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| 1 Identification of the substance/mixture and of the company/undertaking |
|---|
| · Product identifier |
| Trade name: <u>Montana Black Ink red</u> Registration number The ingredients of this ink have been pre-registered according to 1907/2006/EC (REACH) Relevant identified uses of the substance or mixture and uses advised against Currently no such applications are identified Application of the substance / the preparation alcohol based permanent marking ink |
| Details of the supplier of the safety data sheet Manufacturer/Supplier: Georg Linz GmbH & Co.KG Röthensteig 17 D-90408 Nürnberg Phone + 49(0)911/937719-0 Fax + 49(0)91/937719-44 info@linz-pen.de |
| • Further information obtainable from: as above |
| • Emergency telephone number: as above |
| 2 Hazards identification |
| · Classification of the substance or mixture |
| Classification according to Directive 67/548/EEC or Directive 1999/45/EC Xn; Harmful |
| R68: Possible risk of irreversible effects. |
| Xi; Irritant |
| R36: Irritating to eyes. |
| F; Highly flammable |
| R11: Highly flammable. |
| R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic |
| environment. • Information concerning particular hazards for human and environment: The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version. • Classification system: The classification is according to the latest editions of the EU-lists, and extended by company and |
| literature data. • Label elements |
| • Labelling according to EU guidelines: The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials. |
| · Code letter and hazard designation of product: |
| Xn Harmful F Highly flammable N Dangerous for the environment |
| • Hazard-determining components of labelling: C. I. Solvent Orange 3 |
| • Risk phrases: 11 Highly flammable. 36 Irritating to eyes. 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. 68 Possible risk of irreversible effects. |
| • Safety phrases: 2 Keep out of the reach of children. 29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point. |
| (Contd. on page 2) - EU |

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ANSES The H22 198 - MACHETANA BLK MRKR according to 1907/2006/EC, Article 31

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36/37/39 Wear suitable protective clothing, gloves and eye/face protection. 46 If swallowed, seek medical advice immediately and show this container or label.

- Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- Chemical characterization: Mixtures
- Mixture of the following substances, containing non-hazardous substances and colouring agents. • **Description:** Mixture of substances listed below with nonhazardous additions.

| CAS: 64-17-5 | ethanol | 50-100% |
|-------------------|---|---------|
| EINECS: 200-578-6 | F R11 | |
| | 🔗 Flam. Liq. 2, H225 | |
| CAS: 107-98-2 | 1-Methoxy-2-propanol | 10-25% |
| EINECS: 203-539-1 | R10-67 | |
| | 🔞 Flam. Liq. 3, H226; 🚯 STOT SE 3, H336 | |
| CAS: 989-38-8 | C.I. Basic Red 1 | 2,5-10% |
| EINECS: 213-584-9 | 🗙 Xn R22; 📉 Xi R41; 🌄 N R51/53 | |
| | 🔶 Acute Tox. 3, H301; 🚸 Eye Dam. 1, H318; 🚸 Aquatic Acute 1, | |
| | H400; Aquatic Chronic 1, H410 | |
| CAS: 12645-31-7 | Phosphoric acid mono-bis-(2-ethylhexyl)-ester | 2,5-10% |
| EINECS: 235-741-0 | C R34 | |
| | Skin Corr. 1C, H314 | |
| CAS: 495-54-5 | C. I. Solvent Orange 3 | 2,5-10% |
| EINECS: 207-803-7 | | |
| | Muta. Cat. 3 | |
| | 🚸 Muta. 1B, H340; Carc. 2, H351; 🚯 Aquatic Acute 1, H400; Aquatic | |
| | Čhronic 1, H410; 🚸 Acute Tox. 4, H302, Skin Irrit. 2, H315; Škin | |
| | Sens. 1, H317 | |

4 First aid measures

· Description of first aid measures

- After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Immediately rinse with water.
- After eye contact:
- Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- After swallowing: If symptoms persist consult doctor.
- · Information for doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- Indication of any immediate medical attention and special treatment needed
- No further relevant information available.

