0,74 | 0,6 |
| NDS/NDSch | POL | 0,37 | | | 0,74 | SKIN |
| WEL | GBR | 2,5 | 2 | | 2,5 | 2 |
| OEL | EU | 0,37 | 0,3 | | 0,74 | 0,6 |
| TLV-ACGIH | | | 0,1 | | | 0,3 (C) |
| Predicted no-effect concentration - PNEC | | | | | | |
| Normal value in fresh water | | | | | 440 | µg/l |
| Normal value in marine water | | | | | 440 | µg/l |
| Normal value for fresh water sediment | | | | | 2,3 | mg/kg/d |

V403 - 360° MARKER PAINT 500 ml AMBRO-SOL

| | | |
|--|------|---------|
| Normal value for marine water sediment | 2,3 | mg/kg/d |
| Normal value for water, intermittent release | 4,44 | mg/l |
| Normal value of STP microorganisms | 190 | µg/l |
| Normal value for the terrestrial compartment | 200 | µg/kg/d |
| Normal value for the atmosphere | NPI | |

| Health - Derived no-effect level - DNEL / DMEL | | | | | | | | |
|---|----------------------|----------------|---------------|------------------|--------------------|----------------|---------------|------------------|
| Route of exposure | Effects on consumers | | | | Effects on workers | | | |
| | Acute local | Acute systemic | Chronic local | Chronic systemic | Acute local | Acute systemic | Chronic local | Chronic systemic |
| Oral | | NPI | | 4,1 mg/kg bw/d | | | | |
| Inhalation | NPI | NPI | 100 µg/m3 | 3,2 mg/m3 | 750 µg/m3 | NPI | 375 µg/m3 | 9 mg/m3 |
| Skin | NPI | NPI | 12 µg/cm2 | 102 mg/kg bw/d | NPI | NPI | 37 µg/cm2 | 240 mg/kg bw/d |

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

HAND PROTECTION

None required.

SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, a mask with a type AX filter combined with a type P filter should be worn (see standard EN 14387).

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Properties | Value | Information |
|------------|-------|-------------|
|------------|-------|-------------|

| | | |
|--|---------------------------|--------------------|
| Appearance | aerosol | |
| Colour | various | |
| Odour | characteristic of solvent | |
| Melting point / freezing point | Not available | |
| Initial boiling point | Not available | |
| Flammability | flammable gas | |
| Lower explosive limit | Not available | |
| Upper explosive limit | Not available | |
| Flash point | < 0 °C | |
| Auto-ignition temperature | Not available | |
| Decomposition temperature | Not available | |
| pH | Not available | |
| Kinematic viscosity | Da 28" a 33" Coppa Ford | |
| Solubility | insoluble in water | |
| Partition coefficient: n-octanol/water | Not available | |
| Vapour pressure | Not available | |
| Density and/or relative density | 0,82 ÷ 0,86 kg/l | Temperature: 20 °C |
| Relative vapour density | Not available | |
| Particle characteristics | Not applicable | |

9.2. Other information

9.2.1. Information with regard to physical hazard classes
Information not available

9.2.2. Other safety characteristics

| | |
|------------------------------|--------------------------|
| Total solids (250°C / 482°F) | 0 % |
| VOC (Directive 2004/42/EC) : | 71,56 % - 601,07 g/litre |
| VOC (volatile carbon) | 50,64 % - 425,35 g/litre |
| Explosive properties | not applicable |
| Oxidising properties | not applicable |

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

N-butyl acetate

Decomposes on contact with: water.

2-methoxy-1-methylethyl acetate

Stable in normal conditions of use and storage. On contact with: strong oxidising agents.

V403 - 360° MARKER PAINT 500 ml AMBRO-SOL

With the air it may slowly develop peroxides that explode with an increase in temperature.

Isobutyl acetate

Decomposes under the effect of heat. Attacks various types of plastic materials.

Formaldehyde

Decomposes under the effect of heat.

Aqueous solutions are stabilised with methanol but tend to polymerise over time.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

Xylene (Mixture of isomers)

Stable in normal conditions of use and storage. Reacts violently with: strong oxidants, strong acids, nitric acid, perchlorates. May form explosive mixtures with: air.

N-butyl acetate

Risk of explosion on contact with: strong oxidising agents. May react dangerously with: alkaline hydroxides, potassium tert-butoxide. Forms explosive mixtures with: air.

