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

- · Product identifier
- · Trade name: Montana Black Ink blue
- · Article number:
- Registration number
- ingredients of this ink have been pre-registered according to 1907/2006/EC (REACH)
- The ingredients of this link have been pre-legistered according to lower the 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)911/937719-44 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



F; Highly flammable

R11: 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.

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.

· Safety phrases:

Keep out of the reach of children.
Keep container tightly closed and in a well-ventilated place.

29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.
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.

according to 1907/2006/EC, Article 31

Trade name: Montana Black Ink blue

(Contd. of page 1) · Dangerous components: 50-100% CAS: 64-17-5 ethanol EINECS: 200-578-6 F R11 Flam. Liq. 2, H225 1-Methoxy-2-propanol CAS: 107-98-2 10-25% ETNECS: 203-539-1 R10-67 CAS: 68411-04-1 2,5-10% EINECS: 270-096-9 R52/53 Aquatic Chronic 3, H412 CAS: 12645-31-7 Phosphoric acid mono-bis-(2-ethylhexyl)-ester 2.5-10% C R34 EINECS: 235-741-0 Skin Corr. 1C, H314 CAS: 6786-83-0 I. Solvent Blue 4 < 2,5% Xn R20/22 EINECS: 229-851-8 Acute Tox. 4, H302; Acute Tox. 4, H332 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: Immediately rinse with water.

 After eye contact: Rinse opened eye for several minutes under running water. Then 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 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). Ensure adequate ventilation.
- Do not flush with water or aqueous cleansing agents
- 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.
- Not applicable
- Information about fire and explosion protection: Keep ignition sources away Do not smoke. Protect against electrostatic charges.

(Contd. on page 3)

EII

according to 1907/2006/EC, Article 31

Trade name: Montana Black Ink blue

(Contd. of page 2)

- 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.
- 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:

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

- 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

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 trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

- Information on basic physical and chemical properties
- General Information
- Appearance: Form:

Colour: Odour:

Fluid According to product specification Product specific

· Odour threshold:

Not determined.

Important information on protection of health and environment, and on safety.

· pH-value at 20°C:

6,3

Change in condition

Melting point/Melting range: Undetermined. Boiling point/Boiling range: 78°C

· Flash point:

13°C

(Contd. on page

according to 1907/2006/EC, Article 31

Trade name: Montana Black Ink blue

	(Contd. of page 1
· 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:	83,7 %
Solids content: Other information	16,3 % 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.
- Hazardous decomposition products: No dangerous decomposition products known.

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 2 (German Regulation) (Self-assessment): hazardous for water Do not allow product to reach ground water, water course or sewage system. Danger to drinking water if even small quantities leak into the ground.

Results of PBT and vPvB assessment

- PBT: Not applicable. **vPvB:** Not applicable.
- Other adverse effects No further relevant information available.

(Contd. on page 5)

according to 1907/2006/EC, Article 31

Trade name: Montana Black Ink blue

(Contd. of page 4)

13 Disposal considerations

- Waste treatment methods
- Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

European waste catalogue

08	00	00	WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS,	
			VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS	
08	08 01 00 wastes from MFSU and removal of paint and varnish			
00 (77	11*	wagte paint and warnigh containing excapic columnts or other dangerous substances	

- Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.

14 Transport information

Land transport ADR/RID (cross-border)



ADR/RID class: 3 (F1) Flammable liquids.

Danger code (Kemler): 33 UN-Number: 1263 Packaging group: IIHazard label 3

UN proper shipping name: 1263 PAINT

Limited quantities (LQ) 5L Tunnel restriction code D/E

Maritime transport IMDG:



IMDG Class: 1263 UN Number: Label Packaging group: TTEMS Number: F-E , S-EMarine pollutant: Proper shipping name: PAINT

Air transport ICAO-TI and IATA-DGR:



ICAO/IATA Class: UN/ID Number: 1263 Label 3 Packaging group: TTPAINT Proper shipping name:

- Special precautions for user Warning: Flammable liquids.

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

15 Regulatory information

- \cdot Safety, health and environmental regulations/legislation specific for the substance or mixture
- · National regulations:
- · Technical instructions (air):

Class	Share in %
NK	50-100

· Waterhazard class: Water hazard class 2 (Self-assessment): hazardous for water.

(Contd. on page 6) EU

Trade name: Montana Black Ink blue

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

(Contd. of page 5)

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

- Highly flammable liquid and vapour. Flammable liquid and vapour. Harmful if swallowed. H225
- H226
- H302
- H314 Causes severe skin burns and eye damage.
- H332
- Harmful if inhaled.
 May cause drowsiness or dizziness. H336
- H412 Harmful to aquatic life with long lasting effects.
- R10 Flammable.
- R11 Highly flammable. R20/22 Harmful by inhalation and if swallowed.
- R34 Causes burns.
 R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 R67 Vapours may cause drowsiness and dizziness.

EU