5 Firefighting measures

• Extinguishing media

- · Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water.
- · For safety reasons unsuitable extinguishing agents:
- Water Water with full jet
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures
Wear protective equipment. Keep unprotected persons away.
Wear protective clothing.
Environmental precautions:
Do not allow product to reach sewage system or any water course.
Prevent seepage into sewage system, workpits and cellars.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). (Contd. on page 3)

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SASTISTIST #222,198 - SWACENETANA BLK MRKR

according to 1907/2006/EC, Article 31

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Dispose contaminated material as waste according to item 13. Dispose containing ed instant at a state of the second sec Reference to other sections See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

7 Handling and storage

Handling:

- Precautions for safe handling Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols.
- Information about fire and explosion protection: Keep ignition sources away - Do not smoke. Protect against electrostatic charges.

· Conditions for safe storage, including any incompatibilities

- Storage:
- · Requirements to be met by storerooms and receptacles: Store in a cool location.
- Information about storage in one common storage facility: Not required. Further information about storage conditions:
- Keep container tightly sealed. Store in cool, dry conditions in well sealed receptacles.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

· Additional information about design of technical facilities: No further data; see item 7.

| • 6 | Control parameters |
|--|---|
| • - | Ingredients with limit values that require monitoring at the workplace: |
| 2 | 107-98-2 1-Methoxy-2-propanol (10-25%) |
| - | IOELV Short-term value: 568 mg/m³, 150 ppm Long-term value: 375 mg/m³, 100 ppm Skin |
| - 2 | Additional information: The lists valid during the making were used as basis. |
| - 1 - 6 - 7 - 7 - 1 - 1 | Exposure controls Personal protective equipment: General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing Wash hands before breaks and at the end of work. Avoid contact with the eyes. Avoid contact with the eyes and skin. Respiratory protection: In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device. |
| | Protective gloves |
| 1 1 2 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 | The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation Material of gloves The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. |

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed. (Contd. on page 4)

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SASTISTING #222198 - SMONETANA BLK MRKR

according to 1907/2006/EC, Article 31

Trade name: Montana Black Ink red

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(Contd. of page 3)

· Eye protection:

Tightly sealed goggles

| 9 Physical and chemical properties | |
|---|---|
| | |
| Information on basic physical and chemical proj General Information Appearance: | perties |
| Form: Colour: | Fluid According to product specification |
| · Odour: · Odour threshold: | Product specific Not determined. |
| Important information on protection of health environment, and on safety. | and |
| · pH-value at 20°C: | 5,2 |
| • Change in condition Melting point/Melting range: Boiling point/Boiling range: | Undetermined. 78°C |
| · Flash point: | 13°C |
| · Flammability (solid, gaseous): | Not applicable. |
| · Ignition temperature: | 287°C |
| · Decomposition temperature: | Not determined. |
| · Self-igniting: | Product is not selfigniting. |
| · Danger of explosion: | Product is not explosive. However, formation of explosive air/vapour mixtures are possible. |
| • Explosion limits: Lower: Upper: | 1,7 Vol % 15,0 Vol % |
| · Vapour pressure at 20°C: | 59 hPa |
| Density: Relative density Vapour density Evaporation rate | Not determined. Not determined. Not determined. Not determined. |
| Solubility in / Miscibility with water: | Not miscible or difficult to mix. |
| · Segregation coefficient (n-octanol/water): | Not determined. |
| · Viscosity: Dynamic at 20°C: Kinematic: | 5 mPas Not determined. |
| · Solvent content: Organic solvents: | 80,5 % |
| Solids content: • Other information | 19,5 % No further relevant information available. |

10 Stability and reactivity

· Reactivity

Chemical stability

- Thermal decomposition / conditions to be avoided:

- Thermal decomposition / conditions to be avoided. No decomposition if used according to specifications.
 Possibility of hazardous reactions No dangerous reactions known.
 Conditions to avoid No further relevant information available.
 Incompatible materials: No further relevant information available.
 Hazardous decomposition products: No dangerous decomposition products known.