2-methoxy-1-methylethyl acetate

May react violently with: oxidising substances, strong acids, alkaline metals.

Isobutyl acetate

Risk of explosion on contact with: strong oxidising agents. May react violently with: alkaline hydroxides, potassium tert-butoxide. Forms explosive mixtures with: air.

Formaldehyde

Risk of explosion on contact with: nitromethane, nitrogen dioxide, hydrogen peroxide, phenoles, performic acid, nitric acid. May polymerise on contact with: strong oxidising agents, alkalis. May react dangerously with: hydrochloric acid, magnesium carbonate, sodium hydroxide, perchloric acid, aniline. Forms explosive mixtures with: air.

10.4. Conditions to avoid

Avoid overheating.

N-butyl acetate

Avoid exposure to: moisture, sources of heat, naked flames.

Isobutyl acetate

Avoid exposure to: sources of heat, naked flames.

Formaldehyde

Avoid exposure to: light, sources of heat, naked flames.

10.5. Incompatible materials

Strong reducing or oxidising agents, strong acids or alkalis, hot material.

N-butyl acetate

Incompatible with: water, nitrates, strong oxidants, acids, alkalis, zinc.

2-methoxy-1-methylethyl acetate

Incompatible with: oxidising substances, strong acids, alkaline metals.

Isobutyl acetate

Incompatible with: strong oxidants, nitrates, strong acids, strong bases.

Formaldehyde

Incompatible with: acids, alkalis, ammonia, tannin, strong oxidants, phenoles, copper salts, silver, iron.

10.6. Hazardous decomposition products

Formaldehyde

When heated to decomposition releases: methanol, carbon monoxide.

SECTION 11. Toxicological information

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

Metabolism, toxicokinetics, mechanism of action and other information

2-methoxy-1-methylethyl acetate

The main route of entry is the skin, whereas the respiratory route is less important due to the low vapour pressure of the product.

Information on likely routes of exposure

Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

V403 - 360° MARKER PAINT 500 ml AMBRO-SOL**Xylene (Mixture of isomers)**

WORKERS: inhalation; contact with the skin.

POPULATION: ingestion of contaminated food or water; inhalation of ambient air.

N-butyl acetate

WORKERS: inhalation; contact with the skin.

2-methoxy-1-methylethyl acetate

WORKERS: inhalation; contact with the skin.

Methanol

WORKERS: inhalation; contact with the skin.

POPULATION: ingestion of contaminated food or water; contact with the skin of products containing the substance.

Delayed and immediate effects as well as chronic effects from short and long-term exposure**Xylene (Mixture of isomers)**

Toxic action on the central nervous system (encephalopathies); irritant action on the skin, conjunctiva, cornea and respiratory system.

N-butyl acetate

In humans, the substance's vapours cause irritation of the eyes and nose. In the event of repeated exposure, skin irritation, dermatitis (dryness and cracking of the skin) and keratitis appear.

2-methoxy-1-methylethyl acetate

Above 100 ppm causes irritation of the eye, nose and oropharynx mucous membranes. At 1000 ppm, disturbance of equilibrium and severe eye irritation can be noticed. Clinical and biological examinations carried out on exposed volunteers revealed no anomalies. Acetate produces greater skin and eye irritation with direct contact. No chronic effects on humans have been reported (INCR, 2010).

Methanol

The minimum lethal dose for humans by ingestion is considered to be in the range from 300 to 1000 mg/kg. Ingestion of 4-10 ml of the substance may cause permanent blindness in adult humans (IPCS).

Interactive effects**Xylene (Mixture of isomers)**

Alcohol intake interferes with the metabolism of the substance, inhibiting it. Consumption of ethanol (0.8 g / kg) before a 4-hour exposure to xylenes vapors (145 and 280 ppm) causes a 50% decrease in the excretion of methylippuric acid, while the blood concentration of xylenes rises about 1.5-2 times. At the same time, there is an increase in the secondary side effects of ethanol. The metabolism of xylenes is enhanced by phenobarbital and 3-methylcolanthrene type enzyme inducers. Aspirin and xylenes mutually inhibit their conjugation with glycine, which results in a decrease in urinary excretion of methylippuric acid. Other industrial products can interfere with the metabolism of xylenes.

