

Safety Data Sheet

According to Annex II to REACH - Regulation (EU) 2020/878 and to Annex II to UK REACH

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

1.1. Product identifier

Code: P324
Product name: STAINLESS STEEL POLISH CLEANER 400 ml AMBRO-SOL
UFI : AAC0-R0R7-D00P-Y3M1

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

Intended use: Aerosol polish for steel.

| 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, 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 di Milano - Ospedale Niguarda: Tel. 02 66101029 (Italy)
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 / +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 / 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 / 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 | Extremely flammable aerosol. |
| | H229 | Pressurised container: may burst if heated. |
| Hazardous to the aquatic environment, chronic toxicity, category 4 | H413 | May cause long lasting harmful effects to aquatic life. |

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:

| | |
|--------|---|
| H222 | Extremely flammable aerosol. |
| H229 | Pressurised container: may burst if heated. |
| H413 | May cause long lasting harmful effects to aquatic life. |
| EUH208 | Contains: (R)-P-MENTHA-1,8-DIENE May produce an allergic reaction. |

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. |
| P273 | Avoid release to the environment. |

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 (EC) 1272/2008 (CLP) |
|--|-----------------------|--|
| Hydrocarbons, C11-C12, isoalkanes, <2% aromatics | | |
| INDEX | 47 ≤ x < 48,5 | Flam. Liq. 3 H226, Asp. Tox. 1 H304, Aquatic Chronic 4 H413 |
| EC | 918-167-1 | |
| CAS | | |
| REACH Reg. | 01-2119472146-39-XXXX | |
| PROPANE | | |
| INDEX | 601-003-00-5 | Flam. Gas 1A H220, Press. Gas (Liq.) H280, Classification note according to Annex VI to the CLP Regulation: U |
| EC | 200-827-9 | |
| CAS | 74-98-6 | |
| REACH Reg. | 01-2119486944-21-0046 | |
| BUTANE | | |
| INDEX | 601-004-00-0 | Flam. Gas 1A H220, Press. Gas (Liq.) H280, Classification note according to Annex VI to the CLP Regulation: C, U |
| EC | 203-448-7 | |
| CAS | 106-97-8 | |
| REACH Reg. | 01-2119474691-32-XXXX | |
| BUTYLGLYCOL ACETATE | | |
| INDEX | 607-038-00-2 | Acute Tox. 4 H312, Acute Tox. 4 H332 |
| EC | 203-933-3 | STA Dermal: 1100 mg/kg, STA Inhalation mists/powders: 1,5 mg/l |
| CAS | 112-07-2 | |
| REACH Reg. | 01-2119475112-47-XXXX | |
| Isobutane | | |
| INDEX | 601-004-00-0 | Flam. Gas 1A H220, Press. Gas H280 |
| EC | 200-857-2 | |
| CAS | 75-28-5 | |
| REACH Reg. | 01-2119485395-27-XXXX | |
| (R)-P-MENTHA-1,8-DIENE | | |
| INDEX | 601-096-00-2 | Flam. Liq. 3 H226, Asp. Tox. 1 H304, Skin Irrit. 2 H315, Skin Sens. 1B H317, Aquatic Acute 1 H400 M=1, Aquatic Chronic 3 H412 |
| EC | 227-813-5 | |
| CAS | 5989-27-5 | |
| REACH Reg. | 01-2119529223-47-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: 36,65 %

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:

