

## SAFETY DATA SHEET

### HOT STUFF Ethanol Gel Chafing Fuel

Issued: 13/10/2011  
Revision No. 0

#### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

**Product name:** ETHANOL GEL CHAFING FUEL  
**Synonyms, trade names:** HOT STUFF Ethanol Gel Chafing Fuel  
**Company name:** Flomatic t/a Renovate Ltd  
 143–149 Bath Road  
 Kettering  
 Northants  
 NN16 8NE  
 Tel: 01536 481 977  
 Fax: 01536 411 210  
 Email: [contactus@flomatic.co.uk](mailto:contactus@flomatic.co.uk)  
 Web: [www.flomatic.co.uk](http://www.flomatic.co.uk)

#### 2. HAZARD IDENTIFICATION

**Main hazard:** Highly flammable.  
**Classification:** F, R11  
**Environment:** The product is not expected to be hazardous to the environment.  
**Physical and chemical hazard:** The product is highly flammable and explosive vapours/air mixtures may be formed even at normal room temperatures.  
**Human health:** In high concentrations, vapours and spray mist are narcotic and may cause headache, fatigue, dizziness and nausea. May irritate eyes and skin. In high concentrations, vapours may be irritating to the respiratory system.

#### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Name	EC No.	CAS No.	Conc. (%w/w)	Classification
ETHANOL	200-578-6	64-17-5	75-85	F, R11
TRIETHYLAMINE	204-469-4	121-44-8	<1%	F,R11 C;R35 Xn; R20/21/22

The Data shown is in accordance with the latest EC Directives.

#### 4. FIRST AID MEASURES (ACTION)

**General information:** General first aid, rest, warmth and fresh air. Do not give victim anything to drink if they are unconscious. Get medical attention if any discomfort continues.

**Skin contact:** Immediately remove contaminated clothing. Wash off promptly and flush contaminated skin with water. Promptly remove clothing if soaked through and flush with water. Get medical attention if irritation persists after washing.

**Eye contact:** Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Get medical attention promptly if symptoms occur after washing.

**Ingestion:** Immediately rinse mouth and drink plenty of water. Keep person under observation. If person becomes uncomfortable seek medical advice. Never give liquid to an unconscious person.

**Inhalation:** Move the exposed person to fresh air at once. Place unconscious person on the side in the recovery position and ensure breathing. If respiratory problems, artificial respiration/oxygen. Get medical attention if any discomfort continues.

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#### 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media:** Use: Alcohol resistant foam, Carbon dioxide (CO<sub>2</sub>), Dry chemicals, sand, dolomite etc. Do not use water if avoidable.
- Special fire fighting procedures:** Avoid breathing fire vapours. Be aware of risk of fire re-starting and risk of explosion. Containers close to fire should be removed or cooled with water. Cool containers exposed to flames with water until well after the fire is out. Dike and collect extinguishing water.
- Unusual fire & explosion hazard:** Fire causes formation of toxic gases.
- Specific hazard:** The product is highly flammable and explosive vapours/air mixtures may formed even at normal room temperatures. Fire creates: Carbon monoxide (CO), Hydrogen cyanide (HCN), Nitrous gases (NO<sub>x</sub>).
- Protective measures in fire:** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

#### 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions:** Wear protective clothing as described in Section 8 of this safety data sheet. Do not smoke, use open fire or other sources of ignition. Do not breathe vapour. Provide adequate ventilation. In case of spills, beware of slippery floors and surfaces.
- Environmental precautions:** Ensure that waste and contaminated materials are collected and removed from the work area as soon as possible in a suitably labelled container. Do not discharge into rains, water courses or onto the ground. Avoid release to the environment.
- Methods for cleaning up:** Keep combustible away from spilled material. Shovel into fry containers. Cover and move the containers. Flush the area with water. Wash thoroughly after dealing with a spillage. For waste disposal, see section 13.

#### 7. HANDLING AND STORAGE

- Usage precautions:** Keep away from heat, sparks and open flame. Static electricity and formation of sparks must be prevented. Eye wash facilities and emergency shower must be available when handling this product. Avoid inhalation of vapours. Avoid contact with skin and eyes. Do not use contact lenses. During application and drying, solvent vapours will be emitted. Provide good ventilation. Use explosion proof electric equipment.
- Storage precautions:** Store in tightly closed container in a dry and cool place (4 - 49°C). Store away from: Oxidising materials, Acids. Keep away from food, drink and animal feeding stuffs.

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#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Name	Std	TWA-8 hrs		STEL – 15 min		Notes
ETHANOL		1000 ppm	1920 mg/m <sup>3</sup>			
TRIETHYLAMINE	WELL	2 ppm(Sk)	8 mg/m <sup>3</sup> (Sk)	4 ppm(Sk)	17 mg/m <sup>3</sup> (Sk)	

**Ingredient comments:** WELL = Working Exposure Limit.

**Protective equipment:**



**Process conditions:** Provide eyewash station.

**Engineering measures:** Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

**Respiratory protection:** In case of inadequate ventilation and work of brief duration, use suitable respiratory equipment. Wear air supplied respiratory protection. Suitable respiratory protection must be used at high concentrations. Self-contained breathing apparatus with full face-piece.

**Hand protection:** Protective gloves and goggles must be used if there is a risk of direct contact or splash.

**Eye protection:** Contact lenses should not be worn when working with this chemical! Wear approved safety goggles.

**Other protection:** Use engineering controls to reduce air contamination to permissible exposure level. Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact. Provide eyewash station and safety shower.