N-butyl acetate

V403 - 360° MARKER PAINT 500 ml AMBRO-SOL

A case of acute intoxication been reported involving a 33 year old worker while cleaning a tank with a preparation containing xylenes, butyl acetate and ethylene glycol acetate. The person had irritation of the conjunctiva and upper respiratory tract, drowsiness and motor coordination disorders, which disappeared within 5 hours. The symptoms are attributed to poisoning by mixed xylenes and butyl acetate, with a possible synergistic effect responsible for the neurological effects. Cases of vacuolar keratitis are reported in workers exposed to a mixture of butyl acetate and isobutanol vapours, but with uncertainty concerning the responsibility of a particular solvent (INRC, 2011).

ACUTE TOXICITY

ATE (Inhalation - mists / powders) of the mixture: > 5 mg/l
 ATE (Oral) of the mixture: >2000 mg/kg
 ATE (Dermal) of the mixture: >2000 mg/kg

Methyl acetate

LD50 (Oral): 6482 mg/kg rat
 LD50 (Dermal): 2000 mg/kg bw rat
 LC50 (Inhalation vapours): 49,2 mg/l/4h rabbit

Propane

LC50 (Inhalation mists/powders): 800000 ppm 15 min

Xylene (Mixture of isomers)

LD50 (Oral): > 3000 mg/kg rat
 LD50 (Dermal): > 1700 mg/kg rabbit
 LC50 (Inhalation vapours): 5000 ppm/4h rat
 STA (Inhalation vapours): 11 mg/l estimate from table 3.1.2 of Annex I of the CLP
 (figure used for calculation of the acute toxicity estimate of the mixture)

Petroleum Resins

LD50 (Oral): 2000 mg/kg

N-butyl acetate

LD50 (Oral): > 10000 mg/kg Rat
 LD50 (Dermal): > 5000 mg/kg rabbit
 LC50 (Inhalation vapours): 0,74 mg/l/4h Rat

Butane

LC50 (Inhalation mists/powders): > 1442,738 mg/l/15min rat

2-methoxy-1-methylethyl acetate

LD50 (Oral): > 5000 mg/kg Rat
 LD50 (Dermal): > 5000 mg/kg Rat
 LC50 (Inhalation vapours): 1805,05 ppm LC0 (4 h) rat

Isobutane

LC50 (Inhalation mists/powders): > 1442,738 mg/l/15min rat

Isobutyl acetate

V403 - 360° MARKER PAINT 500 ml AMBRO-SOL

LD50 (Oral): 13413 mg/kg bw rat
 LD50 (Dermal): 17400 mg/kg bw rabbit
 LC50 (Inhalation vapours): 30 mg/l/6h rat

Methyl formate

LD50 (Oral): 1500 mg/kg bw rat
 LD50 (Dermal): 4000 mg/kg bw rat
 LC50 (Inhalation vapours): 5,2 mg/l/4h rat
 STA (Inhalation vapours): 11 mg/l estimate from table 3.1.2 of Annex I of the CLP
 (figure used for calculation of the acute toxicity estimate of the mixture)

Methanol

LD50 (Oral): 1978 mg/kg bw rat
 STA (Oral): 100 mg/kg estimate from table 3.1.2 of Annex I of the CLP
 (figure used for calculation of the acute toxicity estimate of the mixture)

LC50 (Inhalation vapours): 123,3 mg/l/4h rat
 STA (Inhalation vapours): 3 mg/l estimate from table 3.1.2 of Annex I of the CLP
 (figure used for calculation of the acute toxicity estimate of the mixture)

Formaldehyde

LD50 (Oral): 460 mg/kg rat - Category 4 based on GHS criteria
 STA (Oral): 100 mg/kg estimate from table 3.1.2 of Annex I of the CLP
 (figure used for calculation of the acute toxicity estimate of the mixture)

LC50 (Inhalation mists/powders): 463 ppm/4h rat - Category 2 based on GHS criteria
 STA (Inhalation mists/powders): 0,501 mg/l estimate from table 3.1.2 of Annex I of the CLP
 (figure used for calculation of the acute toxicity estimate of the mixture)

SKIN CORROSION / IRRITATION

Causes skin irritation

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

Xylene (Mixture of isomers)

Classified in group 3 (not classifiable as a human carcinogen) by the International Agency for Research on Cancer (IARC).

The US Environmental Protection Agency (EPA) claims that "the data were found to be inadequate for an assessment of carcinogenic potential."