| | | |
|-----|-----------------|--|
| CZE | Česká Republika | NAŘÍZENÍ VLÁDY ze dne 10. května 2021, kterým se mění nařízení vlády č. 361/2007 Sb., kterým se stanoví podmínky ochrany zdraví při práci |
| DEU | Deutschland | Forschungsgemeinschaft MAK- und BAT-Werte-Liste 2022 Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe Mitteilung 58 |
| DNK | Danmark | Bekendtgørelse om grænseværdier for stoffer og materialer - BEK nr 1458 af 13/12/2019 |
| ESP | España | Límites de exposición profesional para agentes químicos en España 2023 |
| FRA | France | Valeurs limites d'exposition professionnelle aux agents chimiques en France Décret n° 2021-1849 du 28 décembre 2021 |
| 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"» |
| HUN | Magyarország | Az innovációért és technológiáért felelős miniszter 5/2020. (II. 6.) ITM rendelete a kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről |
| ITA | Italia | Decreto Legislativo 9 Aprile 2008, n.81 |
| NOR | Norge | Forskrift om endring i forskrift om tiltaksverdier og grenseverdier for fysiske og kjemiske faktorer i arbeidsmiljøet samt smitterisikogrupper for biologiske faktorer (forskrift om tiltaks- og grenseverdier), 21. august 2018 nr. 1255 |
| NLD | Nederland | Arbeidsomstandighedenregeling. Lijst van wettelijke grenswaarden op grond van de artikelen 4.3, eerste lid, en 4.16, eerste lid, van het Arbeidsomstandighedenbesluit |
| 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 |
| ROU | România | Hotărârea nr. 53/2021 pentru modificarea hotărârii guvernului nr. 1.218/2006, precum și pentru modificarea și completarea hotărârii guvernului nr. 1.093/2006 |
| SVK | Slovensko | NARIADENIE VLÁDY Slovenskej republiky z 12. augusta 2020, ktorým sa mení a dopĺňa nariadenie vlády Slovenskej republiky č. 356/2006 Z. z. o ochrane zdravia zamestnancov pred rizikami súvisiacimi s expozíciou karcinogénnym a mutagénnym faktorom pri práci v znení neskorších predpisov |
| GBR | United Kingdom | EH40/2005 Workplace exposure limits (Fourth Edition 2020) |
| EU | OEL EU | Directive (EU) 2022/431; 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 2023 |

Hydrocarbons, C11-C12, isoalkanes, <2% aromatics

Threshold Limit Value

| Type | Country | TWA/8h | | STEL/15min | | Remarks / Observations |
|-----------|---------|--------|-----|------------|-----|------------------------|
| | | mg/m3 | ppm | mg/m3 | ppm | |
| TLV-ACGIH | | 1200 | 177 | | | |

PROPANE

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 | |
| TLV | DNK | 1800 | 1000 | | | |
| VLA | ESP | | 1000 | | | |
| TLV | GRC | 1800 | 1000 | | | |
| TLV | NOR | 900 | 500 | | | |
| NDS/NDSch | POL | 1800 | | | | |
| TLV | ROU | 1400 | 778 | 1800 | 1000 | |

SECTION 8. Exposure controls/personal protection ... / >>

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 | |
| TLV | DNK | 1200 | 500 | | | |
| VLA | ESP | | 1000 | | | Gases |
| VLEP | FRA | 1900 | 800 | | | |
| TLV | GRC | 2350 | 1000 | | | |
| AK | HUN | 2350 | | 9400 | | |
| TLV | NOR | 600 | 250 | | | |
| TGG | NLD | 1430 | | | | |
| NDS/NDSch | POL | 1900 | | 3000 | | |
| WEL | GBR | 1450 | 600 | 1810 | 750 | |
| WEL | GBR | | 4 | | | RESP |
| TLV-ACGIH | | | | | 1000 | |

Soybean oil, epoxidized

Predicted no-effect concentration - PNEC

Normal value for the terrestrial compartment 6,25 mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

| Route of exposure | Effects on consumers | | | | Effects on workers | | | |
|-------------------|----------------------|------------|---------|------------|--------------------|----------|---------|----------|
| | Acute | Acute | Chronic | Chronic | Acute | Acute | Chronic | Chronic |
| | local | systemic | local | systemic | local | systemic | local | systemic |
| Oral | | 5 | | 800 | | | | |
| | | mg/kg bw/d | | µg/kg bw/d | | | | |
| Inhalation | | 17,5 | | 2,8 | | 70 | | 11,9 |
| | | mg/m3 | | mg/m3 | | mg/m3 | | mg/m3 |
| Skin | NPI | 5 | | 800 | NPI | 10 | | 1,7 |
| | | mg/kg bw/d | | µg/kg bw/d | | mg/kg | | mg/kg |
| | | | | | | bw/d | | bw/d |

