

SAFETY DATA SHEET

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AGS GRAFFI GHOST LIQUID

Revision 2
Revision date 8-Oct-2008

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY

Product name AGS GRAFFI GHOST LIQUID
Company tensid uk ltd
Aquila House
70A Wheatash Road
Addlestone
Surrey
KT15 2ES
Telephone 01932 564133

2. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous ingredients

	Conc.	CAS	EINECS	Symbols/Risk phrases
Dipropylene glycol monoethyl ether (2-methoxymethylethoxy) propanol)	20-30%	34590-94-8	252-104-2	
2-Aminoethanol	1-10%	141-43-5	205-483-3	Xn; R20/21/22 C; R34
Potassium hydroxide	10-20%	1310-58-3	215-181-3	Xn; R22 C; R35
Mono ethylene glycol (Ethane-1,2-diol vapour)	1-10%	107-21-1	203-473-3	Xn; R22

3. HAZARDS IDENTIFICATION

Main hazards Harmful if swallowed. Causes severe burns.

4. FIRST AID MEASURES

Skin contact Causes burns.
Wash off immediately with plenty of soap and water. Remove contaminated clothing.
Seek medical attention if irritation or symptoms persist.

Eye contact Causes burns. Causes severe inflammation and may damage the cornea.
Rinse immediately with plenty of water for 15 minutes holding the eyelids open. Contact lenses should be removed. Seek medical attention.

Inhalation Inhalation of vapour may cause shortness of breath.
Move the exposed person to fresh air. Keep the affected person warm and at rest. Seek medical attention.

Ingestion Ingestion causes burns to the respiratory tract.
DO NOT INDUCE VOMITING. If swallowed, seek medical advice immediately and show this container or label. Rinse mouth thoroughly. Drink 1 to 2 glasses of water.
Never give anything by mouth to an unconscious person.

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5. FIRE FIGHTING MEASURES

Extinguishing media	Use extinguishing media appropriate to the surrounding fire conditions. Cool fire exposed containers with waterspray. Do not allow runoff water to enter sewers or drains.
Fire hazards	Corrosive. Burning produces irritating, toxic and obnoxious fumes. Carbon oxides. Nitrogen oxides.
Protective equipment	In case of fire and/or explosion do not breathe fumes. Wear suitable respiratory equipment when necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Ensure adequate ventilation of the working area. Evacuate personnel to a safe area. Wear suitable protective equipment.
Environmental precautions	Do not allow product to enter drains. Prevent further spillage if safe.
Clean up methods	Absorb with inert, absorbent material. Transfer to suitable, labelled containers for disposal. Clean spillage area thoroughly with plenty of water.

7. HANDLING AND STORAGE

Handling	Avoid contact with eyes and skin. Ensure adequate ventilation of the working area.
Storage	Keep in a cool, dry, well ventilated area. Keep containers tightly closed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits

Dipropylene glycol monoethyl ether (2-methoxymethylethoxy) propanol)	WEL 8-hr limit ppm: 50 WEL 15 min limit ppm: -	WEL 8-hr limit mg/m3: 308 WEL 15 min limit mg/m3: -
2-Aminoethanol	WEL 8-hr limit ppm: 1 WEL 15 min limit ppm: 3	WEL 8-hr limit mg/m3: 2.5 WEL 15 min limit mg/m3: 7.6
Potassium hydroxide	WEL 8-hr limit ppm: - WEL 15 min limit ppm: -	WEL 8-hr limit mg/m3: - WEL 15 min limit mg/m3: 2
Mono ethylene glycol (Ethane-1,2-diol vapour)	WEL 8-hr limit ppm: 20 WEL 15 min limit ppm: 40	WEL 8-hr limit mg/m3: 52 WEL 15 min limit mg/m3: 104
Mono ethylene glycol (Ethane-1,2-diol particulate)	WEL 8-hr limit ppm: - WEL 15 min limit ppm: -	WEL 8-hr limit mg/m3: 10 WEL 15 min limit mg/m3: -

Engineering measures	Ensure adequate ventilation of the working area.
Respiratory protection	Local exhaust and general ventilation must be adequate to meet exposure standards. Wear suitable respiratory equipment when necessary.
Hand protection	Chemical resistant gloves (PVC) Neoprene gloves.
Eye protection	Face shield. Approved safety goggles. Provide eye wash station.
Protective equipment	Wear chemical protective clothing.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Description	Viscous liquid.
Colour	Yellow.
Odour	Characteristic.
pH	>13
Relative density	1.105 - 1.125 g/ml
Water solubility	soluble in water.

10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions.
Materials to avoid	Acids. Alkali metals. Finely powdered metals.
Hazardous decomposition products	Burning produces irritating, toxic and obnoxious fumes. Carbon oxides. Nitrogen oxides. Under some circumstances, may corrode certain metals, including aluminium and zinc and generate hydrogen gas.

11. TOXICOLOGICAL INFORMATION

Toxicological information

Dipropylene glycol monoethyl ether	Oral Rat LD50 = 5000mg/kg
2-Aminoethanol	Oral Rat LD50 = > 2000 mg/kg
Potassium hydroxide	Oral Rat LD50 = 365 mg/kg
Mono ethylene glycol	Oral Mouse LD50 = 4700 mg/kg

Acute toxicity Harmful if swallowed.

Corrosivity Causes severe burns.

12. ECOLOGICAL INFORMATION

Ecotoxicity May cause adverse effects to the environment due to high pH.

2-Aminoethanol	Daphnia LC50/48h = 10 - 100 mg/l Fish LC50/96h = 100 mg/l
Potassium hydroxide	Rainbow trout LC50/96h = 39 - 56 mg/l
Mono ethylene glycol	Algae EC50/72h = 10000 mg/l Daphnia LC50/48h = 46300 mg/l Fish LC50/24h = > 5000 mg/l

Degradability Readily biodegradable.

13. DISPOSAL CONSIDERATIONS

General information Dispose of in compliance with all local and national regulations.

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14. TRANSPORT INFORMATION

ADR/RID

UN 1760
Class 8
Packing group II
Hazard ID 80
Proper Shipping CORROSIVE LIQUID, N.O.S,
Name (Potassium hydroxide,
2-Aminoethanol).

IMDG

UN 1760
Class 8
Packing group II
Marine pollutant NO
EmS Code F-A S-B

IATA

UN 1760
Class 8
Packing group II
Subsidiary risk -
Packing Instruction 812
(Cargo) Maximum quantity 30 L
Packing Instruction 808
(Passenger) Maximum quantity 1 L

15. REGULATORY INFORMATION

Labelling The product is classified in accordance with 67/548/EEC.

Symbols C - Corrosive



Risk phrases R22 - Harmful if swallowed.
R35 - Causes severe burns.

Safety phrases S1/2 - Keep locked up and out of the reach of children.
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S28 - After contact with skin, wash immediately with plenty of soap and water.
S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

16. OTHER INFORMATION

Text of risk phrases in R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed.

Section 2 R22 - Harmful if swallowed.
R34 - Causes burns.
R35 - Causes severe burns.

Further information The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process.

Revision This document differs from the previous version in the following areas:
8 - respiratory protection.
8 - eye protection.