| Trade name: Marabu do it M | /letallic 786, 150 m | | | Marab |
|---|--|--|--|--|
| Substance number: 21074 | 006786 | Version: 1 / Replaces Version: | - / WORLD | Date revised: 06.08.2020 Print date: 14.08.20 |
| SECTION 1: Identific company/undertaki | | substance/m | ixture and of | the_ |
| 1.1. Product identifier Marabu do it Metalli | c 786, 150 ml | | | |
| 1.2. Relevant identifie | d uses of the s | ubstance or mix | xture and uses | advised against |
| Use of the substance/ Colour spray | preparation | | | |
| 1.3. Details of the sup | plier of the safe | ety data sheet | | |
| Address/Manufactu Marabu GmbH & Co Asperger Strasse 4 71732 Tamm Germany Telephone no. Fax no. Information provided by / telephone E-mail address of person responsible for this SDS | - KG +49-7141/691- +49-7141/691- | 147 oduct safety | Importer - S&S Wholesale 18/10 Pioneer A Thornleigh NSV Tel: 1300 731 52 Emergency Con S&S Wholesale Tel: 1300 731 52 | Avenue, W 2120 29 Fax: 1300 739 715 Mact: Pty. Limited |
| 1.4. Emergency teleph (+49) (0)621-60-433 | | | | |
| SECTION 2: Hazard | | | | |
| 2.1. Classification of t | | | | |
| Classification (Regu Classification (Regu | | - | | |
| | Aerosol 1 Eye Irrit. 2 STOT SE 3 Aquatic Acute 7 Aquatic Chronic | H222 H229 H319 H336 I H400 | | |
| 2.2. Label elements | | | | |
| Labelling accordi | ng to regulation | n (EC) No 1272/ | 2008 | |
| Hazard pictograms | | | | |
| Signal word Danger | • | | | |
| Hazard statements H222 H229 H319 | Extremely flam Pressurized co Causes serious | ntainer: may burst if | ⁻ heated. | |