SECTION 8. Exposure controls/personal protection ... / >>

BUTYGLYCOL ACETATE

Threshold Limit Value

| Type | Country | TWA/8h | | STEL/15min | | Remarks / Observations | |
|-----------|---------|--------|------|------------|-----|------------------------|---------|
| | | mg/m3 | ppm | mg/m3 | ppm | | |
| TLV | CZE | 130 | 19,5 | 300 | 45 | SKIN | |
| AGW | DEU | 65 | 10 | 130 | 20 | SKIN | 11 |
| MAK | DEU | 66 | 10 | 132 | 20 | SKIN | Hinweis |
| TLV | DNK | 134 | 20 | 333 | 50 | SKIN | E |
| VLA | ESP | 133 | 20 | 333 | 50 | SKIN | |
| VLEP | FRA | 66,5 | 10 | 333 | 50 | | |
| TLV | GRC | 135 | 20 | 270 | 40 | | |
| AK | HUN | 133 | 20 | 333 | 50 | SKIN | |
| VLEP | ITA | 133 | 20 | 333 | 50 | SKIN | |
| TLV | NOR | 65 | 10 | | | SKIN | |
| TGG | NLD | 135 | | 333 | | SKIN | |
| VLE | PRT | 133 | 20 | 333 | 50 | SKIN | |
| NDS/NDSch | POL | 100 | | 300 | | SKIN | |
| TLV | ROU | 133 | 20 | 333 | 50 | SKIN | |
| NPEL | SVK | 133 | 20 | 333 | 50 | SKIN | |
| WEL | GBR | 133 | 20 | 332 | 50 | SKIN | |
| OEL | EU | 133 | 20 | 333 | 50 | SKIN | |
| TLV-ACGIH | | 131 | 20 | | | | |

Predicted no-effect concentration - PNEC

| | | |
|---|------|---------|
| Normal value in fresh water | 304 | µg/l |
| Normal value in marine water | 30,4 | µg/l |
| Normal value for fresh water sediment | 2,03 | mg/kg/d |
| Normal value for marine water sediment | 203 | µg/kg/d |
| Normal value of STP microorganisms | 90 | mg/l |
| Normal value for the food chain (secondary poisoning) | 60 | mg/kg |
| Normal value for the terrestrial compartment | 415 | µg/kg/d |

Health - Derived no-effect level - DNEL / DMEL

| Route of exposure | Effects on consumers | | Chronic local | Chronic systemic | Effects on workers | | | |
|-------------------|----------------------|------------------|---------------|-------------------|--------------------|----------------------|---------------|----------------------|
| | Acute local | Acute systemic | | | Acute local | Acute systemic | Chronic local | Chronic systemic |
| Oral | | 36 mg/kg bw/d | | 8,6 mg/kg bw/d | | | | |
| Inhalation | | NPI | NPI | | 333 mg/m3 | NPI | NPI | |
| Skin | NPI | 72 mg/kg bw/d | NPI | 102 mg/kg bw/d | NPI | 120 mg/kg bw/d | NPI | 169 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 | | | | |

SECTION 8. Exposure controls/personal protection ... / >>

(R)-P-MENTHA-1,8-DIENE

Threshold Limit Value

| Type | Country | TWA/8h | | STEL/15min | | Remarks / Observations |
|------|---------|--------|-----|------------|-----|------------------------|
| | | mg/m3 | ppm | mg/m3 | ppm | |
| AGW | DEU | 28 | 5 | 112 | 20 | SKIN |
| MAK | DEU | 28 | 5 | 112 | 20 | SKIN |
| VLA | ESP | 168 | 30 | | | SKIN |
| TLV | NOR | 140 | 25 | | | |

