

**Section 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product Identifier**

AG Refractometer Calibration Fluid

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

Uses: Refractometer calibration

**1.3 Details of the supplier of the safety data sheet**

Supplier: Bellingham + Stanley Ltd., Longfield Road, Tunbridge Wells, KENT. TN2 3EY. UK

Telephone: +44 (0) 1892 500400 Fax: +44 (0) 1892 543115 Email: lab.bs.uk@xyleminc.com

**1.4 Emergency telephone number** For Hazardous Material Chemical Emergencies (Spill, Leak, Fire, Exposure, or Accident)

Call CHEMTREC Day or Night: Within USA and Canada 1-800-424-9300 Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

**Section 2: Hazards identification****2.1 Classification of substance or mixture**

Not hazardous according to Regulation (EC) No. 1272/2008

Not classified as dangerous according to Directive 67/548/EEC

**2.2 Label elements** None needed**2.3 Other Hazards** None**Section 3: Composition/Information on ingredients****3.2 Mixtures**

Aqueous Glycol &lt; 65%

No hazardous materials according to Directive 67/548/EEC or 1999/45/EC

Organic Liquids

**Section 4: First aid measures****4.1 Description of first aid measures**

When in doubt or if symptoms are observed, get medical advice. If unconscious place in recovery position and seek medical advice. Never give anything by mouth to an unconscious person or a person with cramps. Change contaminated, saturated clothing. Do not leave affected person unattended.

**Inhalation:** Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. In case of respiratory tract irritation, consult a physician.

**Skin contact:** After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. In case of skin reactions, consult a physician.

**Eye Contact:** In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult a physician. Protect uninjured eye. Remove contact lenses, if present and easy to do. Continue rinsing.

**Ingestion:** If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Do not induce vomiting. Give nothing to eat or drink.

**4.2 Most important symptoms and effects both acute and delayed**

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**

No data available

**Section 5: Firefighting measures****5.1 Extinguishing Media**

**Suitable:** The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.

**Unsuitable:** no restriction

**5.2 Special hazards arising from the substance or mixture**In case of fire may be liberated: Carbon dioxide (CO<sub>2</sub>) Carbon monoxide Sulphur oxides**5.3 Advice for firefighters**

Do not fight fire when fire reaches explosives. Wear self-contained breathing apparatus if necessary.

Do not allow run-off from fire-fighting to enter drains or water courses. Do not inhale explosion and combustion gases. Use caution when applying carbon dioxide in confined spaces, carbon dioxide can displace oxygen. Use water spray jet to protect personnel and to cool endangered containers.

**Section 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

Avoid generation of dust.

Do not breathe dust/fume/gas/mist/vapours/spray. Provide adequate ventilation. Use personal protective equipment (see section 8).

**6.2 Environmental precautions**

Do not allow to enter into surface water or drains.

**6.3 Methods and materials for containment and cleaning up**

Spilled product must never be returned to the original container for recycling. Collect in closed and suitable containers for disposal. Clear spills immediately.

**6.4 Reference to other sections**

See sections 8 and 13 for personal protection and disposal information

**Section 7: Handling and storage****7.1 Precautions for safe handling**

Wash hands and face thoroughly after working with material. Contaminated clothing should be removed and washed before re-use. Avoid inhalation, skin and eye contact.

**7.2 Conditions for safe storage, including any incompatibilities**

Storage temperature 15-25°C. Keep container tightly closed in a cool, well-ventilated place.

**7.3 Specific end use(s)**

Apply refractometer samples by pipette. Clean with distilled water. Refer to certification accompanying samples.

**Section 8: Exposure controls/personal protection****8.1 Control parameters**

None of the components have assigned exposure limits

**8.2 Exposure Controls**

Technical measures and the application of suitable work processes have priority over personal protection equipment. If handled uncovered, arrangements with local exhaust ventilation have to be used.

Wash hands before breaks and after work. Avoid contact with skin and eyes. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously.