| Frade name: Marabu do in | t Metallic 786, 15 | 0 ml | | | | |
|---|--|--|--|---------------------------------|--------------------------|------------------------------------|
| | | Version | : 1/ | | | Marabu Date revised: 06.08.2020 |
| Substance number: 2107 | 4006786 | Replace | es Versior | n: -/W | ORLD | Print date: 14.08.20 |
| H336 H410 | | drowsiness o o aquatic life | | | effects | |
| Precautionary sta | • | o aquatic inc | with long | lasting | cheets. | |
| P101 | | dvice is need | aved have | nroduct | t container c | or label at hand. |
| P102 | | f reach of chi | | product | | |
| P210 | | from heat, h | | es, spark | ks, open flan | nes and other ignition |
| P211 | | ay on an oper | n flame or | r other ic | nition sourc | e. |
| P251 | | ce or burn, e | | | , | |
| P264.1 | | s thoroughly | | | | |
| P271 | | utdoors or in | | | area. | |
| P280 | | | | | | ection / face protection. |
| P305+P351+P338 | 3 IF IN ÉYES | | ously with | n water f | or several n | ninutes. Remove contact |
| P405 | Store locke | | | | - | |
| P410+P412 | | | | | | exceeding 50 °C / 122 °F. |
| P501.9 | Dispose of | contents / co | ntainer as | s problei | matic waste | |
| Hazardous compo | onent(s) to be i | ndicated o | n label (| Regula | tion (EC) I | No. 1272/2008) |
| contains | • • | te; Propan-2- | • | - | . , | - |
| | • | te, i iopan-z- | -01, Z-1VICI | 110×y-1-1 | neuryieuryi | acetate |
| Supplemental info | | | | | | |
| EUH066 | Repeated e | exposure may | / cause s | kin drvno | ess or crack | ina. |
| Further sunnlame | | | , | - , | | 5 |
| i ultilei suppleille | ntal information | n | | . , | | 5 |
| Without adequate | | | | - | | - |
| Without adequate 2.3. Other hazards | ventilation, explo | osive atmosp | | - | | - |
| Without adequate | ventilation, explo | osive atmosp | | - | | - |
| Without adequate 2.3. Other hazards No special hazard | ventilation, explo | osive atmosp | here/gas | mix may | v be created | - |
| Without adequate 2.3. Other hazards No special hazard SECTION 3: Comp | ventilation, explo | osive atmosp | here/gas | mix may | v be created | - |
| Without adequate 2.3. Other hazards No special hazard SECTION 3: Comp 3.2. Mixtures Chemical characte | ventilation, explo ls have to be mer OSITION/INFO erization | osive atmosp | here/gas | mix may | v be created | - |
| Without adequate 2.3. Other hazards No special hazard SECTION 3: Comp 3.2. Mixtures Chemical character Solvent based col | ventilation, explo ls have to be mer osition/info erization our spray | osive atmosp | here/gas | mix may | v be created | - |
| Without adequate 2.3. Other hazards No special hazard SECTION 3: Comp 3.2. Mixtures Chemical characte | ventilation, explo ls have to be mer osition/info erization our spray | osive atmosp | here/gas | mix may | v be created | - |
| Without adequate 2.3. Other hazards No special hazard SECTION 3: Comp 3.2. Mixtures Chemical characte Solvent based col Hazardous ingred | ventilation, explo ls have to be mer osition/info erization our spray | osive atmosp | here/gas | mix may | v be created | - |
| Without adequate 2.3. Other hazards No special hazard SECTION 3: Comp 3.2. Mixtures Chemical character Solvent based col | ventilation, explo ls have to be mer osition/info erization our spray | osive atmosp | here/gas | mix may | v be created | - |
| Without adequate 2.3. Other hazards No special hazard ECTION 3: Comp 3.2. Mixtures Chemical characte Solvent based col Hazardous ingred Ethyl acetate | ventilation, explo ls have to be mer OSITION/INFO erization our spray ients 141-78-6 | osive atmosp | here/gas | mix may | v be created | - |
| Without adequate 2.3. Other hazards No special hazard ECTION 3: Comp 3.2. Mixtures Chemical characte Solvent based col Hazardous ingred Ethyl acetate CAS No. EINECS no. | ventilation, explo ls have to be mer OSITION/INFO erization our spray ients | osive atmosp ntioned. o rmation | here/gas | mix may | v be created | - |
| Without adequate 2.3. Other hazards No special hazard ECTION 3: Comp 3.2. Mixtures Chemical characte Solvent based col Hazardous ingred Ethyl acetate CAS No. | ventilation, explo ls have to be mer osition/info erization our spray ients 141-78-6 205-500-4 | osive atmosp ntioned. o rmation | here/gas | mix may | v be created | - |
| Without adequate 2.3. Other hazards No special hazard SECTION 3: Comp 3.2. Mixtures Chemical characte Solvent based col Hazardous ingred Ethyl acetate CAS No. EINECS no. Registration no. | ventilation, explo ls have to be mer OSITION/INFO erization our spray ients 141-78-6 205-500-4 01-211947 | osive atmosp ntioned. o rmation | here/gas <u>on ing</u> | mix may | [,] be created | - |
| Without adequate 2.3. Other hazards No special hazard SECTION 3: Comp 3.2. Mixtures Chemical characte Solvent based col Hazardous ingred Ethyl acetate CAS No. EINECS no. Registration no. | ventilation, explo ls have to be men OSITION/INFO erization our spray ients 141-78-6 205-500-4 01-211947 >= | osive atmosp ntioned. ormation 5103-46 20 | here/gas <u>on ing</u> | mix may | [,] be created | - |
| Without adequate 2.3. Other hazards No special hazard SECTION 3: Comp 3.2. Mixtures Chemical characte Solvent based col Hazardous ingred Ethyl acetate CAS No. EINECS no. Registration no. Concentration | ventilation, explo ls have to be men OSITION/INFO erization our spray ients 141-78-6 205-500-4 01-211947 >= | 5103-46 20 | here/gas <u>on ing</u> | mix may | [,] be created | - |
| Without adequate 2.3. Other hazards No special hazard SECTION 3: Comp 3.2. Mixtures Chemical characte Solvent based col Hazardous ingred Ethyl acetate CAS No. EINECS no. Registration no. Concentration | ventilation, explo ls have to be men OSITION/INFO erization our spray ients 141-78-6 205-500-4 01-211947 >= gulation (EC) No. | 5103-46 20 | here/gas <u>on ing</u> < | mix may | [,] be created | - |
| Without adequate 2.3. Other hazards No special hazard SECTION 3: Comp 3.2. Mixtures Chemical characte Solvent based col Hazardous ingred Ethyl acetate CAS No. EINECS no. Registration no. Concentration | ventilation, explo ls have to be mer OSITION/INFO erization our spray ients 141-78-6 205-500-4 01-2119475 >= gulation (EC) No. Flam. Liq. 2 | 5103-46 20 1272/2008) | here/gas on ing < H225 | mix may | [,] be created | - |
| Without adequate 2.3. Other hazards No special hazard SECTION 3: Comp 3.2. Mixtures Chemical characte Solvent based col Hazardous ingred Ethyl acetate CAS No. EINECS no. Registration no. Concentration | ventilation, explo ls have to be men OSITION/INFO erization our spray ients 141-78-6 205-500-4 01-2119475 >= gulation (EC) No. Flam. Liq. 2 Eye Irrit. 2 | 5103-46 20 1272/2008) | here/gas on ing < H225 H319 | mix may | [,] be created | - |
| Without adequate 2.3. Other hazards No special hazard SECTION 3: Comp 3.2. Mixtures Chemical characte Solvent based col Hazardous ingred Ethyl acetate CAS No. EINECS no. Registration no. Concentration Classification (Ref | ventilation, explo ls have to be men OSITION/INFO erization our spray ients 141-78-6 205-500-4 01-2119475 >= gulation (EC) No. Flam. Liq. 2 Eye Irrit. 2 | 5103-46 20 1272/2008) | here/gas on ing < H225 H319 | mix may | [,] be created | - |
| Without adequate 2.3. Other hazards No special hazard ECTION 3: Comp 3.2. Mixtures Chemical characte Solvent based col Hazardous ingred Ethyl acetate CAS No. EINECS no. Registration no. Concentration Classification (Res | ventilation, explo ls have to be men OSITION/INFO erization our spray ients 141-78-6 205-500-4 01-2119479 >= gulation (EC) No. Flam. Liq. 2 Eye Irrit. 2 STOT SE 3 | 5103-46 20 1272/2008) | here/gas on ing < H225 H319 | mix may | [,] be created | - |
| Without adequate 2.3. Other hazards No special hazard SECTION 3: Comp 3.2. Mixtures Chemical characte Solvent based col Hazardous ingred Ethyl acetate CAS No. EINECS no. Registration no. Concentration Classification (Res Propan-2-ol CAS No. | ventilation, explo ls have to be men osition/info erization our spray ients 141-78-6 205-500-4 01-2119479 >= gulation (EC) No. Flam. Liq. 2 Eye Irrit. 2 STOT SE 3 67-63-0 | 5103-46 20 1272/2008) | here/gas on ing < H225 H319 | mix may | [,] be created | - |
| Without adequate 2.3. Other hazards No special hazard SECTION 3: Comp 3.2. Mixtures Chemical characte Solvent based col Hazardous ingred Ethyl acetate CAS No. EINECS no. Classification (Res Propan-2-ol CAS No. EINECS no. | ventilation, explo ls have to be men osition/info erization our spray ients 141-78-6 205-500-4 01-2119475 >= gulation (EC) No. Flam. Liq. 2 Eye Irrit. 2 STOT SE 3 67-63-0 200-661-7 | 5103-46 20 1272/2008) | here/gas on ing < H225 H319 | mix may | [,] be created | - |
| Without adequate 2.3. Other hazards No special hazard ECTION 3: Comp 3.2. Mixtures Chemical characte Solvent based col Hazardous ingred Ethyl acetate CAS No. EINECS no. Registration no. Concentration Classification (Res Propan-2-ol CAS No. EINECS no. Registration no. Cas no. EINECS no. Registration no. | ventilation, explo ls have to be men osition/info erization our spray ients 141-78-6 205-500-4 01-2119475 >= gulation (EC) No. Flam. Liq. 2 Eye Irrit. 2 STOT SE 3 67-63-0 200-661-7 01-211945 | 5103-46 20 1272/2008) | here/gas on ing + H225 H319 H336 | mix may I <mark>redie</mark> | v be created nts % | - |
| Without adequate 2.3. Other hazards No special hazard ECTION 3: Comp 3.2. Mixtures Chemical characte Solvent based col Hazardous ingred Ethyl acetate CAS No. EINECS no. Registration no. Concentration Classification (Reg Propan-2-ol CAS No. EINECS no. | ventilation, explo ls have to be men osition/info erization our spray ients 141-78-6 205-500-4 01-2119475 >= gulation (EC) No. Flam. Liq. 2 Eye Irrit. 2 STOT SE 3 67-63-0 200-661-7 | 5103-46 20 1272/2008) | here/gas on ing < H225 H319 | mix may | [,] be created | - |
| Without adequate 2.3. Other hazards No special hazard SECTION 3: Comp 3.2. Mixtures Chemical characte Solvent based col Hazardous ingred Ethyl acetate CAS No. EINECS no. Registration no. Classification (Red Propan-2-ol CAS No. EINECS no. Registration no. Concentration | ventilation, explo ls have to be men osition/info erization our spray ients 141-78-6 205-500-4 01-2119479 >= gulation (EC) No. Flam. Liq. 2 Eye Irrit. 2 STOT SE 3 67-63-0 200-661-7 01-211945 >= | 5103-46 20 1272/2008) | here/gas on ing + H225 H319 H336 | mix may I <mark>redie</mark> | v be created nts % | - |
| Without adequate 2.3. Other hazards No special hazard SECTION 3: Comp 3.2. Mixtures Chemical characte Solvent based col Hazardous ingred Ethyl acetate CAS No. EINECS no. Registration (Res Propan-2-ol CAS No. EINECS no. Registration no. Classification (Res | ventilation, explo s have to be men osition/info erization our spray ients 141-78-6 205-500-4 01-2119473 >= gulation (EC) No. Flam. Liq. 2 Eye Irrit. 2 STOT SE 3 67-63-0 200-661-7 01-2119457 >= gulation (EC) No. | 5103-46 20 1272/2008) 7558-25 20 | here/gas on ing < H225 H319 H336 | mix may I <mark>redie</mark> | v be created nts % | - |
| Without adequate 2.3. Other hazards No special hazard SECTION 3: Comp 3.2. Mixtures Chemical characte Solvent based col Hazardous ingred Ethyl acetate CAS No. EINECS no. Registration no. Classification (Red Propan-2-ol CAS No. EINECS no. Registration no. Concentration | ventilation, explo Is have to be men OSITION/INFO erization our spray ients 141-78-6 205-500-4 01-2119473 >= gulation (EC) No. Flam. Liq. 2 STOT SE 3 67-63-0 200-661-7 01-2119453 >= gulation (EC) No. Flam. Liq. 2 | 5103-46 20 1272/2008) 7558-25 20 | here/gas on ing < H225 H319 H336 < H225 | mix may I <mark>redie</mark> | v be created nts % | - |
| Without adequate 2.3. Other hazards No special hazard SECTION 3: Comp 3.2. Mixtures Chemical characte Solvent based col Hazardous ingred Ethyl acetate CAS No. EINECS no. Registration no. Classification (Red Propan-2-ol CAS No. EINECS no. Registration no. Concentration | ventilation, explo s have to be men osition/info erization our spray ients 141-78-6 205-500-4 01-2119473 >= gulation (EC) No. Flam. Liq. 2 Eye Irrit. 2 STOT SE 3 67-63-0 200-661-7 01-2119457 >= gulation (EC) No. | 5103-46 20 1272/2008) 7558-25 20 1272/2008) | here/gas on ing < H225 H319 H336 | mix may I <mark>redie</mark> | v be created nts % | - |