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according to 1907/2006/EC, Article 31

Trade name: Montana Black Ink red

Version number 1

Printing date

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| 11 Toxicological information | 11 | Toxico | logical | informa | ation |
|------------------------------|----|--------|---------|---------|-------|
|------------------------------|----|--------|---------|---------|-------|

- Information on toxicological effects
- · Acute toxicity: · LD/LC50 values relevant for classification:
- 989-38-8 C.I. Basic Red 1
- Oral LD50 250 mg/kg (rat)
- Primary irritant effect:

- Primary irritant effect: on the skin: No irritant effect. on the eye: Irritating effect. Sensitization: No sensitizing effects known. Additional toxicological information: The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version: Irritant Irritant

| 12 ECOIOGICa | | |
|---|--|--|
| · Toxicity | | |
| · Acquatic toxicity: | | |
| 989-38-8 C. | I. Basic Red 1 | |
| EC50 / 48h | 0,1-0,5 mg/l (Daphnie) | |
| LC50 / 96h | 1-5 mg/l (Fish) | |
| Persistence | and degradability No further relevant information available. | |
| | n environmental systems: | |
| | tive potential No further relevant information available. | |
| MODILITY IN Ecotoxical | soil No further relevant information available. | |
| • Remark: Tox | | |
| | ecological information: | |
| · General not | | |
| Water hazar | d class 3 (German Regulation) (Self-assessment): extremely hazardous for water | |
| | w product to reach ground water, water course or sewage system, even in small quantities. | |
| | lrinking water if even extremely small quantities leak into the ground. | |
| | nous for fish and plankton in water bodies. Aquatic organisms | |
| | Relatic Organisms PBT and vPvB assessment | |
| · PBT: Not ap | | |
| • vPvB: Not a | pplicable. | |
| Other adver | re effects No further relevant information available. | |
| | considerations | |
| • Waste treat • Recommendat | ment methods | |
| • Waste treat • Recommendat Must not be | ment methods tion | |
| • Waste treat • Recommendat Must not be • European wa 08 00 00 | r ment methods r ion e disposed together with household garbage. Do not allow product to reach sewage system. | |
| • Waste treat • Recommendat Must not be • European wa 08 00 00 | rment methods ion e disposed together with household garbage. Do not allow product to reach sewage system. aste catalogue WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, | |
| Waste treat Recommendat Must not be European wa 08 00 00 08 01 00 | ement methods ion a disposed together with household garbage. Do not allow product to reach sewage system. iste catalogue WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS | |
| Waste treat Recommendat Must not be European wa 08 00 00 08 01 00 08 01 11* | ement methods cion e disposed together with household garbage. Do not allow product to reach sewage system. aste catalogue WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS wastes from MFSU and removal of paint and varnish waste paint and varnish containing organic solvents or other dangerous substances | |
| Waste treat Recommendat Must not be European wa 08 00 00 08 01 00 08 01 11* Uncleaned p | mment methods ion a disposed together with household garbage. Do not allow product to reach sewage system. iste catalogue WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS wastes from MFSU and removal of paint and varnish waste paint and varnish containing organic solvents or other dangerous substances packaging: | |
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| Waste treat Recommendat Must not be European wa 08 00 00 08 01 00 08 01 11* Uncleaned p | mment methods ion a disposed together with household garbage. Do not allow product to reach sewage system. iste catalogue WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS wastes from MFSU and removal of paint and varnish waste paint and varnish containing organic solvents or other dangerous substances packaging: | |
| Waste treat Recommendat Must not be European wa 08 00 00 08 01 00 08 01 11* Uncleaned p Recommendat | mment methods ion e disposed together with household garbage. Do not allow product to reach sewage system. iste catalogue WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS wastes from MFSU and removal of paint and varnish waste paint and varnish containing organic solvents or other dangerous substances packaging: | |
| Waste treat Recommendat Must not be European wa 08 00 00 08 01 00 08 01 10 08 01 11* Uncleaned p Recommendat | <pre>mment methods cion e disposed together with household garbage. Do not allow product to reach sewage system. aste catalogue WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS wastes from MFSU and removal of paint and varnish waste paint and varnish containing organic solvents or other dangerous substances packaging: cion: Disposal must be made according to official regulations.</pre> | |
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| Waste treat Recommendat Must not be European wa 08 00 00 08 01 00 08 01 11* Uncleaned p Recommendat 14 Transport Land transp | <pre>imment methods ition disposed together with household garbage. Do not allow product to reach sewage system. iste catalogue WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS wastes from MFSU and removal of paint and varnish waste paint and varnish containing organic solvents or other dangerous substances ackaging: tion: Disposal must be made according to official regulations. information port ADB/RID (cross-border) iss: 3 (F1) Flammable liquids.</pre> | |
| Waste treat Recommendat Must not be European wa 08 00 00 08 01 00 08 01 11* Uncleaned p Recommendat 14 Transport Land transp Land transp ADR/RID cla | <pre>imment methods ition disposed together with household garbage. Do not allow product to reach sewage system. iste catalogue WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS wastes from MFSU and removal of paint and varnish waste paint and varnish containing organic solvents or other dangerous substances ackaging: tion: Disposal must be made according to official regulations. information port ADB/RID (cross-border) iss: 3 (F1) Flammable liquids.</pre> | |
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according to 1907/2006/EC, Article 31

