

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 05/08/2015

Reviewed on 05/08/2015

1 Identification

- **Product identifier**
- **Trade name:** STERNHEIMER E MALBIN - dye for microscopy
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Product description** Reagent for laboratory, dye for microscopy
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Globe Scientific Inc.
610 Winters Avenue
P.O. Box 1625
Paramus, NJ 07653-1625
Tel: (201) 599-1400 x 226
Fax: (201) 599-1406
Web: www.globescientific.com
- **Emergency telephone number:** (201) 599-1400

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS08 Health hazard

STOT RE 2 H373 May cause damage to the central nervous system, the kidneys and the heart through prolonged or repeated exposure.

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



GHS08

- **Signal word** Warning
- **Hazard-determining components of labeling:**
Ethylene glycol
- **Hazard statements**
May cause damage to the central nervous system, the kidneys and the heart through prolonged or repeated exposure.
- **Precautionary statements**
Do not breathe dust/fume/gas/mist/vapors/spray.
Get medical advice/attention if you feel unwell.
Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 0
Fire = 0
Reactivity = 0

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· **HMIS-ratings (scale 0 - 4)**

HEALTH	0	Health = 0
FIRE	0	Fire = 0
REACTIVITY	0	Reactivity = 0

· **Hazard(s) not otherwise classified (HNOC):** None known

3 Composition/information on ingredients

· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous Components:**

CAS: 64-17-5	Ethyl alcohol	5-10%
RTECS: KQ 6300000	⚠ Flam. Liq. 2, H225; ⚠ Skin Irrit. 2, H315; STOT SE 3, H335; Eye Irrit. 2B, H320	
CAS: 107-21-1	Ethylene glycol	2-12%
RTECS: KW 2975000	⚠ STOT RE 2, H373; ⚠ Acute Tox. 4, H302	

4 First-aid measures

· **Description of first aid measures**

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:**
Rinse opened eye for several minutes under running water.
If eye irritation occurs, consult a doctor.
- **After swallowing:** If swallowed and symptoms occur, consult 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.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:**
As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (ie. sand, diatomite, acid binders, universal binders, sawdust).
Dispose of the collected material according to regulations.
- **Reference to other sections**
See Section 7 for information on safe handling.

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See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **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 section 7.
- **Control parameters**

· Components with occupational exposure limits:

64-17-5 Ethyl alcohol

PEL	Long-term value: 1900 mg/m ³ , 1000 ppm
REL	Long-term value: 1900 mg/m ³ , 1000 ppm
TLV	Short-term value: 1880 mg/m ³ , 1000 ppm Upper Respiratory Tract irritation

107-21-1 Ethylene glycol

TLV	Long-term value: NIC-10* mg/m ³ Ceiling limit value: (100) mg/m ³ (H);*as inhalable fraction and vapor
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- **Additional information:** The lists that were valid during the creation of this SDS were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
Wash hands before breaks and at the end of work.
- **Breathing equipment:** Not required.
- **Protection of hands:** Not required.
- **Eye protection:**



Goggles recommended during refilling.

9 Physical and chemical properties

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

Form:	Liquid
Color:	Red-purple

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- **Odor:** Characteristic
- **Odor threshold:** Not determined.
- **pH-value:** Not determined.
- **Change in condition**
 - **Melting point/Melting range:** Not determined.
 - **Boiling point/Boiling range:** 78 °C (172 °F)
- **Flash point:** Not applicable.
- **Flammability (solid, gaseous):** Not applicable.
- **Ignition temperature:** 425 °C (797 °F)
- **Decomposition temperature:** Not determined.
- **Auto igniting:** Product is not self-igniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Explosion limits:**
 - **Lower:** Not determined.
 - **Upper:** Not determined.
- **Vapor pressure:** Not determined.
- **Density:**
 - **Relative density** Not determined.
 - **Vapor density** Not determined.
 - **Evaporation rate** Not determined.
- **Solubility in / Miscibility with Water:** Fully miscible.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
 - **Dynamic:** Not determined.
 - **Kinematic:** Not determined.
- **Solvent content:**
 - **Organic solvents:** 8.0 %
 - **VOC content:** 8.0 %
- **Other information** 80.0 g/l / 0.67 lb/gl
No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability** Stable under normal conditions.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** Heat, flame and ignition sources.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