| e name: Marabu do it N | /letallic 786, 150 | | . 1/ | | | |
|-----------------------------------|----------------------------------|-----------|-----------|---------|------|-------------------------|
| | | Version | | (10 | | Date revised: 06.08.202 |
| stance number: 21074 | 06786 | Replace | es versio | on: -/W | ORLD | Print date: 14.08.2 |
| | | | | | | |
| COPPER, flakes CAS No. | 7440-50-8 | | | | | |
| EINECS no. | 231-159-6 | | | | | |
| Registration no. | 01-21194801 | 54-42 | | | | |
| Concentration | >= | 2,5 | < | 10 | % | |
| Classification (Regu | lation (EC) No. 1 | 272/2008) | | | | |
| 0.000.000.000 (1.0090 | Acute Tox. 4 | | H302 | | | |
| | Aquatic Acute | e 1 | H400 | | | |
| | Aquatic Chro | | H410 | | | |
| | Eye Irrit. 2 | | H319 | | | |
| Concentration limits | (Regulation (EC Aquatic Acute | | | 10 | | |
| 2 Mothoxy 1 mothyl | • | | J IVI = | = 10 | | |
| 2-Methoxy-1-methyle CAS No. | | | | | | |
| EINECS no. | 108-65-6 | | | | | |
| | 203-603-9 | 01.20 | | | | |
| Registration no. Concentration | 01-21194757 >= | 1 | | 10 | % | |
| Concentration | >= | I | < | 10 | 70 | |
| Classification (Regu | | 272/2008) | | | | |
| | Flam. Liq. 3 | | H226 | | | |
| | STOT SE 3 | | H336 | | | |
| 2-Butoxyethanol | | | | | | |
| CAS No. | 111-76-2 | | | | | |
| EINECS no. | 203-905-0 | | | | | |
| Registration no. | 01-21194751 | 08-36 | | | | |
| Concentration | >= | 1 | < | 9,5 | % | |
| Classification (Regu | llation (EC) No. 1 | 272/2008) | | | | |
| | Skin Irrit. 2 | | H315 | | | |
| | Acute Tox. 4 | | H332 | | | |
| | Acute Tox. 4 | | H312 | | | |
| | Acute Tox. 4 | | H302 | | | |
| | Eye Irrit. 2 | | H319 | | | |
| Zinc powder - Zinc d | lust | | | | | |
| CAS No. | 7440-66-6 | | | | | |
| EINECS no. | 231-175-3 | | | | | |
| Registration no. | 01-21194671 | | | | | |
| Concentration | >= | 2,5 | < | 10 | % | |
| Classification (Regu | | | | | | |
| - | Aquatic Acute | | H400 | | | |
| | Aquatic Chro | nic 1 | H410 | | | |

4.1. Description of first aid measures

General information

In all cases of doubt, or when symptoms persist, seek medical attention. If unconscious place in recovery position and seek medical advice.

Trade name: Marabu do it Metallic 786, 150 ml

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After inhalation

Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration. Summon a doctor immediately.

After skin contact

After contact with skin, wash immediately with plenty of water. Don't use solvents.

After eye contact

Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.

After ingestion

Summon a doctor immediately. Keep at rest. Do NOT induce vomiting.

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

Until now no symptoms known so far.

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

Hints for the physician / treatment

Treat symptomatically

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Recommended: alcohol resistant foam, CO2, powders, water spray/mist, Not be used for safety reasons: water jet

5.2. Special hazards arising from the substance or mixture

In the event of fire the following can be released: Carbon monoxide (CO); Carbon dioxide (CO2); dense black smoke

5.3. Advice for firefighters

Special protective equipment for fire-fighting

In case of combustion use a suitable breathing apparatus.

Other information

Cool endangered containers with water spray jet. Collect contaminated fire-fighting water separately, must not be discharged into the drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Keep away sources of ignition. Ensure adequate ventilation. Do not breathe gas/fumes/vapour/spray. Refer to protective measures listed in Sections 7 and 8.

6.2. Environmental precautions

Do not empty into drains. If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations.

6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13). Clean preferably with a detergent - avoid use of solvents.

6.4. Reference to other sections

Refer to protective measures listed in Sections 7 and 8.