Predicted no-effect concentration - PNEC

| | | |
|---|------|---------|
| Normal value in fresh water | 14 | µg/L |
| Normal value in marine water | 1,4 | µg/L |
| Normal value for fresh water sediment | 3,85 | mg/kg/d |
| Normal value for marine water sediment | 385 | µg/kg/d |
| Normal value of STP microorganisms | 1,8 | mg/l |
| Normal value for the food chain (secondary poisoning) | 133 | mg/kg |
| Normal value for the terrestrial compartment | 763 | 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 |
| Inhalation | NPI | NPI | NPI | 66,7 mg/m3 | NPI | NPI | NPI | 16,6 mg/m3 |
| Skin | NPI | NPI | NPI | 4,8 mg/kg bw/d | VND | NPI | VND | 9,5 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 ; LOW = low hazard ; MED = medium hazard ; HIGH = high hazard.

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.

HAND PROTECTION

None required.

SKIN PROTECTION

Wear category I 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 ISO 16321).

RESPIRATORY PROTECTION

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. Use a mask with a type AX filter combined with a type P filter should be worn (see standard EN 14387).

ENVIRONMENTAL EXPOSURE CONTROLS

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

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Properties | Value | Information |
|--------------------------------|---------------|--|
| Appearance | aerosol | |
| Colour | yellowish | |
| Odour | aromatic | |
| 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 | Reason for missing data:substance/mixture is |

SECTION 9. Physical and chemical properties ... / >>

| | | | |
|--|--------------------|------|--|
| Kinematic viscosity | not available | | non-polar/aprotic (eg: an organic solvent mixture) |
| Solubility | insoluble in water | | |
| Partition coefficient: n-octanol/water | not available | | |
| Vapour pressure | not available | | |
| Density and/or relative density | 0,66 ÷ 0,70 | 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

| | | | | |
|----------------------------|----------------|---|--------|---------|
| VOC (Directive 2010/75/EU) | 84,80 % | - | 576,62 | g/litre |
| VOC (volatile carbon) | 64,76 % | - | 440,37 | 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.

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.

10.4. Conditions to avoid

Avoid overheating.

10.5. Incompatible materials

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

10.6. Hazardous decomposition products

Information not available

SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.
It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

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

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

SECTION 11. Toxicological information ... / >>

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

| | |
|--|---|
| ATE (Inhalation - mists / powders) of the mixture: | > 5 mg/l |
| ATE (Oral) of the mixture: | Not classified (no significant component) |
| ATE (Dermal) of the mixture: | >2000 mg/kg |

Hydrocarbons, C11-C12, isoalkanes, <2% aromatics

| | |
|----------------|-------------------|
| LD50 (Dermal): | 2000 mg/kg bw rat |
|----------------|-------------------|

| | |
|--------------|-------------------|
| LD50 (Oral): | 2000 mg/kg bw rat |
|--------------|-------------------|

| | |
|----------------------------|-----------------|
| LC50 (Inhalation vapours): | > 4 mg/l/4h rat |
|----------------------------|-----------------|

PROPANE

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

BUTANE

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

BUTYLGLYCOL ACETATE

| | |
|---------------|---|
| STA (Dermal): | 1100 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): | > 2,66 mg/l/4h Rat |
|----------------------------|--------------------|

| | |
|---------------------------------|---|
| STA (Inhalation mists/powders): | 1,5 mg/l (figure used for calculation of the acute toxicity estimate of the mixture) |
|---------------------------------|---|

Isobutane

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

(R)-P-MENTHA-1,8-DIENE

| | |
|--------------|----------------|
| LD50 (Oral): | 2000 mg/kg rat |
|--------------|----------------|

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

RESPIRATORY OR SKIN SENSITISATION

May produce an allergic reaction.

Contains:

(R)-P-MENTHA-1,8-DIENE

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

STOT - REPEATED EXPOSURE

SECTION 11. Toxicological information ... / >>

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

This product may damage the structure and/or the functions of the aquatic ecosystems in the long and/or delayed term.

