

Safety Data Sheet
acc. to OSHA HCS

Printing date 02/09/2018

Reviewed on 02/09/2018

1 Identification

- **Product identifier**
- **Trade name:** Montana Bold Marker
- **Article number:** 468339, 468322, 468315, 468308, 468346
- **Application of the substance / the mixture** Paint
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
MONTANA CANS
Häusserstr. 36
D-69115 Heidelberg
Tel. +49-6221-36333-30
Fax +49-6221-36333-33
info@montana-cans.de
www.montana-cans.com
- **Information department:** Abteilung Produktsicherheit
- **Emergency telephone number:**
Tel.: +49 6266-75-310
Fax +49 6266-75-362
(Mo - Th 08:00 am - 04:00 pm, Fr 08:00 am - 00:30 pm)

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapor.



GHS08 Health hazard

Carc. 1A H350 May cause cancer.

- **Label elements**
- **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS02



GHS08

- **Signal word** Danger
- **Hazard-determining components of labeling:**
ethanol
- **Hazard statements**
H225 Highly flammable liquid and vapor.
H350 May cause cancer.
- **Precautionary statements**
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P280 Wear protective gloves / eye protection.
P302+P352 If on skin: Wash with plenty of soap and water.

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P403 Store in a well-ventilated place.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 2
Fire = 3
Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**



Health = 2
Fire = 3
Reactivity = 0

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

3 Composition/information on ingredients

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

· **Dangerous components:**

CAS: 64-17-5 EINECS: 200-578-6 Index number: 603-002-00-5	ethanol ⚠ Flam. Liq. 2, H225 ⚠ Carc. 1A, H350	50-<75%
CAS: 107-98-2 EINECS: 203-539-1 Index number: 603-064-00-3	1-methoxy-2-propanol ⚠ Flam. Liq. 3, H226 ⚠ STOT SE 3, H336	5-<10%
	Methin-Farbstoff-Zubereitung ⚠ Skin Irrit. 2, H315; Eye Irrit. 2A, H319	<2.5%

4 First-aid measures

- **Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** Drink copious amounts of water and provide fresh air. Immediately call a 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 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO2, extinguishing 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 -**

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· **Protective equipment:** No special measures required.

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6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** 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).
Dispose contaminated material as waste according to item 13.
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.
- **Protective Action Criteria for Chemicals**

· **PAC-1:**

64-17-5	ethanol	1,800 ppm
107-98-2	1-methoxy-2-propanol	100 ppm

· **PAC-2:**

64-17-5	ethanol	3300* ppm
107-98-2	1-methoxy-2-propanol	160 ppm

· **PAC-3:**

64-17-5	ethanol	15000* ppm
107-98-2	1-methoxy-2-propanol	660 ppm

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:**
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 receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
- **Storage class:** 3
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

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

· **Control parameters**

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

64-17-5 ethanol	
PEL	Long-term value: 1900 mg/m ³ , 1000 ppm
REL	Long-term value: 1900 mg/m ³ , 1000 ppm

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TLV	Short-term value: 1880 mg/m ³ , 1000 ppm
107-98-2 1-methoxy-2-propanol	
REL	Short-term value: 540 mg/m ³ , 150 ppm Long-term value: 360 mg/m ³ , 100 ppm
TLV	Short-term value: 369 mg/m ³ , 100 ppm Long-term value: 184 mg/m ³ , 50 ppm

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
Store protective clothing separately.
- **Breathing equipment:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- **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 through 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:** Liquid
 - **Color:** According to product specification
 - **Odor:** Characteristic
 - **Odor threshold:** Not determined.
- **pH-value:** Not determined.
- **Change in condition**
 - **Melting point/Melting range:** Undetermined.