SECTION 7: Handling and storage

| | with regulation (EC) No 1907/2006 | |
|--|---|--|
| rade name: Marabu do it Metallic | - | Marabu |
| | Version: 1 / | Date revised: 06.08.2020 |
| Substance number: 21074006786 | Replaces Version: - / WORLD | Print date: 14.08.20 |
| 7.1. Precautions for safe ha | Indling | |
| Advice on safe handling | | |
| concentration higher than t (local exhaust ventilation if heat, sparks and open flam | nmable or explosive concentrations of vapour in the occupational exposure limits. Provide good v necessary). Handle and open container with ca ne. Avoid skin and eye contact. Smoking, eating ea. Comply with the health and safety at work la | ventilation of working area are. Isolate from sources of and drinking shall be |
| Advice on protection aga Keep away from sources o | inst fire and explosion of ignition - No smoking. Take action to prevent s | static discharges. |
| Classification of fires / ter | mperature class / Ignition group / Dust e | xplosion class |
| Classification of fires Temperature class | C (Flammable gases) T2 | |
| 7.2. Conditions for safe sto | rage, including any incompatibilities | |
| Requirements for storage | | |
| Store in accordance with n | | |
| Further information on st | - | |
| | f ignition. Keep container in a cool, well-ventilate | ed place. Observe label |
| 7.3. Specific end use(s) | | |
| Colour spray | | |
| | ontrols/personal protection | |
| ECTION 8: Exposure co | ontrols/personal protection | |
| ECTION 8: Exposure co 8.1. Control parameters | ontrols/personal protection | |
| ECTION 8: Exposure co 8.1. Control parameters Exposure limit values | ontrols/personal protection | |
| ECTION 8: Exposure co 8.1. Control parameters | ontrols/personal protection TRGS 900 | |
| ECTION 8: Exposure co 8.1. Control parameters Exposure limit values COPPER, flakes | TRGS 900 | |
| ECTION 8: Exposure co 8.1. Control parameters Exposure limit values COPPER, flakes List Derived No/Minimal Effec | TRGS 900 | |
| SECTION 8: Exposure co 8.1. Control parameters Exposure limit values COPPER, flakes List Derived No/Minimal Effec COPPER, flakes Type of value | TRGS 900 t Levels (DNEL/DMEL) Derived No Effect Level (DNEL) | |
| SECTION 8: Exposure co 8.1. Control parameters Exposure limit values COPPER, flakes List Derived No/Minimal Effec COPPER, flakes Type of value Reference group | TRGS 900 It Levels (DNEL/DMEL) Derived No Effect Level (DNEL) Worker | |
| SECTION 8: Exposure co 8.1. Control parameters Exposure limit values COPPER, flakes List Derived No/Minimal Effec COPPER, flakes Type of value Reference group Duration of exposure | TRGS 900 It Levels (DNEL/DMEL) Derived No Effect Level (DNEL) Worker Short term | |
| ECTION 8: Exposure co 8.1. Control parameters Exposure limit values COPPER, flakes List Derived No/Minimal Effec COPPER, flakes Type of value Reference group Duration of exposure Route of exposure | TRGS 900 t Levels (DNEL/DMEL) Derived No Effect Level (DNEL) Worker Short term dermal | |
| ECTION 8: Exposure co 8.1. Control parameters Exposure limit values COPPER, flakes List Derived No/Minimal Effec COPPER, flakes Type of value Reference group Duration of exposure Route of exposure Mode of action | TRGS 900 It Levels (DNEL/DMEL) Derived No Effect Level (DNEL) Worker Short term dermal Systemic effects | |
| ECTION 8: Exposure co 8.1. Control parameters Exposure limit values COPPER, flakes List Derived No/Minimal Effec COPPER, flakes Type of value Reference group Duration of exposure Route of exposure | TRGS 900 t Levels (DNEL/DMEL) Derived No Effect Level (DNEL) Worker Short term dermal | mg/kg |
| ECTION 8: Exposure co 8.1. Control parameters Exposure limit values COPPER, flakes List Derived No/Minimal Effec COPPER, flakes Type of value Reference group Duration of exposure Route of exposure Mode of action Concentration | TRGS 900 It Levels (DNEL/DMEL) Derived No Effect Level (DNEL) Worker Short term dermal Systemic effects 273 | mg/kg |
| ECTION 8: Exposure co 8.1. Control parameters Exposure limit values COPPER, flakes List Derived No/Minimal Effec COPPER, flakes Type of value Reference group Duration of exposure Route of exposure Mode of action Concentration Type of value | TRGS 900 It Levels (DNEL/DMEL) Derived No Effect Level (DNEL) Worker Short term dermal Systemic effects 273 Derived No Effect Level (DNEL) | mg/kg |
| ECTION 8: Exposure co 8.1. Control parameters Exposure limit values COPPER, flakes List Derived No/Minimal Effec COPPER, flakes Type of value Reference group Duration of exposure Route of exposure Mode of action Concentration Type of value Reference group | TRGS 900 It Levels (DNEL/DMEL) Derived No Effect Level (DNEL) Worker Short term dermal Systemic effects 273 Derived No Effect Level (DNEL) Worker | mg/kg |
| ECTION 8: Exposure co 8.1. Control parameters Exposure limit values COPPER, flakes List Derived No/Minimal Effec COPPER, flakes Type of value Reference group Duration of exposure Route of exposure Mode of action Concentration Type of value Reference group Duration of exposure | TRGS 900 It Levels (DNEL/DMEL) Derived No Effect Level (DNEL) Worker Short term dermal Systemic effects 273 Derived No Effect Level (DNEL) Worker Short term | mg/kg |
| ECTION 8: Exposure co 8.1. Control parameters Exposure limit values COPPER, flakes List Derived No/Minimal Effec COPPER, flakes Type of value Reference group Duration of exposure Route of exposure Mode of action Concentration Type of value Reference group Duration of exposure Route of exposure Route of exposure Route of exposure Route of exposure | TRGS 900 t Levels (DNEL/DMEL) Derived No Effect Level (DNEL) Worker Short term dermal Systemic effects 273 Derived No Effect Level (DNEL) Worker Short term inhalative | mg/kg |
| ECTION 8: Exposure co 8.1. Control parameters Exposure limit values COPPER, flakes List Derived No/Minimal Effec COPPER, flakes Type of value Reference group Duration of exposure Route of exposure Mode of action Concentration Type of value Reference group Duration of exposure | TRGS 900 It Levels (DNEL/DMEL) Derived No Effect Level (DNEL) Worker Short term dermal Systemic effects 273 Derived No Effect Level (DNEL) Worker Short term | mg/m³ |
| ECTION 8: Exposure co 8.1. Control parameters Exposure limit values COPPER, flakes List Derived No/Minimal Effec COPPER, flakes Type of value Reference group Duration of exposure Route of exposure Mode of action Concentration Type of value Reference group Duration of exposure Route of exposure Route of exposure Route of exposure Route of exposure Route of exposure Mode of action Concentration | TRGS 900 t Levels (DNEL/DMEL) Derived No Effect Level (DNEL) Worker Short term dermal Systemic effects 273 Derived No Effect Level (DNEL) Worker Short term inhalative Systemic effects 20 | |
| ECTION 8: Exposure co 8.1. Control parameters Exposure limit values COPPER, flakes List Derived No/Minimal Effec COPPER, flakes Type of value Reference group Duration of exposure Route of exposure Mode of action Concentration Type of value Reference group Duration of exposure Route of exposure Route of exposure Route of exposure Mode of action Concentration Type of value | TRGS 900 t Levels (DNEL/DMEL) Derived No Effect Level (DNEL) Worker Short term dermal Systemic effects 273 Derived No Effect Level (DNEL) Worker Short term inhalative Systemic effects 20 Derived No Effect Level (DNEL) | |
| ECTION 8: Exposure co 8.1. Control parameters Exposure limit values COPPER, flakes List Derived No/Minimal Effec COPPER, flakes Type of value Reference group Duration of exposure Mode of action Concentration Type of value Reference group Duration of exposure Mode of action Concentration Type of value Reference group Duration of exposure Mode of action Concentration Type of value Reference group | TRGS 900 t Levels (DNEL/DMEL) Derived No Effect Level (DNEL) Worker Short term dermal Systemic effects 273 Derived No Effect Level (DNEL) Worker Short term inhalative Systemic effects 20 Derived No Effect Level (DNEL) Worker | |
| ECTION 8: Exposure co 8.1. Control parameters Exposure limit values COPPER, flakes List Derived No/Minimal Effec COPPER, flakes Type of value Reference group Duration of exposure Route of exposure Mode of action Concentration Type of value Reference group Duration of exposure Route of exposure Route of exposure Mode of action Concentration Type of value Reference group Duration of exposure Mode of action Concentration | TRGS 900 t Levels (DNEL/DMEL) Derived No Effect Level (DNEL) Worker Short term dermal Systemic effects 273 Derived No Effect Level (DNEL) Worker Short term inhalative Systemic effects 20 Derived No Effect Level (DNEL) Worker Long term | |
| ECTION 8: Exposure co 8.1. Control parameters Exposure limit values COPPER, flakes List Derived No/Minimal Effec COPPER, flakes Type of value Reference group Duration of exposure Route of exposure Mode of action Concentration Type of value Reference group Duration of exposure Route of exposure Route of exposure Mode of action Concentration Type of value Reference group Duration of exposure Mode of action Concentration Type of value Reference group Duration of exposure Mode of action Concentration | TRGS 900 t Levels (DNEL/DMEL) Derived No Effect Level (DNEL) Worker Short term dermal Systemic effects 273 Derived No Effect Level (DNEL) Worker Short term inhalative Systemic effects 20 Derived No Effect Level (DNEL) Worker Long term dermal | |
| ECTION 8: Exposure co 8.1. Control parameters Exposure limit values COPPER, flakes List Derived No/Minimal Effec COPPER, flakes Type of value Reference group Duration of exposure Route of exposure Mode of action Concentration Type of value Reference group Duration of exposure Route of exposure Route of exposure Mode of action Concentration Type of value Reference group Duration of exposure Mode of action Concentration Type of value Reference group Duration of exposure | TRGS 900 t Levels (DNEL/DMEL) Derived No Effect Level (DNEL) Worker Short term dermal Systemic effects 273 Derived No Effect Level (DNEL) Worker Short term inhalative Systemic effects 20 Derived No Effect Level (DNEL) Worker Long term | |