**Personal Protective Equipment**

As appropriate to the situation and the quantity handled

**Eyes/Face:** Safety glasses (EN166)

**Gloves:** Nitrile rubber, min. thickness 0.11mm, breakthrough time 480 min

**Respirator:** Usually not necessary

**Ventilation:** General

## Section 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

(a) Appearance:	Colourless liquid	(k) Vapour pressure:	0.11 nPa (20°C)
(b) Odour:	None	(l) Vapour density:	2.6 (20°C)
(c) Odour Threshold:	No data available	(m) Relative density:	1.04 g/cm <sup>3</sup> (20°C)
(d) pH:	No data available	(n) Solubility(ies):	Soluble in water (20°C)
(e) Melting point/freezing point:	-59°C	(o) Partition coefficient: n-octanol/water:	-0.92 (20°C)
(f) Initial boiling point and boiling range:	187°C	(p) Auto-ignition temperature:	371°C
(g) Flash point:	103°C – Closed cup	(q) Decomposition temperature:	No data available
(h) Evaporation rate:	No data available	(r) Viscosity:	
(i) Flammability (solid, gas):	No data available	Kinematic: No data available	
(j) Upper/lower flammability or explosive limits:		Dynamic: 45 mPa*s (20°C)	
Upper explosion limit: 2.4 (%V)		(s) Explosive properties:	No data available
Lower explosion limit: 17.4 (%V)		(t) Oxidising properties:	No data available

### 9.2 Other information

100% miscible in water

## Section 10: Stability and reactivity

### 10.1 Reactivity

No data available

### 10.2 Chemical Stability

The product is chemically stable under standard ambient conditions (room temperature).

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

No data available

### 10.5 Incompatible materials

No data available

### 10.6 Hazardous decomposition products

No data available

## Section 11: Toxicological information

### 11.1 Information on toxicological effects

Eyes:	May cause temporary discomfort	STOT – single exposure:	Not relevant
Skin:	No adverse effects normally expected	STOT – repeated exposure:	Not relevant
Inhalation:	No adverse effects normally expected	Carcinogenicity:	No indication of human carcinogenicity
Ingestion:	No adverse effects normally expected	Mutagenicity:	No indications of human germ cell mutagenicity exist
Oral LD50 (rat):	19400 to 36000 mg/kg	Reproductive Toxicity:	No indications of human reproductive toxicity exist
Dermal LD50 (Rabbit):	20800 mg/kg	Aspiration hazard	Not relevant

## Section 12: Ecological information

### 12.1 Toxicity

No data available

### 12.2 Persistence and degradability

No data available

### 12.3 Bioaccumulative potential

No data available

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

No data available

### 12.6 Other adverse effects

No data available

## Section 13: Disposal considerations

### 13.1 Waste treatment measures

Dispose of according to legislation. Consult the appropriate local waste disposal expert about waste disposal.

Waste code product: No data available

## Section 14: Transport information

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
<b>14.1 UN number</b>	n/a	n/a	n/a
<b>14.2 UN proper shipping name</b>	Not dangerous	Not dangerous	Not dangerous
<b>14.3 Transport hazard class(es)</b>	n/a	n/a	n/a
<b>14.4 Packing group</b>	n/a	n/a	n/a
<b>14.5 Environmental hazards</b>	No	No	n/a
<b>14.6 Special precautions for user</b>	n/a	n/a	n/a
<b>14.7 Transport in bulk according to Annex II of MARPOL 7 3/78 and IBC code</b>			
Not intended for transport in bulk			

## Section 15: Regulatory information

### 15.1 Safety health and environmental regulations/legislation specific for the substance or mixture

Water hazard class (WGK) 1

### 15.2 Chemical Safety Assessment

No data available

## Section 16: Other information

Relevant R-, H- and EUH-phrases: Not applicable

Changes: Modification to comply with Regulation (EC) No. 1907/2006 (REACH)