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Düsseldorf, 14.09.99

Sicherheitsdatenblatt nach Richtlinie 88/379 EWG, 91/155 EWG und 93/112 EG

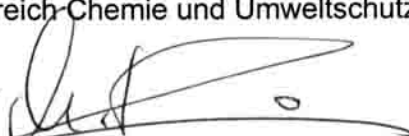
Sehr geehrter Herr Ackermann,

als Anlage erhalten Sie in einfacher Ausfertigung das Sicherheitsdatenblatt in deutsch und englisch für Ethanol-/Glykologemisch, Handelsname HY 3.

Mit freundlichen Grüßen

Bereich Chemie und Umweltschutz

i.A.


Michaela Reimann

BANDIT
Bahnstr. 159

41541 Dormagen

Material Safety Data Sheet 88/379 EEC, 91/155 EEC and 93/112 EC

1. Identification of the substance/preparation and the company/undertaking

1.1 Identification of the substance/preparation

Ethanol-/Glycol Mixed
Trade Name: HY-3

1.2 Identification of the company or undertaking

BANDIT
Bahnstr. 159
41541 Dormagen

Telefon: 02133/244671
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Emergency phone numbers

e.g.
Beratungsstelle für Vergiftungserscheinungen und Embryonaltoxikologie
Pulsstr. 3-7
14059 Berlin
Direct: (030) 19240
Fax: (030) 32680721
E-Mail: berlintox@aol.com

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Revision Date:

2. Composition / Information on ingredients

Ethanol 16,5 % CAS-Nr. 64-17-5

None of the components are listed by IARC, NTP, or OSHA as carcinogens.

Non-hazardous Ingredients 80,5 %

3. Hazards identification

Incompatible with acids, strong oxidizing substances, zinc

4. First aid measures

Skin contact: Remove contaminated clothing. Wash thoroughly with water

Eye contact: Rinse immediately with plenty of water (at least 15 minutes); seek medical advice if irritation persists.

Inhalation: Remove to fresh air; in case of persistent irritation, call a physician.

Ingestion: Drink water, do not induce vomiting or give anything by mouth to an unconsciousness person. Get medical attention if complaints persist.

5. Fire-fighting measures

Suitable extinguishing media: Alcohol resistant foam, dry chemical powder, CO₂, water spray

Protective equipment: Use self contained breathing apparatus, if needed.

6. Accidental release measures

Soak up with inert absorbent.

7. Handling and storage

Handling

Ventilated area well.

Storage

Keep container tightly closed. Store in the original container in a dry, well ventilated location at ambient temperature.

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8. Exposure controls / personal protection

Exposure controls

OSHA	ACGIH	OEL-Japan	TRGS 900
./.	./.	./.	./.

Personal protective equipment

Respiratory protection:	None special
Eye protection:	Glasses with side shields
Hand protection:	None special
Body protection:	The usual precautions for handling chemicals should be observed.

Physical and chemical properties

Appearance:	Clear, colorless liquid
Odour:	Mild menthol odor
Boiling Point:	Ethanol distills at 79 °C
Melting Point:	No data
Flash Point (Method):	33,0 °C (closed cup)
Flammability:	No data
Autoflammability:	No data
Explosive properties:	No data
Oxidizing properties:	None
Vapor Pressure:	10,58 mm Hg (at 20 °C)
Specific Gravity:	0,98 g/cm ³ (H ₂ O = 1)
Solubility in water:	miscible at all concentrations
Vapor density (air = 1)	3,7

10. Stability and reactivity

10.1 Condition to avoid

None

10.2 Materials to avoid

Acids, strong oxidizing substances, zinc

10.3 Hazardous decomposition products

Combustion will produce CO, CO₂ and smoke

11. Toxicological information

Skin and eye contact: Low irritating to eyes and mucous membranes.

Ingestion: LD₅₀: > 5000 mg/kg (rat.)

12. Ecological information

No data.

13. Disposal consideration

Disposal information: Treatment, storage, transportation and disposal should be in accordance with Federal State and local regulations legislation.

Waste-Key: 55315

14. Transportation information

UN-No.: 1987

ADR/RID: Class 3, 31 c, Alcohol n.o.s.

IMDG Code: Class 3.3

IATA: Class 3

15. Regulatory information

Labeling: None

R-Phrase: R 10 Flammable

S-Phrase: S 7 Keep container tightly closed

S 16 Keep away from sources of ignition - no smoking

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16. Other information

Reference

To the best of our knowledge, the information contained herein is accurate. However producer nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

This Material Data Sheet has been written by TÜV Anlagentechnik, Düsseldorf. Data declared by the producer.



Dipl.-Chem. Ing. Andreas Bortz

Düsseldorf, 14.09.1999
211/Bz-R