| ade name: Marabu do it Metallic 78 | 6, 150 ml | |
|------------------------------------|--------------------------------|-------------------------|
| | Version: 1 / | Date revised: 06.08.202 |
| ubstance number: 21074006786 | Replaces Version: - / WORLD | Print date: 14.08.2 |
| Reference group | Consumer | |
| Duration of exposure | Short term | |
| Route of exposure | dermal | |
| Mode of action | Systemic effects | |
| Concentration | 273 | mg/kg |
| Type of value | Derived No Effect Level (DNEL) | |
| Reference group | Consumer | |
| Duration of exposure | Short term | |
| Route of exposure | inhalative | |
| Mode of action | Systemic effects | |
| Concentration | 20 | mg/m³ |
| Ethyl acetate | | |
| Type of value | Derived No Effect Level (DNEL) | |
| Reference group | Worker | |
| Duration of exposure | Acute | |
| Route of exposure | inhalative | |
| Concentration | 1468 | mg/m³ |
| Concentration | 1400 | mg/m² |
| Type of value | Derived No Effect Level (DNEL) | |
| Reference group | Worker | |
| Duration of exposure | Acute | |
| Route of exposure | inhalative | |
| Mode of action | Local effects | |
| Concentration | 1468 | g/m³ |
| Type of value | Derived No Effect Level (DNEL) | |
| Reference group | Worker | |
| Route of exposure | dermal | |
| Mode of action | Chronic effects | |
| Concentration | 63 | mg/kg |
| Type of value | Derived No Effect Level (DNEL) | |
| Reference group | Worker | |
| Route of exposure | inhalative | |
| Mode of action | Chronic effects | |
| Concentration | 734 | mg/m³ |
| Type of value | Derived No Effect Level (DNEL) | |
| Reference group | Worker | |
| Route of exposure | inhalative | |
| Mode of action | Chronic effects | |
| Concentration | 734 | mg/m³ |
| Concentration | 7.0- | |
| Type of value | Derived No Effect Level (DNEL) | |
| Reference group | Consumer | |
| Route of exposure | inhalative | |
| Mode of action | Acute effects | |
| Concentration | 734 | mg/m³ |
| Type of value | Derived No Effect Level (DNEL) | |
| Reference group | Consumer | |
| Route of exposure | inhalative | |
| Mode of action | Local effects | |
| Concentration | 734 | mg/m³ |

| ade name: Marabu do it Metallic 786 | | Ma |
|---|---|--|
| ubstance number: 21074006786 | Version: 1 / Replaces Version: - / WORLD | Date revised: 06.08.20 Print date: 14.08. |
| Type of value | Derived No Effect Level (DNEL) | |
| Reference group | Consumer | |
| Route of exposure | dermal | |
| Mode of action | Chronic effects | |
| | | |
| Concentration | 37 | mg/kg |
| Type of value | Derived No Effect Level (DNEL) | |
| Reference group | Consumer | |
| Route of exposure | inhalative | |
| Mode of action | Chronic effects | |
| Concentration | 367 | mg/m³ |
| Concentration | 307 | mg/m |
| Type of value | Derived No Effect Level (DNEL) | |
| Reference group | Consumer | |
| Route of exposure | oral | |
| Mode of action | Chronic effects | |
| Concentration | 4,5 | mg/m³ |
| Concontration | 1,0 | |
| Type of value | Derived No Effect Level (DNEL) | |
| Reference group | Consumer | |
| Route of exposure | inhalative | |
| Mode of action | Local effects | |
| Concentration | 367 | mg/m³ |
| Concentration | 307 | mg/m |
| Zinc powder - Zinc dust | | |
| Type of value | Derived No Effect Level (DNEL) | |
| Reference group | Worker | |
| Duration of exposure | Long term | |
| | inhalative | |
| Route of exposure | | |
| Mode of action | Systemic effects | |
| Concentration | 5 | mg/m³ |
| Type of value | Derived No Effect Level (DNEL) | |
| Reference group | Worker | |
| Duration of exposure | Long term | |
| Route of exposure | dermal | |
| Mode of action | | |
| | Systemic effects | |
| Concentration | 83 | mg/kg |
| Type of value | Derived No Effect Level (DNEL) | |
| Reference group | Consumer | |
| Duration of exposure | Long term | |
| Route of exposure | oral | |
| | | |
| Mode of action | Systemic effects | malka |
| Concentration | 0,83 | mg/kg |
| Type of value | Derived No Effect Level (DNEL) | |
| Reference group | Consumer | |
| Duration of exposure | Long term | |
| | dermal | |
| Route of exposure | | |
| Mode of action | Systemic effects | malka |
| Concentration | 83 | mg/kg |
| Turner of such se | Derived No Effect Level (DNEL) | |
| | | |
| Type of value Reference group | · · · · · · | |
| Reference group Duration of exposure | Consumer Long term | |

| ade name: Marabu do it Metallic 78 | 6, 150 ml | |
|------------------------------------|--------------------------------|-------------------------|
| | Version: 1 / | Date revised: 06.08.202 |
| ubstance number: 21074006786 | Replaces Version: - / WORLD | Print date: 14.08.2 |
| Mode of action | Systemic effects | |
| Concentration | 2,5 | mg/m³ |
| 2-Methoxy-1-methylethyl acet | ate | |
| Type of value | Derived No Effect Level (DNEL) | |
| Reference group | Worker | |
| Duration of exposure | Long term | |
| Route of exposure | dermal | |
| Mode of action | Systemic effects | |
| Concentration | 796 | mg/kg/d |
| | | |
| Type of value | Derived No Effect Level (DNEL) | |
| Reference group | Worker | |
| Duration of exposure | Long term | |
| Route of exposure | inhalative | |
| Mode of action | Systemic effects | |
| Concentration | 275 | mg/m³ |
| Type of volue | Derived No Effect Level (DNEL) | |
| Type of value | · · · · · | |
| Reference group | Consumer | |
| Duration of exposure | Long term | |
| Route of exposure | dermal | |
| Mode of action | Systemic effects | |
| Concentration | 320 | mg/kg/d |
| Type of value | Derived No Effect Level (DNEL) | |
| Reference group | Consumer | |
| Duration of exposure | Long term | |
| Route of exposure | inhalative | |
| Mode of action | Systemic effects | |
| | | m a /m 3 |
| Concentration | 33 | mg/m³ |
| Type of value | Derived No Effect Level (DNEL) | |
| Reference group | Consumer | |
| Duration of exposure | Long term | |
| Route of exposure | inhalative | |
| Mode of action | Local effects | |
| Concentration | 33 | mg/m³ |
| | Derived No Effect Level (DNEL) | |
| Type of value | Derived No Effect Level (DNEL) | |
| Reference group | Consumer | |
| Duration of exposure | Long term | |
| Route of exposure | oral | |
| Mode of action | Systemic effects | |
| Concentration | 36 | mg/kg/d |
| Type of value | Derived No Effect Level (DNEL) | |
| Reference group | Worker | |
| Duration of exposure | Lifetime | |
| Route of exposure | inhalative | |
| Mode of action | Local effects | |
| Concentration | 550 | mg/m³ |
| | | - |
| Propan-2-ol | | |
| Type of value | Derived No Effect Level (DNEL) | |
| Reference group | Worker | |
| Duration of exposure | Long term | |

Trade name: Marabu do it Metallic 786, 150 ml

Version: 1 / Replaces Version: - / WORLD

| Substance number: 21074006786 | Replaces Version: - / WORLD | Print date: 14.08.20 |
|-------------------------------|--------------------------------|---------------------------------------|
| Route of exposure | inhalative | |
| Mode of action | Systemic effects | |
| Concentration | 500 | mg/m³ |
| Type of value | Derived No Effect Level (DNEL) | |
| Reference group | Worker | |
| Duration of exposure | Long term | |
| Route of exposure | dermal | |
| Mode of action | Systemic effects | |
| Concentration | 888 | mg/kg/d |
| Type of value | Derived No Effect Level (DNEL) | |
| Reference group | General Population | |
| Duration of exposure | Long term | |
| Route of exposure | inhalative | |
| Mode of action | | |
| | Systemic effects | · · · · · · · · · · · · · · · · · · · |
| Concentration | 89 | mg/m³ |
| Type of value | Derived No Effect Level (DNEL) | |
| Reference group | General Population | |
| Duration of exposure | Long term | |
| Route of exposure | dermal | |
| Mode of action | Systemic effects | |
| Concentration | 319 | malkald |
| Concentration | 519 | mg/kg/d |
| Type of value | Derived No Effect Level (DNEL) | |
| Reference group | General Population | |
| Duration of exposure | Long term | |
| Route of exposure | oral | |
| Mode of action | Systemic effects | |
| Concentration | 26 | mg/kg/d |
| | | |
| 2-Butoxyethanol | | |
| Type of value | Derived No Effect Level (DNEL) | |
| Reference group | Worker | |
| Duration of exposure | Acute | |
| Route of exposure | dermal | |
| Mode of action | Systemic effects | |
| Concentration | 89 | mg/kg |
| Type of value | Derived No Effect Level (DNEL) | |
| Reference group | Worker | |
| Duration of exposure | Short term | |
| Route of exposure | inhalative | |
| Mode of action | Systemic effects | |
| Concentration | 1091 | mg/m³ |
| Concentration | 1031 | ing/in |
| Type of value | Derived No Effect Level (DNEL) | |
| Reference group | General Population | |
| Duration of exposure | Short term | |
| Route of exposure | inhalative | |
| Mode of action | Local effects | |
| Concentration | 147 | mg/m³ |
| Concontration | | ····;;···· |
| Type of value | Derived No Effect Level (DNEL) | |
| Reference group | Worker | |
| Duration of exposure | Long term | |
| | | |



