

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

2.2 Label elements According to EC directives or the corresponding national regulations the product does not have to be labelled.**2.3 Other Hazards** None**Section 3: Composition/Information on ingredients****3.2 Mixtures**

Aqueous Glycol < 65%

REACH registration No.: Not yet communicated down the supply chain

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**

No data available

4.3 Indication of any immediate medical attention and special treatment needed

No data available

4.4 Self-protection of the first aider

Pay attention to self-protection

4.5 Information to physician

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 (CO₂), Carbon monoxide**5.3 Advice for firefighters**

Do not fight fire when fire reaches explosives. Wear self-contained breathing apparatus and chemical protective clothing 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. Evacuate area.

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

In case of major fire and large quantities, remove people to safety.

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.

6.4 Additional information

Clear spills immediately.

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. Design work processes to avoid inhalation, skin contact, eye contact. Usual measures for fire prevention.

7.2 Conditions for safe storage, including any incompatibilities

Storage temperature 15-25°C. Keep container tightly closed in a cool, well-ventilated place. Storage class: 10-13

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 0.12mm, breakthrough time 30-60 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 hPa (20°C)
(b) Odour:	No data available	(l) Vapour density:	2.6 (20°C)
(c) Odour Threshold:	No data available	(m) Relative density:	1.04 g/cm ³ (20°C)
(d) pH:	6-8 (100g/l; H ₂ O; 20°C)	(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 (1013 hPa)	(p) Auto-ignition temperature:	371°C
(g) Flash point:	99°C	(q) Decomposition temperature:	No data available
(h) Evaporation rate:	No data available	(r) Viscosity:	
(i) Flammability (solid, gas):	Not applicable	Kinematic:	No data available
(j) Upper/lower flammability or explosive limits:		Dynamic:	45 mPa*s (20°C)
Upper explosion limit: 2.4% (v/v)		(s) Explosive properties:	Not applicable
Lower explosion limit: 17.4% (v/v)		(t) Oxidising properties:	Not applicable

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

10.7 Additional information

No data available

Section 11: Toxicological information

11.1 Information on toxicological effects

Eyes:	May cause temporary discomfort	STOT – single exposure:	Not applicable
Skin:	No adverse effects normally expected	STOT – repeated exposure:	Not applicable
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):	<19400mg/kg	Reproductive Toxicity:	No indications of human reproductive toxicity exist
Dermal LD50 (Rabbit):	>20800 mg/kg	Aspiration hazard	Not applicable

Section 12: Ecological information

12.1 Toxicity

Fish: LC50 39800 mg/l (96h)

Daphnia: LC50 5120 mg/l (48h)

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water: -0.92 (20 °C)

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)
14.1 UN number	n/a	n/a	n/a
14.2 UN proper shipping name	Not dangerous	Not dangerous	Not dangerous
14.3 Transport hazard class(es)	n/a	n/a	n/a
14.4 Packing group	n/a	n/a	n/a
14.5 Environmental hazards	n/a	n/a	n/a
14.6 Special precautions for user	n/a	n/a	n/a
14.7 Transport in bulk according to Annex II of MARPOL 7 3/78 and IBC code			
Not intended for transport in bulk			

Section 15: Regulatory information

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

Regulation (EC) No 1907/2006, 1272/2008; Commission Regulation (EU) No 453/2010, 2015/830.

Water hazard class (WGK) 1

15.2 Chemical Safety Assessment

Not relevant

Section 16: Other information

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

Changes: Modification to comply with Commission Regulation (EU) 2015/830