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Boiling point/Boiling range:	78 °C (172.4 °F)
· Flash point:	13 °C (55.4 °F)
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	270 °C (518 °F)
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· Explosion limits:	
Lower:	3.5 Vol %
Upper:	15 Vol %
· Vapor pressure at 20 °C (68 °F):	59 hPa (44.3 mm Hg)
· Density:	Not determined.
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	83.0 %
VOC content:	830.0 g/l / 6.93 lb/gl
· Solids content:	17.0 %
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **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:**

· **LD/LC50 values that are relevant for classification:**

64-17-5 ethanol

Oral	LD50	10,470 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)
Inhalative	LC50 / 4h	120 mg/l (rat)

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- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:

· **Carcinogenic categories**

· IARC (International Agency for Research on Cancer)	
64-17-5	ethanol
	1

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

· **Toxicity**

· Aquatic toxicity:	
64-17-5 ethanol	
LC50/96h	13,000 mg/l (oncorhynchus mykiss / Regenbogenforelle)
EC50 / 48 h	12,900 mg/l (algae)
LC50 / 48 h	12,340 mg/l (daphnia magna)

- **Persistence and degradability** No further relevant information available.
- **Behavior 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 (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 of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Non contaminated packagings can be used for recycling.

14 Transport information

· UN-Number	UN1263
· DOT, IMDG, IATA	

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- UN proper shipping name
- DOT
- IMDG, IATA

Paint
PAINT

- Transport hazard class(es)
- DOT



- Class
 - Label
- 3 Flammable liquids
3

- IMDG, IATA



- Class
 - Label
- 3 Flammable liquids
3

- Packing group
- DOT, IMDG, IATA

II

- Environmental hazards:
- Not applicable.

- Special precautions for user
 - Danger code (Kemler):
 - EMS Number:
 - Stowage Category
- Warning: Flammable liquids
33
F-E, S-E
B

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

- Transport/Additional information:

- DOT
 - Quantity limitations
- On passenger aircraft/rail: 5 L
On cargo aircraft only: 60 L

- IMDG

- Limited quantities (LQ)
 - Excepted quantities (EQ)
- 1L
Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml

- UN "Model Regulation":
- UN 1263 PAINT, SPECIAL PROVISION 640C, 3, II

15 Regulatory information

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

- Section 355 (extremely hazardous substances):

None of the ingredients is listed.

- Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

- TSCA (Toxic Substances Control Act):

64-17-5 ethanol

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107-98-2	1-methoxy-2-propanol	
· TSCA new (21st Century Act) (Substances not listed)		
Methin-Farbstoff-Zubereitung		
· Proposition 65		
· Chemicals known to cause cancer:		
None of the ingredients is listed.		
· Chemicals known to cause reproductive toxicity for females:		
None of the ingredients is listed.		
· Chemicals known to cause reproductive toxicity for males:		
None of the ingredients is listed.		
· Chemicals known to cause developmental toxicity:		
64-17-5	ethanol	
· Carcinogenic categories		
· EPA (Environmental Protection Agency)		
None of the ingredients is listed.		
· TLV (Threshold Limit Value established by ACGIH)		
64-17-5	ethanol	A3
· NIOSH-Ca (National Institute for Occupational Safety and Health)		
None of the ingredients is listed.		
· National regulations:		
· Additional classification according to Decree on Hazardous Materials:		
Carcinogenic hazardous material group III (dangerous).		
· Information about limitation of use:		
Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation.		
Exceptions can be made by the authorities in certain cases.		
· 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**
 H225 Highly flammable liquid and vapor.
 H226 Flammable liquid and vapor.
 H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H336 May cause drowsiness or dizziness.
 H350 May cause cancer.
- **Date of preparation / last revision 02/09/2018 / -**
- **Abbreviations and acronyms:**
 ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 DOT: US Department of Transportation
 IATA: International Air Transport Association
 ACGIH: American Conference of Governmental Industrial Hygienists
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 NFPA: National Fire Protection Association (USA)
 HMIS: Hazardous Materials Identification System (USA)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic

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MSDS for #24579 - MONTANA BOLD

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vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Flam. Liq. 2: Flammable liquids – Category 2
Flam. Liq. 3: Flammable liquids – Category 3
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
Carc. 1A: Carcinogenicity – Category 1A
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

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