Trade name: Marabu do it Metallic 786, 150 ml

Version: 1 / Replaces Version: - / WORLD Date revised: 06.08.2020

| | Version: 17 | Date revised: 06.08.2020 |
|-------------------------------|-----------------------------------|--------------------------|
| Substance number: 21074006786 | Replaces Version: - / WORLD | Print date: 14.08.20 |
| | ···· | |
| Route of exposure | dermal | |
| Mode of action | Systemic effects | |
| Concentration | | malka |
| Concentration | 125 | mg/kg |
| | Derived No Effect Level (DNEL) | |
| Type of value | Derived No Effect Level (DNEL) | |
| Reference group | Worker | |
| Duration of exposure | Long term | |
| Route of exposure | inhalative | |
| Mode of action | Systemic effects | |
| Concentration | 98 | mg/m³ |
| Turne of under | Device of New Effect Level (DNEL) | |
| Type of value | Derived No Effect Level (DNEL) | |
| Reference group | Consumer | |
| Duration of exposure | Acute | |
| Route of exposure | dermal | |
| Mode of action | Systemic effects | |
| Concentration | 89,5 | mg/kg |
| | | |
| Type of value | Derived No Effect Level (DNEL) | |
| Reference group | Consumer | |
| Duration of exposure | Acute | |
| Route of exposure | inhalative | |
| Mode of action | Systemic effects | |
| Concentration | 426 | mg/m³ |
| | | |
| Type of value | Derived No Effect Level (DNEL) | |
| Reference group | Consumer | |
| Duration of exposure | Acute | |
| Route of exposure | oral | |
| Mode of action | Systemic effects | |
| Concentration | 26,7 | mg/kg |
| | | |
| Type of value | Derived No Effect Level (DNEL) | |
| Reference group | Consumer | |
| Duration of exposure | Acute | |
| Route of exposure | inhalative | |
| Mode of action | Local effects | |
| Concentration | 147 | mg/kg |
| | | |
| Type of value | Derived No Effect Level (DNEL) | |
| Reference group | Consumer | |
| Duration of exposure | Long term | |
| Route of exposure | dermal | |
| Mode of action | Systemic effects | |
| Concentration | 75 | mg/kg |
| | | |
| Type of value | Derived No Effect Level (DNEL) | |
| Reference group | Consumer | |
| Duration of exposure | Long term | |
| Route of exposure | inhalative | |
| Mode of action | Systemic effects | |
| Concentration | 59 | mg/m³ |
| | | ~ |
| Type of value | Derived No Effect Level (DNEL) | |
| Reference group | Consumer | |
| Duration of exposure | Long term | |
| Route of exposure | oral | |
| Mode of action | Systemic effects | |
| | • | |

| rade name: Marabu do it Metallic 7 | 86, 150 ml | |
|------------------------------------|-----------------------------|---------------------------|
| | Version: 1 / | Date revised: 06.08.202 |
| Substance number: 21074006786 | Replaces Version: - / | WORLD Print date: 14.08.2 |
| Concentration | 6,3 | mg/kg |
| Predicted No Effect Concer | ntration (PNEC) | |
| COPPER, flakes | | |
| Type of value | PNEC | |
| Туре | Soil | |
| Concentration | 65,5 | mg/kg |
| Type of value | PNEC | |
| Туре | Freshwater | |
| Concentration | 0,0078 | mg/l |
| Type of value | PNEC | |
| Туре | Freshwater sediment | ~ |
| Concentration | 87 | mg/kg |
| Type of value | PNEC | |
| Туре | Saltwater | |
| Concentration | 0,0052 | mg/l |
| Type of value | PNEC | |
| Туре | Marine sediment | |
| Concentration | 676 | mg/kg |
| Type of value | PNEC | |
| Туре | Sewage treatment plant (STP | |
| Concentration | 0,230 | mg/l |
| Ethyl acetate | | |
| Type of value | PNEC | |
| Туре | Water | |
| Concentration | 0,26 | mg/l |
| Type of value | PNEC | |
| Туре | Aquatic | |
| Concentration | 0,026 | mg/l |
| Type of value | PNEC | |
| Туре | Freshwater sediment | |
| Concentration | 0,34 | mg/kg |
| Type of value | PNEC | |
| Туре | Marine sediment | |
| Concentration | 0,034 | mg/kg |
| Type of value | PNEC | |
| Туре | Soil | |
| Concentration | 0,22 | mg/kg |
| Zinc powder - Zinc dust | | |
| Type of value | PNEC | |
| Туре | Freshwater | |
| Concentration | 0,0206 | mg/l |
| Type of value | PNEC | |
| Туре | Freshwater sediment | |

Trade name: Marabu do it Metallic 786, 150 ml

| Substance number: 21074006786 | Version: 1 / Replaces Version: - / WORLD | Date revised: 06.08.2020 Print date: 14.08.20 |
|--------------------------------|---|--|
| Concentration | 117,8 | mg/kg |
| Type of value | PNEC | |
| Туре | Saltwater | |
| Concentration | 0,0061 | mg/l |
| Type of value | PNEC | |
| Туре | Sewage treatment plant (STP) | |
| Concentration | 0,052 | mg/l |
| Type of value | PNEC | |
| Туре | Soil | |
| Concentration | 35,6 | mg/kg |
| Type of value | PNEC | |
| Туре | Marine sediment | |
| Concentration | 56,5 | mg/kg |
| 2-Methoxy-1-methylethyl acetat | A | |
| Reference substance | 2-Methoxy-1-methylethyl acetate | |
| Type of value | PNEC | |
| Туре | Freshwater | |
| Concentration | 0,635 | mg/l |
| Type of value | PNEC | |
| Type | Freshwater sediment | |
| Concentration | 3,29 | malka |
| | | mg/kg |
| Type of value | PNEC | |
| Туре | Soil | |
| Concentration | 0,29 | mg/kg |
| Source | Literature value | |
| Type of value | PNEC | |
| Туре | Sewage treatment plant (STP) | |
| Concentration | 100 | mg/l |
| Source | Literature value | |
| Type of value | PNEC | |
| Туре | Marine sediment | |
| Concentration | 0,329 | mg/kg |
| Source | Literature value | |
| Type of value | PNEC | |
| Туре | Saltwater | |
| Concentration | 0,0635 | mg/l |
| Propan-2-ol | | |
| Type of value | PNEC | |
| Type | Freshwater | |
| Concentration | 140,9 | mg/l |
| | | ····•;• |
| Type of value | PNEC | |
| Туре | Saltwater | (I |
| Concentration | 140,9 | mg/l |
| Type of value | PNEC | |

| Trade name: Marabu do it Metallic 786, | 150 ml | ΔV |
|--|------------------------------|------------------------------------|
| | Version: 1 / | Marabu Date revised: 06.08.2020 |
| Substance number: 21074006786 | Replaces Version: - / WORLD | Print date: 14.08.20 |
| Туре | Sewage treatment plant (STP) | |
| Concentration | 2251 | mg/l |
| Type of value | PNEC | |
| Туре | Freshwater sediment | |
| Concentration | 552 | mg/kg |
| Type of value | PNEC | |
| Туре | Marine sediment | |
| Concentration | 552 | mg/kg |
| Type of value | PNEC | |
| Туре | Soil | |
| Concentration | 28 | mg/kg |
| 2-Butoxyethanol | | |
| Type of value | PNEC | |
| Туре | Freshwater | |
| Concentration | 8,8 | mg/l |
| Type of value | PNEC | |
| Туре | Soil | |
| Concentration | 2,8 | mg/kg |
| Type of value | PNEC | |
| Туре | Freshwater sediment | |
| Concentration | 34,6 | mg/kg |
| Type of value | PNEC | |
| Туре | Sewage treatment plant (STP) | |
| Concentration | 463 | mg/l |
| Type of value | PNEC | |
| Туре | Saltwater | |
| Concentration | 0,88 | mg/l |
| Type of value | PNEC | |
| Туре | Marine sediment | |
| Concentration | 3,46 | mg/kg |