| Trade name: Montana Black In. | k red |
|--|--|
| | (Contd. of page 5) |
| · Special marking: | Symbol (fish and tree) |
| | 163 PAINT, ENVIRONMENTALLY HAZARDOUS |
| Limited quantities (LQ) Tunnel restriction code | 5L D/E |
| • Maritime transport IMDG: | |
| | |
| | |
| | |
| | |
| · IMDG Class: | 3 |
| · UN Number: · Label | 1263 3 |
| Packaging group: | II |
| • EMS Number: • Marine pollutant: | F-E, <u>S-E</u> Yes |
| | Symbol (fish and tree) |
| • Proper shipping name: | PAINT (C.I. Basic Red 1, C. I. Solvent Orange 3) |
| · Remarks: | 1263 Paint (dye-stuff C.I. Basic Red 1; Solvent Orange 3), marine pollutant |
| · Air transport ICAO-TI an | d IATA-DGR: |
| | |
| | |
| | |
| | |
| ICAO/IATA Class: UN/ID Number: | 3 1263 |
| · Label | 3 |
| · Packaging group: | |
| · Proper shipping name: | PAINT |
| Environmental hazards: Product contains environ | umentally hazardous substances: C.I. Basic Red 1, C. I. Solvent Orange 3 |
| | user Warning: Flammable liquids. |
| · Ifansport in bulk accord | ing to Annex II of MARPOL73/78 and the IBC Code Not applicable. |
| 15 Domilatore informat | |
| 15 Regulatory informat | |
| \cdot Safety, health and envir | conmental regulations/legislation specific for the substance or mixture |
| • National regulations: | |
| • Technical instructions (| air): |
| Class Share in % | |
| NK 50-100 | |
| • Waterhazard class: Water | hazard class 3 (Self-assessment): extremely hazardous for water. |
| • Chemical safety assessme | ent: A Chemical Safety Assessment has not been carried out. |
| | |
| 16 Other information | |
| | ed on our present knowledge. However, this shall not constitute a guarantee |
| | : features and shall not establish a legally valid contractual relationship. |
| Relevant phrases H225 Highly flammable | liquid and vapour. |
| H226 Flammable liquid | and vapour. |
| H301 Toxic if swallowe H302 Harmful if swallo | |
| H314 Causes severe ski | n burns and eye damage. |
| H315 Causes skin irrit H317 May cause an alle | ation. ergic skin reaction. |
| H318 Causes serious ey | re damage. |
| H336 May cause drowsin H340 May cause genetic | ness or dizziness. 2 defects |
| H351 Suspected of caus | sing cancer. |
| H400 Very toxic to aqu | |
| | natic life with long lasting effects. |
| R10 Flammable. R11 Highly flammable. | |
| | |
| R22 Harmful if swallc | wed. |
| R22 Harmful if swallc R34 Causes burns. R38 Irritating to ski | |

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Trade name: Montana Black Ink red

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R41 Risk of serious damage to eyes.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R67 Vapours may cause drowsiness and dizziness.
R68 Possible risk of irreversible effects.