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

May cause drowsiness or dizziness

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Excluded because the aerosol does not allow the accumulation of a significant amount of product in the mouth

11.2. Information on other hazards

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

SECTION 12. Ecological information**12.1. Toxicity**

Petroleum Resins

EC50 - for Crustacea

100 mg/l/48h

EC50 - for Algae / Aquatic Plants

100 mg/l/72h

V403 - 360° MARKER PAINT 500 ml AMBRO-SOL

Xylene (Mixture of isomers)

| | |
|---|------------------|
| LC50 - for Fish | 2,6 mg/l/96h |
| EC50 - for Algae / Aquatic Plants | 4,6 mg/l/72h |
| EC10 for Crustacea | 1,9 mg/l/21d |
| Chronic NOEC for Fish | 1,3 mg/l 56 days |
| Chronic NOEC for Crustacea | 960 µg/l 7 days |
| Chronic NOEC for Algae / Aquatic Plants | 440 µg/l 73 h |

2-methoxy-1-methylethyl acetate

| | |
|---|-------------------|
| LC50 - for Fish | > 100 mg/l/96h |
| EC50 - for Crustacea | > 100 mg/l/48h |
| EC50 - for Algae / Aquatic Plants | > 100 mg/l/72h |
| Chronic NOEC for Fish | > 10 mg/l 14 days |
| Chronic NOEC for Crustacea | 100 mg/l |
| Chronic NOEC for Algae / Aquatic Plants | 1 g/l 4 days |

Butane

| | |
|-----------------|------------------|
| LC50 - for Fish | > 24,11 mg/l/96h |
|-----------------|------------------|

Propane

| | |
|----------------------|----------------|
| LC50 - for Fish | 85,82 mg/l/96h |
| EC50 - for Crustacea | 41,82 mg/l/48h |

Methanol

| | |
|----------------------------|--------------------|
| LC50 - for Fish | 15,4 g/l/96h |
| Chronic NOEC for Fish | 446,7 mg/l 28 days |
| Chronic NOEC for Crustacea | 208 mg/l 21 days |

Formaldehyde

| | |
|-----------------------------------|------------------|
| LC50 - for Fish | 6,7 mg/l/96h |
| EC50 - for Algae / Aquatic Plants | 3,48 mg/l/72h |
| EC10 for Crustacea | 5,8 mg/l/48h |
| Chronic NOEC for Crustacea | 6,4 mg/l 21 days |

Methyl acetate

| | |
|---|---------------|
| LC50 - for Fish | 300 mg/l/96h |
| EC50 - for Crustacea | 1,027 g/l |
| EC50 - for Algae / Aquatic Plants | 120 mg/l/72h |
| Chronic NOEC for Algae / Aquatic Plants | 120 mg/l 72 h |

N-butyl acetate

| | |
|-----------------------------------|--------------|
| LC50 - for Fish | 18 mg/l/96h |
| EC50 - for Crustacea | 32 mg/l/48h |
| EC50 - for Algae / Aquatic Plants | 246 mg/l/72h |

V403 - 360° MARKER PAINT 500 ml AMBRO-SOL

| | |
|---|-------------------|
| Chronic NOEC for Crustacea | 23,2 mg/l 21 days |
| Chronic NOEC for Algae / Aquatic Plants | 105 mg/l 72 h |

| | |
|---|-------------------|
| Isobutyl acetate | |
| LC50 - for Fish | 16,6 mg/l/96h |
| EC50 - for Crustacea | 24,6 mg/l/48h |
| EC50 - for Algae / Aquatic Plants | 321,5 mg/l/72h |
| Chronic NOEC for Crustacea | 23,2 mg/l 21 days |
| Chronic NOEC for Algae / Aquatic Plants | 1505 mg/l 72 h |

| | |
|-----------------|------------------|
| Isobutane | |
| LC50 - for Fish | > 24,11 mg/l/96h |

| | |
|-----------------------------------|----------------|
| Methyl formate | |
| LC50 - for Fish | 115 mg/l/96h |
| EC50 - for Crustacea | 500 mg/l/48h |
| EC50 - for Algae / Aquatic Plants | 1,079 g/l/72h |
| EC10 for Algae / Aquatic Plants | 131,2 mg/l/72h |
| Chronic NOEC for Fish | 46 mg/l 4 days |

12.2. Persistence and degradability

Propane
 Global Warming Potential (GWP): 3. Ozone Depletion Potential (ODP): 0.
 2-methoxy-1-methylethyl acetate
 Easily biodegradable. It is rapidly oxidized into the air by photochemical reaction.

