

MATERIAL SAFETY DATA SHEET

PRODUCT NAME : HEXID FLUID

1. Product and Company Identification

Product name: Hexid Fluid
Synonyms: None
Item Numbers: E460-13-400

European Contact Details

Edwards, Manor Royal, Crawley
West Sussex, RH10 9LW, England

General enquiries

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US Contact Details

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Toll Free: 1-800-848-9800

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Chemtrec: 1-800-424-9300

2. Composition/Information on Ingredients

Ingredient	% Weight	CAS No	Hazard class*	Risk phrase*
Water, propylene glycol, fluorescein, biocide (see below)	100	57-55-6	Not applicable	Not applicable
Biocide: 1-2-Benzisothiazol-3(2H)-one	0.002% active	2634-33-5	Not applicable	Not applicable

*Hazard class & Risk phrase. These columns are only completed for ingredients which are classified as hazardous under EU Directive (67/548/EEC, as amended) and are present in sufficient concentration to make the overall substance hazardous. In all other situations, the column will be completed as "Not applicable".

3. Hazards Identification

EMERGENCY OVERVIEW

The fluid when properly handled according to good working and hygienic practices is not dangerous to human health.
Propionaldehyde formed on decomposition.

For short and long term exposure effects see Section 11 Toxicological data.

Eye Effects: May cause transitory stinging/tearing.

Skin Effects: Mild irritant and defatting agent, especially on prolonged contact.

Ingestion/Oral Effects: Relatively non-toxic. Ingestion of sizable amount (over 100 ml) may cause some gastrointestinal upset and temporary central nervous system depression. Effects appear more severe in individuals with kidney problems.

Inhalation Effects: No adverse health effects through inhalation are expected.

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MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known.

NFPA Hazard codes		HMIS Hazard codes		Rating System
Health	0	Health	0	0 = No Hazard
Flammability	1	Flammability	1	1 = Slight Hazard
Instability	0	Reactivity	0	2 = Moderate Hazard
				3 = Serious Hazard
				4 = Severe Hazard

4. First Aid Measures

- Eyes:** Flush eyes with plenty of water. Seek medical attention if irritation persists.
- Skin:** Remove contaminated clothing and immediately wash off with plenty of water. Seek medical attention if skin irritation arises.
- Ingestion/Oral:** Wash mouth out with water. Seek medical attention if fluid has been ingested.
- Inhalation:** Remove to fresh air. If breathing problems occur: a qualified individual should administer oxygen or artificial respiration as indicated; seek medical attention.
- Other Information:** In case of ingestion, monitor for acidosis and central nervous system changes. Exposed persons with previous kidney dysfunction may require special treatment.

5. Fire Fighting Measures

- Extinguishing Media:** Any.
- Fire and Explosion Hazard:** Containers may explode in heat or fire. Irritating and toxic gases may be formed by thermal decomposition.
- Special Protective Equipment for Fire Fighters:** In the event of a fire, wear full protective clothing and NIOSH-approved (or equivalent) self-contained breathing apparatus with full face-piece, operated in pressure-demand or positive pressure mode.

For Flammability Properties - see Section 9

6. Accidental Release Measures

- Avoid contact with skin and eyes and wear appropriate personal protective equipment (see Section 8). Wipe small spills from surfaces with a clean cloth, or absorb with a suitable inert absorbent material, or flush with plenty of water into foul drain or sewer.
- For large spills, pump the fluid into a suitable tank/container, then clean the area of the spill with plenty of water. Dispose of the fluid as described in Section 13.

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7. Handling and Storage

Handling: Use in a well-ventilated place. Avoid contact with skin and eyes. Wear suitable personal protective equipment when handling.

Storage: Store in its original container in a dry, cool, well-ventilated area, at a temperature above -21 °C/-6 °F.

8. Exposure Controls/Personal Protection

Exposure Limits:

Ingredient	ACGIH - TLV -	OSHA - PEL	Occupational Exposure Limits EH40 (UK)
-	Not applicable	Not applicable	Not applicable

Airborne Exposure Limit - AIHA Workplace Environmental Exposure Level (WEEL) for propylene glycol:
Vapour and Aerosol : 50 ppm
Aerosol only : 10 mg/m³

OES (United Kingdom) TWA total (vapour and particulates) for propylene glycol: 150 ppm, 474 mg/m³

Personal Protection:

Engineering Measures: No special ventilation is required

Respiratory Protection: No special protection is required.

Hand/Skin Protection: Wear suitable impervious gloves. Wear suitable protective clothing where there is the possibility of splashing.

Eye/Face Protection: Wear face shield/goggles/safety glasses.

Hygiene Measures: Practice good workplace hygiene. Do not eat or smoke when handling. Wash hands after handling and before eating.

Other/General Protection: None.