12.1. Toxicity

(R)-P-MENTHA-1,8-DIENE

| | |
|---|-----------------|
| LC50 - for Fish | 590 µg/l/96h |
| EC50 - for Crustacea | 307 µg/l/48h |
| EC50 - for Algae / Aquatic Plants | 267 µg/l/72h |
| Chronic NOEC for Fish | 80 µg/l 28 days |
| Chronic NOEC for Crustacea | 65 µg/l 21 days |
| Chronic NOEC for Algae / Aquatic Plants | 90 µg/l 48 h |

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 |

BUTYLGLYCOL ACETATE

| | |
|-----------------------------------|------------------|
| LC50 - for Fish | 30 mg/l/96h |
| EC50 - for Crustacea | 37 mg/l/48h |
| EC50 - for Algae / Aquatic Plants | 1045 mg/l/72h |
| EC10 for Crustacea | 30,4 mg/l 7 days |

Isobutane

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

Hydrocarbons, C11-C12, isoalkanes, <2% aromatics

| | |
|-----------------------------------|-------|
| EC50 - for Algae / Aquatic Plants | 1 g/l |
|-----------------------------------|-------|

12.2. Persistence and degradability

PROPANE

Global Warming Potential (GWP): 3. Ozone Depletion Potential (ODP): 0.

(R)-P-MENTHA-1,8-DIENE

| | |
|---------------------|----------------|
| Solubility in water | 0,1 - 100 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 | |

BUTYLGLYCOL ACETATE

Rapidly degradable

Isobutane

Rapidly degradable

SECTION 12. Ecological information ... / >>

Hydrocarbons, C11-C12, isoalkanes, <2% aromatics
Entirely degradable

12.3. Bioaccumulative potential

(R)-P-MENTHA-1,8-DIENE
Partition coefficient: n-octanol/water 4,38
BCF 1022

BUTANE
Partition coefficient: n-octanol/water 1,09

PROPANE
Partition coefficient: n-octanol/water 1,09

BUTYLGLYCOL ACETATE
Partition coefficient: n-octanol/water 1,51

12.4. Mobility in soil

Information not available

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.

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, IATA: UN 1950

14.2. UN proper shipping name

ADR / RID: AEROSOLS, FLAMMABLE

IMDG: AEROSOLS

IATA: AEROSOLS, FLAMMABLE

SECTION 14. Transport information ... / >>

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: 190, 327, 344, 625 | | |
| IMDG: | EMS: F-D, S-U | Limited Quantities: 1 L | |
| IATA: | Cargo: | Maximum quantity: 150 Kg | Packaging instructions: 203 |
| | Passengers: | 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/EU: 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 |

Regulation (EU) 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 Regulation (EU) 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

SECTION 15. Regulatory information ... / >>

Information not available

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. 3 | Flammable liquid, category 3 |
| Press. Gas (Liq.) | Liquefied gas |
| Press. Gas | Pressurised gas |
| Acute Tox. 4 | Acute toxicity, category 4 |
| Asp. Tox. 1 | Aspiration hazard, category 1 |
| Skin Irrit. 2 | Skin irritation, category 2 |
| Skin Sens. 1B | Skin sensitization, category 1B |
| Aquatic Acute 1 | Hazardous to the aquatic environment, acute toxicity, category 1 |
| Aquatic Chronic 3 | Hazardous to the aquatic environment, chronic toxicity, category 3 |
| 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. |
| H226 | Flammable liquid and vapour. |
| H280 | Contains gas under pressure; may explode if heated. |
| H312 | Harmful in contact with skin. |
| H332 | Harmful if inhaled. |
| H304 | May be fatal if swallowed and enters airways. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H400 | Very toxic to aquatic life. |
| H412 | Harmful to aquatic life with long lasting effects. |
| H413 | May cause long lasting harmful effects to aquatic life. |

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 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: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent, bioaccumulative and toxic
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PMT: Persistent, mobile and toxic
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 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

SECTION 16. Other information ... / >>

- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very persistent and very bioaccumulative
- vPvM: Very persistent and very mobile
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

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2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
4. Regulation (EC) 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
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17. Regulation (EU) 2019/1148
18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
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20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
22. Delegated Regulation (UE) 2022/692 (XVIII Atp. CLP)
23. Delegated Regulation (UE) 2023/707

- 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:

03 / 08 / 11 / 14.