

Safety data sheet

MSDS for #22198 - MONTANA BLK MKRKR according to 1907/2006/EC, Article 31

Printing date 03.11.2011

Revision: 03.11.2011

- **Product identifier**
- **Trade name:** *Montana Black Ink cyan*
- **Relevant identified uses of the substance or mixture and uses advised against:** -
- **Application of the substance / the preparation:** *marker ink*
- **Details of the supplier of the safety data sheet:**
- **Manufacturer/Supplier**
*Georg Linz GmbH & Co.Kg
Röthensteig 17
Germany-90408Nürnberg
Phone: +49(0) 911/937719-0
Fax : +49(0) 911/937719-44*
- **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** *F Highly flammable.*
- **Hazard description:** *F Highly flammable*
- **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.
Has a narcotizing effect.
R 11 Highly flammable.
R 67 Vapours may cause drowsiness and dizziness.*
- **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:**



F Highly flammable

- **Risk phrases:**
*11 Highly flammable.
67 Vapours may cause drowsiness and dizziness.*
- **Safety phrases:**
*2 Keep out of the reach of children.
7/9 Keep container tightly closed and in a well-ventilated place.
18 Handle and open container with care.
20/21 When using do not eat, drink or smoke.
24/25 Avoid contact with skin and eyes.
29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.*
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** *Not applicable.*
- **vPvB:** *Not applicable.*

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3 Composition/information on ingredients

- **Chemical characterization:** Mixtures
- **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 64-17-5 EINECS: 200-578-6	ethanol	 F R11	50-100%
CAS: 1569-02-4 EINECS: 216-374-5	1-ethoxypropan-2-ol	R10-67	10-25%
CAS: 107-98-2 EINECS: 203-539-1	1-methoxypropan-2-ol	R10	2.5-10%

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- **Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Wash with water and soap.
- **After eye contact:** Rinse opened eye for several minutes under running water. Consult doctor.
- **After swallowing:** Rinse mouth with water (only if person conscious). 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, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** 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.
- **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 surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
- **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.

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7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Open and handle receptacle with care.
- **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.
- **Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

64-17-5 ethanol

WEL	Long-term value: 1920 mg/m ³ , 1000 ppm
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107-98-2 1-methoxypropan-2-ol

WEL	Short-term value: 560 mg/m ³ , 150 ppm
	Long-term value: 375 mg/m ³ , 100 ppm
Sk	

- **Additional information:** The lists valid during the making were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:** Wash hands before breaks and at the end of work.
- **Respiratory protection:** Not required.
- **Protection of hands:**
Protective gloves recommended during handling/refilling large quantities.
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.
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Tightly sealed goggles recommended during handling/refilling large quantities.

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9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Fluid
 Colour: According to product specification

· Odour: Characteristic

· Odour threshold: Not determined.

· pH-value: Not determined.

· Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 78°C

· Flash point: 13°C

· Flammability (solid, gaseous): -

· Ignition temperature: 255°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: 1.3 Vol %

Upper: 15.0 Vol %

· Vapour pressure at 20°C: 59 hPa

· Density: Not determined.

· Relative density: Not determined.

· Vapour density: Not determined.

· Evaporation rate: Not determined.

· Solubility in / Miscibility with

water: Not miscible or difficult to mix.

· Segregation coefficient (n-octanol/water): Not determined.

· Viscosity:

Dynamic: Not determined.

Kinematic: Not determined.

· Solvent content:

Organic solvents: 81.3 %

Water: 0.0 %

Solids content: 18.7 %

· Other information: No further relevant information available.

10 Stability and reactivity

· Reactivity

· Chemical stability

· 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.

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· **Hazardous decomposition products:** No dangerous decomposition products known.

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11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.

12 Ecological information

- **Toxicity**
- **Acquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Waste disposal key:** 080111 (waste containing organic solvents)
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- | | |
|----------------------------------|--|
| · UN-Number | |
| · ADR, IMDG, IATA | UN1263 |
| · UN proper shipping name | |
| · ADR | 1263 PAINT (vapour pressure at 50°C not more than 110 kPa) |
| · IMDG, IATA | PAINT |

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· Transport hazard class(es)

· ADR



· Class 3 Flammable liquids.
 · Label 3

· IMDG, IATA



· Class 3 Flammable liquids.
 · Label 3

· Packing group

· ADR, IMDG, IATA II

· Environmental hazards:

· Marine pollutant: No

· Special precautions for user Warning: Flammable liquids.

· Danger code (Kemler): 33

· EMS Number: F-E,S-E

· Transport in bulk according to Annex II of
 MARPOL73/78 and the IBC Code Not applicable.

· Transport/Additional information:

· ADR

· Tunnel restriction code D/E

15 Regulatory information

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

· National regulations:

· Technical instructions (air):

Class	Share in %
NK	81.3

· Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

R10 Flammable.

R11 Highly flammable.

R67 Vapours may cause drowsiness and dizziness.

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