**Hygiene measures:** Wash promptly if skin becomes contaminated. Promptly remove non-impervious clothing that becomes contaminated. Isolate contaminated clothing and wash before reuse. When using do not eat, drink or smoke.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Gel
<b>Colour:</b>	Colourless
<b>Solubility:</b>	Completely soluble in water.
<b>Boiling point (°C):</b>	79 °C
<b>Vapour pressure:</b>	44 mm Hg 20°C
<b>Viscosity:</b>	3570 P 25°C
<b>Auto ignition temperature:</b>	451 °C
<b>pH-value:</b>	7.5 – 8.5
<b>Flash point:</b>	16 °C CC (Closed cup.)
<b>Bulk density:</b>	0.84 g/cm <sup>3</sup> 25°C
<b>Flammability limit- upper (%)</b>	19%
<b>Flammability limit – lower (%)</b>	3.3 %

#### 10. STABILITY AND REACTIVITY

**Stability:** No particular stability concerns.

**Conditions to avoid:** Avoid heat, flames and other sources of ignition. Avoid contact with acids and oxidising substances.

**Hazardous decomposition products:** Fire creates: Carbon monoxide (CO), Hydrogen cyanide (HCN), Nitrous gases (NO<sub>x</sub>).

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#### 11. TOXICOLOGICAL INFORMATION

<b>Inhalation:</b>	In high concentrations, vapours may irritate throat and respiratory system and cause coughing.
<b>Ingestion:</b>	Gastrointestinal symptoms, including upset stomach.
<b>Skin contact:</b>	Repeated exposure may cause skin dryness and cracking. Irritating to skin.
<b>Eye contact:</b>	Irritating and may cause redness and pain.
<b>Other health effects:</b>	This substance has no evidence of carcinogenic properties. IARS not listed. OSHA not regulated.
<b>Name</b>	ETHANOL
<b>Toxic dose 1 – LD 50</b>	6200 mg/kg (oral rat)
<b>Toxic conc. – LC 50</b>	124.7 mg/l 4h (inh. –rat)
<b>Name</b>	TRIETHYLAMINE
<b>Toxic dose 1 – LD 50</b>	730 mg/kg (oral rat)
<b>Toxic conc. – LC 50</b>	3496 ppm/1h (inh-rat)

#### 12. ECOLOGICAL INFORMATION

<b>Ecotoxicity:</b>	The product is not expected to be hazardous to the environment.
<b>Mobility:</b>	The product is miscible with water. May spread in water systems.
<b>Degradability:</b>	The product is biodegradable.
<b>Name:</b>	ETHANOL
<b>LC 50, 96 Hrs, Fish</b>	11000 mg/l Alburnus alburnus
<b>EC 50, 48 Hrs, Daphnia</b>	3715 – 6772 mg/l
<b>IC 50, 72 Hrs, Algae</b>	9310 mg/l Chlorella pyrenoidosa
<b>Name</b>	TRIETHYLAMINE
<b>LC 50, 96 Hrs, Fish</b>	330 mg/l
<b>EC 50, 48 Hrs, Daphnia</b>	200 mg/l

#### 13. DISPOSAL CONSIDERATIONS

<b>General information:</b>	Waste to be treated as controlled waste. Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority.
<b>Disposal methods:</b>	Absorb in vermiculite or dry sand and dispose of at a licenced hazardous waste collection point. Make sure containers are empty before discarding (explosion risk). Environmental manager must be informed of all major spillages. Do not allow runoff to sewer, waterway or ground.

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### 14. TRANSPORT INFORMATION



<b>UK Road Class:</b>	4.1	<b>UK Road Pack Group:</b>	III.
<b>Proper Shipping Name:</b>	Flammable solid, Organic, N.O.S.	<b>ADR Class:</b>	Class 4.1: Flammable solids, self-reactive substances and solid desensitized explosives
<b>UN No. Road:</b>	1325	<b>Tunnel Restriction Code:</b>	(E)
<b>ADR Class No.</b>	4.1	<b>ADR Label No.</b>	4.1
<b>ADR Pack Group:</b>	III.	<b>CEPIC TEC(R) No.</b>	41GF1-II+III
<b>Hazard No. (ADR)</b>	40	<b>RID Pack Group:</b>	III.
<b>HAZCHEM Code:</b>	1Z	<b>IMDG Class</b>	4.1
<b>RID Class No.</b>	4.1	<b>EMS</b>	F-A, S-G
<b>UN No. Sea</b>	1325	<b>Air Class:</b>	4.1
<b>IMDG Pack Group:</b>	III.		
<b>UN No. Air:</b>	1325		
<b>Air Pack Group:</b>	III.		

### 15. REGULATORY INFORMATION

**Labelling:**



Highly Flammable

**Risk phrases:** R11: Highly Flammable

**Safety phrases:** S2: Keep out of the reach of children.

S7: Keep container tightly closed.

S16: Keep away from sources of ignition – No smoking.

S46: If swallowed, seek medical advice immediately and show this container or label.

**National regulations:** The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002. No. 1689. Workplace Exposure Limits 2005 (EH40).

### 16. OTHER INFORMATION

**Information sources:** This SDS is prepared based on the information received from the product owner.

**Risk phrases in full:** R35: Causes severe burns.  
R20/21/22: Harmful by inhalation, in contact with skin and if swallowed.  
R11: Highly flammable.  
R37: Irritating to respiratory system.

**Legal disclaimer:** This information relates only to the specific material designated and may not be valid for such a material used in combination with any other material or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for this own particular use.