8.2. Exposure controls

Exposure controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

Respiratory protection

If workers are exposed to concentrations above the exposure limit they must use appropriate, certified respirators. Short term: filter apparatus, Filter A/P2; Self-contained breathing apparatus.

Hand protection

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

For prolonged or repeated handling nitrile rubber gloves with textile undergloves are required.

- Material thickness > 0,5 mm
- Breakthrough time < 30 min

The breakthrough time must be greater than the end use time of the product.

The instructions and information provided by the glove manufacturer on use, storage, maintenance and

| Safety data sheet in accordance with regulation (EC) No 1907/2006 | | | | | | | |
|---|---|--|---------------------------|---------------------------|-------------------------|-------------------------------------|---|
| Trade name: Marabu do it Metallic 786, 150 ml | | | | | | | |
| | | | | Version: | 1 / | | Date revised: 06.08.2020 |
| Substa | ance number: | 21074006786 | | Replaces | Version: | -/WORLD | Print date: 14.08.20 |
| E | Gloves shou Always ensu The perform maintenance Barrier creat | are that gloves are f ance or effectivene a. ms may help to prot are has occurred. | ree from ss of the |) defects a e glove ma | nd that th y be redu | ney are stored a uced by physica | the glove material. and used correctly. al/ chemical damage and poor ould however not be applied |
| _ | Safety glass | | | | | | |
| B | Body protect | | | | | | |
| | ••• | | ic clothi | ng made o | f natural | fibre or of high | temperature resistant synthetic |
| SECT | TION 9: Ph | nysical and cl | hemic | al prop | oerties | 5 | |
| F | orm | on basic physi | Aeroso | ol | cal pro | perties | |
| C | Solour Ddour | | colour solven | | | | |
| р | H value Remarks | | Not ap | plicable | | | |
| Ν | lelting point | | | | | | |
| | Remarks | | not de | termined | | | |
| Ir | nitial boiling | point and boilin | g range | e | | | |
| | Value Pressure Source | | appr. Literat | 76 1.013 ure value | hPa | °C | |
| F | lash point | | | | | | |
| | Remarks | | Not ap | plicable | | | |
| U | Jpper/lower | lammability or e | xplosiv | ve limits | | | |
| | Lower explo Upper explo Source | | appr. appr. Literat | 2 12 ure value | | | (V) (V) |
| D | Density | | | | | | |
| | Value | | | 0,75 | ° ^ | g/ | CM ³ |
| ~ | Temperature | | | 20 | °C | | |
| 5 | Solubility in v | vater | | | | | |
| _ | Remarks | | immiso | | | | |
| P | | ficient: n-octano | | | | | |
| | Remarks | | Not ap | plicable | | | |
| IÇ | gnition temp | erature | | 405 | | ° C | 、 、 |
| | Value Source | | appr. Literat | 425 ure value | | °C | , |
| Viscosity | | | | | | | |
| • | Remarks | | | | | | |
| | Remarks | | not de | termined | | | |
| 9.2. C | Other inform | nation | | | | | |
| C | Other information | ation | | | | | |
| | The physica | I specifications are | approxir | nate value | s and ref | er to the used | safety relevant component(s). |

| Safety data she | et in accordance w | vith regu | ulation (EC |) No 1907/200 | 6 | |
|--------------------------|--|---------------|---------------------|------------------|-------------------------|--|
| Trade name: Ma | arabu do it Metallic 7 | 786, 150 | ml | | | Mar |
| | 04074000700 | | Version | | | Date revised: 06.08.202 Print date: 14.08.2 |
| Substance numi | ber: 21074006786 | | Керіас | es Version: - | WORLD | F fint date. 14.00.2 |
| |): Stability an | d road | -tivitv | | | |
| 10.1. Reactiv | | <u>u i ca</u> | SUVILY | | | |
| None kr | - | | | | | |
| 10.2. Chemic Stable u | al stability | l storage | and handl | ing conditions (| (see section 7). | |
| Keep av | ility of hazardou way from oxidising a mic reactions. | | | line and strong | ly acid materia | ls in order to avoid |
| | | peratures | s may prod | uce hazardous | decomposition | products. Protect from heat |
| 10.5. Incomp None kr | atible materials | 5 | | | | |
| | ous decomposi | tion nr | oducts | | | |
| | | | | al hazards aris | ing from the su | bstance or mixture). |
| | | - | | | - | |
| SECTION 12 | 1: Toxicologio | cal inf | ormatic | <u>on</u> | | |
| 11.1. Informa | ation on toxicolo | ogical | effects | | | |
| Acute ora | I toxicity | | | | | |
| ATE | | > | 2.000 | (Degulation (E) | mg/kg | 00) |
| Method | I toxicity (Compo | | | | C) No. 1272/20 | 00) |
| | | Jiieiiisj | | | | |
| Zinc pow Species | der - Zinc dust | rat | | | | |
| LD50 | | > | 2000 | | mg/kg | |
| 2-Butoxy | ethanol | | | | | |
| Species | , | rat (m | | | | |
| LD50 | | | 1746 | | mg/kg | |
| Method | | OECD | 401 | | | |
| | mal toxicity | | 0.000 | | | |
| ATE Method | | > calcul: | 2.000 ated value | (Regulation (F) | mg/kg C) No. 1272/20 | 08) |
| | alational toxicity | | | | 0) 10. 1272/20 | 00) |
| ACULE | | | 20 | | ma/l | |
| | tration/Form | > Vapor | | | mg/l | |
| Method | | | | (Regulation (E | C) No. 1272/20 | 08) |
| ATE | | > | 5 | () (| ´mg/l | , |
| | tration/Form | Dust/N | | | | |
| Method | 0 | | | | C) No. 1272/20 | |
| Remark | | | | ne data, the Cla | issilication crite | ria are not met. |
| | alative toxicity (0 | Jompol | ients) | | | |
| - | der - Zinc dust | r -1 | | | | |
| Species LC50 | | rat | 5,41 | | ma/l | |
| | n of exposure | | 5,41 4 | h | mg/l | |
| | stration/Form | Dust/N | - | | | |
| | osion/irritation | | | | | |