| | |
|-----------------------------|--------------------------------------|
| Xylene (Mixture of isomers) | |
| Solubility in water | 146 - 208 mg/L @ 25 °C and pH 7 mg/l |
| Rapidly degradable | |

| | |
|---------------------------------|--------------|
| 2-methoxy-1-methylethyl acetate | |
| Solubility in water | > 10000 mg/l |
| Rapidly degradable | |

| | |
|---------------------|----------------|
| Butane | |
| Solubility in water | 0,1 - 100 mg/l |
| Rapidly degradable | |

| | |
|---------------------|----------------|
| Propane | |
| Solubility in water | 0,1 - 100 mg/l |
| Rapidly degradable | |

| | |
|---------------------|-------------------|
| Methanol | |
| Solubility in water | 1000 - 10000 mg/l |
| Rapidly degradable | |

Formaldehyde

V403 - 360° MARKER PAINT 500 ml AMBRO-SOL

| | |
|---------------------|-------------------|
| Solubility in water | 55000 mg/l |
| Rapidly degradable | |
| Methyl acetate | |
| Solubility in water | 243500 mg/l |
| Rapidly degradable | |
| N-butyl acetate | |
| Solubility in water | 5,3 g/l |
| Rapidly degradable | |
| Isobutyl acetate | |
| Solubility in water | 1000 - 10000 mg/l |
| Rapidly degradable | |
| Isobutane | |
| Rapidly degradable | |
| Methyl formate | |
| Rapidly degradable | |

12.3. Bioaccumulative potential

| | |
|--|-------|
| Xylene (Mixture of isomers) | |
| Partition coefficient: n-octanol/water | 3,12 |
| BCF | 25,9 |
| 2-methoxy-1-methylethyl acetate | |
| Partition coefficient: n-octanol/water | 1,2 |
| Butane | |
| Partition coefficient: n-octanol/water | 1,09 |
| Propane | |
| Partition coefficient: n-octanol/water | 1,09 |
| Methanol | |
| Partition coefficient: n-octanol/water | -0,77 |
| BCF | 0,2 |
| Formaldehyde | |
| Partition coefficient: n-octanol/water | 0,35 |
| BCF | < 1 |
| Methyl acetate | |
| Partition coefficient: n-octanol/water | 0,18 |

N-butyl acetate

Partition coefficient: n-octanol/water 2,3
BCF 15,3

Isobutyl acetate

Partition coefficient: n-octanol/water 2,3
BCF 15,3

12.4. Mobility in soil

Xylene (Mixture of isomers)

Partition coefficient: soil/water 2,73

Formaldehyde

Partition coefficient: soil/water 1,202

Methyl acetate

Partition coefficient: soil/water 0,18

N-butyl acetate

Partition coefficient: soil/water < 3

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage \geq than 0,1%.

12.6. Endocrine disrupting properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

12.7. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

Product residues are to be considered special hazardous waste.

Empty cans, even if completely emptied, must not be dispersed in the environment.

The aerosol container overheated to a temperature above 50 ° C may burst even if it contains a small residue of gas.

V403 - 360° MARKER PAINT 500 ml AMBRO-SOL

Disposal must take place in an authorized place and in compliance with the laws in force.

The transport of waste may be subject to ADR.

European waste catalog code (contaminated containers):

Aerosol as domestic waste is excluded from the application of the aforementioned rule.

The exhausted aerosol for professional / industrial use can be classified:

15.01.11 *: metallic packaging containing dangerous solid porous matrices, including empty pressure containers.

SECTION 14. Transport information

14.1. UN number or ID number

ADR / RID, IMDG, 1950
IATA:

14.2. UN proper shipping name

ADR / RID: AEROSOLS
IMDG: AEROSOLS
IATA: AEROSOLS, FLAMMABLE

14.3. Transport hazard class(es)

ADR / RID: Class: 2 Label: 2.1
IMDG: Class: 2 Label: 2.1
IATA: Class: 2 Label: 2.1



14.4. Packing group

ADR / RID, IMDG, -
IATA:

14.5. Environmental hazards

ADR / RID: NO
IMDG: NO
IATA: NO

14.6. Special precautions for user

| | | | |
|------------|----------------------|--------------------------|------------------------------|
| ADR / RID: | HIN - Kemler: -- | Limited Quantities: 1 L | Tunnel restriction code: (D) |
| | Special provision: - | | |
| IMDG: | EMS: F-D, S-U | Limited Quantities: 1 L | |
| IATA: | Cargo: | Maximum quantity: 150 Kg | Packaging instructions: 203 |