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11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

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

64-17-5 Ethyl alcohol

Oral	LD50	7060 mg/kg (rat) Remarks: Lungs, Thorax, or Respiration: Other changes. Carcinogenicity - Mouse - Oral Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Liver: Tumors. Blood: Lymphomas including Hodgkin's disease. Central nervous system depression, narcosis, Damage to the heart., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Heart - Irregularities - Based on Human Evidence Central nervous system - Breathing difficulties - Based on Human Evidence Stomach - Irregularities - Based on Human Evidence
Inhalative	LC50/4 h	20000 mg/l (rat)
	LC50/96 hours	12900-15300 mg/l (Trout)

107-21-1 Ethylene glycol

Oral	LD50	5840 mg/kg (rat)
Dermal	LD50	9530 mg/kg (rabbit)
Inhalative	LC50/96 hours	38.109 mg/l (Trout)
	LC50/48 hrs	16.103 mg/l (daphnia)

- **Primary irritant effect:**
- **on the skin:** No irritating effect.
- **on the eye:** No irritating effect.
- **Additional toxicological information:**
- **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

None of the ingredients are listed.

· **NTP (National Toxicology Program)**

None of the ingredients are listed.

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

None of the ingredients are listed.

12 Ecological information

· **Toxicity**

· **Aquatic toxicity:**

64-17-5 Ethyl alcohol

EC50 34900 mg/l (daphnia)

107-21-1 Ethylene glycol

EC50 3.536 mg/l (Green algae)

· **Persistence and degradability** No further relevant information available.

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- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Not known to be hazardous to water.
- **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:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- **UN-Number**
- **DOT, ADR, IMDG, IATA** Non-Regulated Material
- **UN proper shipping name**
- **DOT, ADR, IMDG, IATA** Non-Regulated Material
- **Transport hazard class(es)**
- **DOT, ADR, IMDG, IATA**
- **Class** Non-Regulated Material
- **Packing group**
- **DOT, ADR, IMDG, IATA** Non-Regulated Material
- **Environmental hazards:** Not applicable.
- **Special precautions for user** Not applicable.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.
- **UN "Model Regulation":** -

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 are listed.

· **Section 313 (Specific toxic chemical listings):**

107-21-1 Ethylene glycol

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **California Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients are listed.

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· Chemicals known to cause reproductive toxicity for females:	
None of the ingredients are listed.	

· Chemicals known to cause reproductive toxicity for males:	
None of the ingredients are listed.	

· Chemicals known to cause developmental toxicity:	
64-17-5	Ethyl alcohol

· **Carcinogenic categories**

· EPA (Environmental Protection Agency)	
None of the ingredients are listed.	

· TLV (Threshold Limit Value established by ACGIH)		
64-17-5	Ethyl alcohol	A3
107-21-1	Ethylene glycol	A4

· NIOSH-Ca (National Institute for Occupational Safety and Health)	
None of the ingredients are listed.	

· **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS08

· **Signal word** Warning

· **Hazard-determining components of labeling:**

Ethylene glycol

· **Hazard statements**

May cause damage to the central nervous system, the kidneys and the heart through prolonged or repeated exposure.

· **Precautionary statements**

Do not breathe dust/fume/gas/mist/vapors/spray.

Get medical advice/attention if you feel unwell.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· National regulations:	
The product is subject to be classified according with the latest version of the regulations on hazardous substances.	

· State Right to Know		
CAS: 64-17-5 RTECS: KQ 6300000	Ethyl alcohol ⚠ Flam. Liq. 2, H225; ⚠ Skin Irrit. 2, H315; STOT SE 3, H335; Eye Irrit. 2B, H320	5-10%
CAS: 107-21-1 RTECS: KW 2975000	Ethylene glycol ⚠ STOT RE 2, H373; ⚠ Acute Tox. 4, H302	2-12%
107-21-1	Ethylene glycol	4%

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

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16 Other information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

· **Date of preparation / last revision** 05/08/2015 / -

· **Abbreviations and acronyms:**

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road

ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

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)

HMS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2B: Serious eye damage/eye irritation, Hazard Category 2B

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

· *** Data compared to the previous version altered.**

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