

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifier

BSDC-B 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@xylem.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)

REACH No.: A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

Section 2: Hazards identification

2.1 Classification of substance or mixture

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

2.2 Label elements

None needed

2.3 Other Hazards

None

Section 3: Composition/Information on ingredients

3.1 Substances

Phenylmethyl Siloxane, Trimethyl-terminated. Silicone compound not classified as hazardous.

CAS-no. 63148-58-3

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. No special precautions are necessary for first aid responders.

Inhalation: Remove casualty to fresh air and keep warm and at rest. Get medical attention if symptoms occur.

Skin contact: As a precaution, after contact with skin, wash immediately with plenty of water and soap. Get medical attention if symptoms occur.

Eye Contact: As a precaution, in case of contact with eyes flush with plenty of flowing water. Get medical attention if symptoms occur.

Ingestion: If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious). Do not induce vomiting. Get medical attention if symptoms occur.

4.2 Most important symptoms and effects both acute and delayed

None known

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically and supportively

Section 5: Firefighting measures

5.1 Extinguishing Media

Suitable: Water spray, Alcohol-resistant foam, Carbon Dioxide (CO₂), Dry Chemical

Unsuitable: None known

5.2 Special hazards arising from the substance or mixture

In case of fire may be liberated: Carbon oxides, Silicon oxides, Formaldehyde. Exposure to combustion products may be a hazard to health.

5.3 Advice for firefighters

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

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. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Follow safe handling advice and personal protective equipment recommendations

6.2 Environmental precautions

Discharge into the environment must be avoided. Prevent further leakage or spillage if safe to do so. Prevent spreading over a wide area (e.g. by containment or oil barriers). Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material. For large spills, provide dyking or appropriate containment to keep material from spreading. If dyked material can be pumped, store in appropriate container. Clean up remaining materials from spill with suitable absorbent.

Local or national regulations may apply to releases and disposal of this material and those materials employed in the cleanup of releases. You will need to determine which regulations are applicable.

6.4 Reference to other sections

See sections 7, 8, 11, 12 and 13.

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. Ensure that eye flushing systems and safety showers are located close to the working place. Use only with adequate ventilation (section 8).

7.2 Conditions for safe storage, including any incompatibilities

Keep properly labelled container tightly closed. Do not store with oxidising agents.

7.3 Specific end use(s)

Apply refractometer samples by pipette. 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. Ensure adequate ventilation.

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

Gloves: Usually not necessary

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:	No data available
(b) Odour:	None	(l) Vapour density:	No data available
(c) Odour Threshold:	No data available	(m) Relative density:	1.1
(d) pH:	No data available	(n) Solubility(ies):	No data available
(e) Melting point/freezing point:	No data available	(o) Partition coefficient: n-octanol/water:	No data available
(f) Initial boiling point and boiling range:	>65°C	(p) Auto-ignition temperature:	No data available
(g) Flash point:	101.1°C – Closed cup	(q) Decomposition temperature:	No data available
(h) Evaporation rate:	No data available	(r) Viscosity:	500 cSt (25°C)
(i) Flammability (solid, gas):	No data available	(s) Explosive properties:	Not explosive
(j) Upper/lower flammability or explosive limits:	No data available	(t) Oxidising properties:	No data available

9.2 Other information

No data available

Section 10: Stability and reactivity

10.1 Reactivity

Not classified as a reactivity hazard.

10.2 Chemical Stability

The product is chemically stable under normal conditions.

10.3 Possibility of hazardous reactions

Use at elevated temperatures may form highly hazardous compounds

10.4 Conditions to avoid

None known

10.5 Incompatible materials

Can react with strong oxidising agents

10.6 Hazardous decomposition products

Can be formed at elevated temperatures: Benzene, Formaldehyde

Section 11: Toxicological information

11.1 Information on toxicological effects

Eyes:	Not classified	STOT – single exposure:	Not classified
Skin:	Not classified	STOT – repeated exposure:	Not classified
Inhalation:	Not classified	Carcinogenicity:	Not classified
Ingestion:	Not classified	Mutagenicity:	Not classified
Oral LD50 (rat):	>15000 mg/kg	Reproductive Toxicity:	Not classified
Dermal LD50 (Rabbit):	No skin irritation	Aspiration hazard:	Not classified

Section 12: Ecological information

12.1 Toxicity

LC50 (Cyprinus carpio (Carp), Oncorhynchus mykiss (rainbow trout))
>1000 mg/l (96 hours exposure)

EC50 (Simocephalus vetulus) 6327 mg/l (48 hours exposure)

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

Not relevant

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			
14.2 UN proper shipping name			
14.3 Transport hazard class(es)		Not regulated as a dangerous good	
14.4 Packing group			
14.5 Environmental hazards			
14.6 Special precautions for user		n/a	
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and IBC code			
Not applicable for product as supplied			

Section 15: Regulatory information

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

REACH Annex XVII & Art. 59; Regulation (EC) Nos. 1005/2009, 1005/2009, 850/2004 & 649/2012; Directive 2012/18/EU – Not applicable
ENCS/ISHL, KECI, AICS, DSL, IECSC, PICCS, REACH, TSCA, NZIoC, TCSI – All ingredients listed or exempt

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out.

Section 16: Other information

Changes: None – first issue.