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| rade name: Marabu d | do it Metallic 786, 15 | 0 ml | | | |
|--|--|---|---|--|--|
| | | Version: 1 / | Date revised: 06.08.202 | | |
| Substance number: 2 | 1074006786 | Replaces Version: - / WORLD | Print date: 14.08.2 | | |
| Remarks | Base | d on available data, the classification c | riteria are not met. | | |
| Skin corrosion | /irritation (Compo | onents) | | | |
| 2-Methoxy-1-me | ethylethyl acetate | | | | |
| Species | rabb | - | | | |
| evaluation | | rritant | | | |
| Serious eye da | mage/irritation | | | | |
| evaluation | irrita | | | | |
| Remarks | Ine | classification criteria are met. | | | |
| Sensitization | Deed | d an available data the class firstion of | | | |
| Remarks | | d on available data, the classification c | riteria are not met. | | |
| Sensitization (C | - / | | | | |
| 2-Butoxyethance | | | | | |
| Route of expose Species | | al ea pig | | | |
| evaluation | 5 | sensitizing | | | |
| Mutagenicity | | | | | |
| Remarks | Base | d on available data, the classification c | riteria are not met | | |
| Reproductive to | | | | | |
| Remarks | - | d on available data, the classification c | riteria are not met | | |
| Carcinogenicity | | | | | |
| Remarks | | d on available data, the classification c | riteria are not met | | |
| | Organ Toxicity (| | | | |
| Single exposu | ıre | | | | |
| Remarks | | classification criteria are met. | | | |
| evaluation | May | cause drowsiness or dizziness. | | | |
| Repeated exp Remarks | | d on available data, the classification c | riteria are not met. | | |
| Aspiration haza | ard | | | | |
| Based on avai | lable data, the class | fication criteria are not met. | | | |
| Experience in p | oractice | | | | |
| limit may resul and adverse ed dizziness, fatig Solvents may o contact with th dermatitis and | t in adverse health e ffects on kidney, live jue, muscular weakr cause some of the a e mixture may cause | apours concentration in excess of the s ffects such as mucous membrane and r and central nervous system. Symptor ess, drowsiness and in extreme cases, bove effects by absorption through the e removal of natural fat from the skin re the skin. The liquid splashed in the eyes hoea and vomiting. | respiratory system irritation ns and signs include headache, , loss of consciousness. skin. Repeated or prolonged sulting in non-allergic contact | | |
| Other informati | | - | | | |
| The mixture ha | | mixture itself. llowing the additivity method of the CLF logical hazards accordingly. | PRegulation (EC) No | | |
| ECTION 12: Ec | ological infor | mation | | | |
| 2.1. Toxicity | | | | | |
| General inform | ation | | | | |
| There are no d | lata available on the | mixture itself.Do not allow to enter drai | | | |
| | | ng the summation method of the CLP F al properties accordingly. See Sections | | | |

| Frade name: Marabu do it Metallic 786, | Version: 1 / | Maral Date revised: 06.08.202 | | | |
|--|---|----------------------------------|--|--|--|
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| 12.2. Persistence and degradab | ility | | | | |
| General information | | | | | |
| There are no data available on t | he mixture itself. | | | | |
| 12.3. Bioaccumulative potential | | | | | |
| Partition coefficient: n-octano | | | | | |
| Remarks | Not applicable | | | | |
| 12.4. Mobility in soil | | | | | |
| General information | | | | | |
| There are no data available on t | he mixture itself. | | | | |
| 12.5. Results of PBT and vPvB | assessment | | | | |
| General information | | | | | |
| There are no data available on t | he mixture itself. | | | | |
| 12.6. Other adverse effects | | | | | |
| General information | | | | | |
| There are no data available on the mixture itself. | | | | | |
| SECTION 13: Disposal cons | derations | | | | |
| 13.1. Waste treatment methods | | | | | |
| Disposal recommendations for | or the product | | | | |
| Do not allow to enter drains or water courses. | | | | | |
| Disposal recommendations for packaging | | | | | |
| Completely emptied packagings | can be given for recycling. ardous waste (waste code number 150110). | | | | |

| Safety data sheet in accordance with regulation (EC) No 1907/2006 | | | | | | | |
|--|--|---------------------------------|------------------------------|--|--|--|--|
| Trade name: Marabu do it Metallic 786, 150 ml Version: 1 / Date revised: 06.08.2020 | | | | | | | |
| Substance number: 210740 | Date revised: 06.08.2020 Print date: 14.08.20 | | | | | | |
| | Land transport ADR/RID | Marine transport IMDG/GGVSee | Air transport ICAO/IATA | | | | |
| Tunnel restriction code | D | | | | | | |
| 14.1. UN number | 1950 | 1950 | 1950 | | | | |
| 14.2. UN proper shipping name | AEROSOLS (COPPER, flakes) | AEROSOLS (COPPER, flakes) | AEROSOLS (COPPER, flakes) | | | | |
| 14.3. Transport hazard class(es) | 2 | 2.1 | 2.1 | | | | |
| Label | 8 | 8 | | | | | |
| 14.4. Packing group | - | - | - | | | | |
| Limited Quantity | 1 | | | | | | |
| Transport category | 2 | | | | | | |
| 14.5. Environmental hazards | ENVIRONMENTALLY HAZARDOUS | Marine Pollutant | ENVIRONMENTALLY HAZARDOUS | | | | |

Information for all modes of transport

14.6. Special precautions for user

Transport within the user's premises:

Always transport in closed containers that are upright and secure.

Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Other information

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code no

SECTION 15: Regulatory information

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

| VOC | | | | |
|----------|------|---|-----|-----|
| VOC (CH) | 87,2 | % | 654 | g/l |
| VOC (EU) | 87,2 | % | 654 | g/l |

Other information

The product does not contain substances of very high concern (SVHC).

15.2. Chemical safety assessment

For this preparation a chemical safety assessment has not been carried out.

SECTION 16: Other information

Safety data sheet in accordance with regulation (EC) No 1907/2006 Trade name: Marabu do it Metallic 786, 150 ml Date revised: 06.08.2020 Version: 1/ Print date: 14.08.20 Substance number: 21074006786 Replaces Version: - / WORLD Hazard statements listed in Chapter 3 Highly flammable liquid and vapour. H225 Flammable liquid and vapour. H226 Harmful if swallowed. H302 H312 Harmful in contact with skin. H315 Causes skin irritation. H319 Causes serious eye irritation. H332 Harmful if inhaled. H336 May cause drowsiness or dizziness. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. **CLP** categories listed in Chapter 3 Acute Tox. 4 Acute toxicity, Category 4 Aquatic Acute 1 Hazardous to the aquatic environment, acute, Category 1 Aquatic Chronic 1 Hazardous to the aquatic environment, chronic, Category 1 Eve Irrit. 2 Eve irritation, Category 2 Flam. Liq. 2 Flammable liquid, Category 2 Flammable liquid, Category 3 Flam. Liq. 3 Skin irritation, Category 2 Skin Irrit. 2 STOT SE 3 Specific target organ toxicity - single exposure, Category 3 Abbreviations ADR: Accord européen relatif au transport international des marchandises Dangereuses par Route RID: Règlement concernant le transport international ferroviaire de marchandises dangereuses GGVSee: Gefahrgutverordnung See IMDG: International Maritime Code for Dangerous Goods ICAO: International Civil Aviation Organization IATA: International Air Transport Association CAS: Chemical Abstracts Service EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances **EmS: Emergency Schedules** AICS: Australian Inventory of Chemical Substances MITI: Ministry of International Trade and Industry (Japan) TSCA: Toxic Substances Control Act (USA) VOC: Volatile Organic Compound LD: Lethal dose LC: Lethal concentration SVHC: Substances of very high concern DNEL: Derived no effect level PNEC: Predicted no effect concentration **UN: United Nations** OEL: Occupational exposure limit Supplemental information Relevant changes compared with the previous version of the safety data sheet are marked with: *** This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship. The information in this Safety Data Sheet is based on the present state of knowledge and current legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications. The product should not be used for purposes other than those shown in Section 1 without first referring to the supplier and obtaining written handling instructions. As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with. The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation.

| Safety data sheet in accordance with regulation (EC) No 1907/2006 | | | | | | | |
|---|-----------------------------|--------------------------|--|--|--|--|--|
| Trade name: Marabu do it Metallic 786, 150 ml | | Marabu | | | | | |
| | Version: 1 / | Date revised: 06.08.2020 | | | | | |
| Substance number: 21074006786 | Replaces Version: - / WORLD | Print date: 14.08.20 | | | | | |
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