Pass.:

Maximum
quantity: 75
Kg

Packaging
instructions:
203

Special provision:

A145, A167,
A802

14.7. Maritime transport in bulk according to IMO instruments

Information not relevant

SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EC: P3a

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product

Point 40

Contained substance

Point 75

Point 72

Formaldehyde
REACH Reg.: 01-
2119459333-39-
XXXX

Point 69

Methanol REACH
Reg.: 01-
2119433307-44-
XXXX

Regulation (EC) No. 2019/1148 - on the marketing and use of explosives precursors

Not applicable

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage \geq than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

VOC (Directive 2004/42/EC) :

Special finishes.

15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

| | |
|--------------------------|--|
| Flam. Gas 1A | Flammable gas, category 1A |
| Aerosol 1 | Aerosol, category 1 |
| Aerosol 3 | Aerosol, category 3 |
| Flam. Liq. 1 | Flammable liquid, category 1 |
| Flam. Liq. 2 | Flammable liquid, category 2 |
| Flam. Liq. 3 | Flammable liquid, category 3 |
| Press. Gas | Pressurised gas |
| Press. Gas (Liq.) | Liquefied gas |
| Carc. 1B | Carcinogenicity, category 1B |
| Muta. 2 | Germ cell mutagenicity, category 2 |
| Acute Tox. 3 | Acute toxicity, category 3 |
| STOT SE 1 | Specific target organ toxicity - single exposure, category 1 |
| Acute Tox. 4 | Acute toxicity, category 4 |
| STOT RE 2 | Specific target organ toxicity - repeated exposure, category 2 |
| Skin Corr. 1B | Skin corrosion, category 1B |
| Eye Irrit. 2 | Eye irritation, category 2 |
| Skin Irrit. 2 | Skin irritation, category 2 |
| STOT SE 3 | Specific target organ toxicity - single exposure, category 3 |
| Skin Sens. 1 | Skin sensitization, category 1 |
| Aquatic Chronic 4 | Hazardous to the aquatic environment, chronic toxicity, category 4 |
| H220 | Extremely flammable gas. |
| H222 | Extremely flammable aerosol. |
| H229 | Pressurised container: may burst if heated. |
| H224 | Extremely flammable liquid and vapour. |
| H225 | Highly flammable liquid and vapour. |

V403 - 360° MARKER PAINT 500 ml AMBRO-SOL

| | |
|---------------|--|
| H226 | Flammable liquid and vapour. |
| H280 | Contains gas under pressure; may burst if heated. |
| H350 | May cause cancer. |
| H341 | Suspected of causing genetic defects. |
| H301 | Toxic if swallowed. |
| H311 | Toxic in contact with skin. |
| H331 | Toxic if inhaled. |
| H370 | Causes damage to organs. |
| H302 | Harmful if swallowed. |
| H312 | Harmful in contact with skin. |
| H332 | Harmful if inhaled. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H314 | Causes severe skin burns and eye damage. |
| H319 | Causes serious eye irritation. |
| H315 | Causes skin irritation. |
| H335 | May cause respiratory irritation. |
| H317 | May cause an allergic skin reaction. |
| H336 | May cause drowsiness or dizziness. |
| H413 | May cause long lasting harmful effects to aquatic life. |
| EUH066 | Repeated exposure may cause skin dryness or cracking. |
| EUH211 | Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist. |

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

V403 - 360° MARKER PAINT 500 ml AMBRO-SOL**GENERAL BIBLIOGRAPHY**

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
 2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
 3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
 4. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
 5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
 6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
 7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
 8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
 9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
 10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
 11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
 12. Regulation (EU) 2016/1179 (IX Atp. CLP)
 13. Regulation (EU) 2017/776 (X Atp. CLP)
 14. Regulation (EU) 2018/669 (XI Atp. CLP)
 15. Regulation (EU) 2019/521 (XII Atp. CLP)
 16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
 17. Regulation (EU) 2019/1148
 18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
 19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
 20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
 21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
- The Merck Index. - 10th Edition
 - Handling Chemical Safety
 - INRS - Fiche Toxicologique (toxicological sheet)
 - Patty - Industrial Hygiene and Toxicology
 - N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
 - IFA GESTIS website
 - ECHA website
 - Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

CALCULATION METHODS FOR CLASSIFICATION

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

Changes to previous review:

The following sections were modified:

09 / 11.