9. Physical and Chemical Properties

Appearance and Odour	Fluorescent green clear liquid, practically odourless	Boiling point	102 / 216	°C/°F
pH (as supplied)	Approximately 7	Freezing Point	-21 / -6	°C/°F
Solubility in Water	Miscible	Auto Ignition	420 / 788	°C/°F
Volatile Content by Volume	No data available	Flash Point	Not applicable	°C/°F
Specific Gravity	1.02 (at 25 °C)			
Vapour Pressure (mbar)	No data available	Vapour Pressure (Torr)	No data available	

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10. Stability and Reactivity

Stability:	Stable in normal conditions.
Material/Conditions to Avoid:	The fluid can react violently if it comes into contact with oxidising agents.
Hazardous Decomposition:	Carbon dioxide, carbon monoxide, aldehydes (propionaldehyde), and lactic, pyruvic or acetic acids can be formed if the material is heated to decomposition.
Hazardous Polymerisation:	Will not occur.

11. Toxicological Information

For a comprehensive description for the various toxicological (health) effects which may arise if the user comes into contact with the substance or preparation refer to Section 3 Hazards Identification.

Animal data:

Note: The following information relates to propylene glycol.

LD50 value: Skin: 20.8 g/kg (Rabbit); Oral: 20 g/kg (Rat)

LC50 value: No data available.

Eyes: 500 mg/24 hr - mild (Rabbit/Draize)

Carcinogenicity:

No data available.

12. Ecological Information

Biodegradability: 81.9/20 days

Aquatic toxicity: CAS 2634-33-5 is very toxic to aquatic organisms (Fish LC50, 4 days exposure 1.0-3.3 ppm, Crustaceans (Daphnia magna) EC50 immobilisation, 2 days exposure, 0.85 ppm). Source: SNF.

COD: Not known.

13. Disposal Considerations

Dispose of in accordance with all local, national, provincial and state regulations.

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14. Transport Information

This product is not classified as dangerous under transport regulations.

PARAMETER	EUROPEAN	CANADIAN TDG	UNITED STATES DOT
Proper Shipping Name	Not applicable	Not applicable	Not applicable
Hazard Class	Not applicable	Not applicable	Not applicable
Identification Number	Not applicable	Not applicable	Not applicable
Shipping Label	Not applicable	Not applicable	Not applicable

15. Regulatory Information

European Regulatory Information

This product has been classified in accordance with the Dangerous Substances Directive (67/548/EEC, as amended) and the Preparations Directive (88/379/EEC, as amended), implemented in the UK as the Chemical (Hazard Information and Packing) Regulations 1994 (CHIP, as amended).

Classified as dangerous to supply : No

Risk Phrases : None

Safety Phrases : S24/25 - Avoid contact with skin and eyes

Symbols : None.

EINECS Number : 200-338-0

United States Regulatory Information

All materials contained in this product are listed on the U.S. Toxic Substances Control Act (TSCA).

SARA TITLE III - SECTION 313 SUPPLIER NOTIFICATION:

This product does not contain toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986 and 40 CFR Part 372.

California Proposition 65: This product does not contain chemicals known to the State of California to cause cancer or reproductive toxicity.

OSHA Regulatory Status: This material is not classified as hazardous under OSHA regulations.

Canadian Regulatory Information

WHMIS Classification: Not Applicable

All ingredients in this product are included in the Canadian DSL.

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16. Other Information

This MSDS is compiled in accordance with ANSI Z400.1 and the EU Safety Data Sheet Directive 91/155/EEC.

Sources of information for this data sheet:

- Applied Thermal Control Ltd. "HEXID FLUID A4" Material Safety Data Sheet. Issue 5, Dec 2004.

Glossary:

ACGIH - American Conference of Governmental Industrial Hygienists; **AIHA** - American Industrial Hygiene Association; **ANSI** - American National Standards Institute; **Canadian TDG** - Canadian Transportation of Dangerous Goods; **CAS** - Chemical Abstracts Service; **Chemtrec** - Chemical Transportation Emergency Center (US); **CHIP** - Chemical (Hazard Information and Packing); **COD** - Chemical Oxygen Demand; **DSL** - Domestic Substances List; **EC** - Effective Concentration; **EH40 (UK)** - HSE Guidance Note EH40 Occupational exposure limits; **EINECS** - European Inventory of Existing Commercial Chemical Substances; **EPCRA** - Emergency Planning and Community Right-to-Know Act; **HMIS** - Hazardous Material Information Service; **LC** - Lethal Concentration; **LD** - Lethal Dose; **NFPA** - National Fire Protection Association; **OES** - Occupational Exposure Standard; **OSHA** - Occupational Safety and Health Administration, US department of Labour; **PEL** - Permissible exposure limit; **SARA (Title III)** - Superfund Amendments and Reauthorization Act; **SARA 313** - Superfund Amendments and Reauthorization Act, Section 313; **TLV** - threshold limit value; **TSCA** - Toxic Substances Control Act Public Law 94-469; **US DOT** - US Department of Transportation; **WHMIS** - Workplace Hazardous Materials Information System.

Revisions:

Nov 2007 - Data Sheet updated to reflect the latest supplier safety information.

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