

SAFETY DATA SHEET

Revision date 2020-Feb-07

Revision number 1.04

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name GEOlube[®] B 68
Product code 5008157
Synonyms Butanol with PO

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

Recommended use [RU] Lubricant
Uses advised against None known

1.3 Details of the supplier of the safety data sheet

Supplier
GEO Specialty Chemicals UK Ltd
Charleston Road, Hardley, Hythe
Southampton, Hampshire SO45 3ZG
United Kingdom
Phone: +44 (0)23 80894666
Fax No: +44 (0)23 80243113

Responsibility Statement For further information, please contact safety-data-sheet-fp@geosc.com

1.4 Emergency telephone number

Emergency telephone 24 Hour Emergency Phone Number
GEO Specialty Chemicals UK Ltd
+44 (0)23 80891806

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

This substance is not classified as dangerous according to regulation (EC) 1272/2008 [GHS].

2.2 Label elements

Labeling according to Regulation (EC) No. 1272/2008 [CLP]

Signal word Not classified

Hazard statements
None

Precautionary statements

None

2.3 Other Information

None known

3. COMPOSITION/INFORMATION ON INGREDIENTS**3.1 Substances**

Component	EU EINECS	weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	(REACH) Regulation (EC 1907/2006)
Butanol with PO	Not applicable	> 99.5%	Not Classified as Hazardous	In compliance

For the full text of the H-Statements mentioned in this Section, see Section 16.

3.2 Mixtures

Not applicable

4. FIRST AID MEASURES**4.1 Description of first aid measures****General advice**

In case of adverse health effects seek medical advice.

Eye contact

Rinse immediately with plenty of running water (for 10 minutes). Seek medical attention if necessary.

Skin contact

Rinse with running water and soap. If irritation should develop, get medical attention.

Ingestion

Rinse mouth with water, then drink one or two glasses of water.

Inhalation

Remove to fresh air.

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

None known.

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

Treat symptomatically.

5. FIRE-FIGHTING MEASURES**5.1 Extinguishing media****Suitable extinguishing media**

Water spray jet, Alcohol-resistant foam, Extinguishing powder, Carbon dioxide.

Extinguishing media which must not be used for safety reasons

High pressure waterjet.

5.2 Special hazards arising from the substance or mixture

Special Hazard

Formation of toxic gases is possible during heating or in fires.

Hazardous combustion products

Carbon oxides. Aldehydes. Toxic vapors. Irritating vapors.

5.3 Advice for firefighters

Special protective equipment for firefighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Firefighting measures

Cool exposed containers with water spray after extinguishing fire.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions

Wear suitable protective clothing and gloves.

6.2 Environmental precautions

Environmental precautions

Do not empty into drains/surface water/ground water. Inform authorities in the event of product spillage to water courses or sewage systems.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up

Remove with liquid-absorbing material (sand, peat, sawdust).

6.4 Reference to other sections

See Section 12 for additional Ecological Information

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling

Ensure that workrooms are adequately ventilated.

Avoid spraying/aerosol generation.

Use adequate ventilation and/or engineering controls in high temperature processing to prevent exposure to vapors

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

When storing in tanks above 60 °C, cover with a layer of nitrogen-protective gas.

Do not store together with reductants.

Do not store together with oxidants.

Keep away from heat. Protect from direct sunlight

Keep only in the original container in a cool, well-ventilated place

7.3 Specific end use(s)

Specific use(s)

Not applicable

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Occupational exposure limit value

Component	European Union	United Kingdom	Spain	Germany
Butanol with PO	NAV	NAV	NAV	NAV

Biological limit values

Component	European Union	United Kingdom	Spain	Germany
Butanol with PO	NAV	NAV	NAV	NAV

Legend

NAV - Not available

8.2 Exposure controls

Personal Protective Equipment

Eye/face Protection

Tight sealing safety goggles.

Hand Protection

PVC or Nitrile

Skin and body protection

Wear suitable protective clothing.

Respiratory protection

When processing in open systems with aerosol formation wear suitable respiratory protection to avoid inhalation of aerosol particles.

Other personal protection data

Eyewash fountains and safety showers must be easily accessible.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls

No information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	liquid
Color	light yellow
Appearance	clear
Odor	little intrinsic odor
Odor threshold	No information available

Property	Values	Remarks
pH	No information available	No information available
Melting / freezing point	No information available	No information available

Boiling point / boiling range	No information available	No information available
Flash point	> 200 °C / > 392 °F	ASTM D 92-97
Evaporation rate	No information available	No information available
Flammability (solid, gas)	No information available	No information available
Flammability Limit in Air		
Upper flammability limit	No information available	No information available
Lower flammability limit	No information available	No information available
Vapor pressure	No information available	No information available
Vapor density	No information available	No information available
Specific gravity	No information available	No information available
Solubility (water)	insoluble	No information available
Solubility in other solvents	No information available	No information available
Partition coefficient: n-octanol/water	No information available	No information available
Autoignition temperature	No information available	No information available
Decomposition temperature	No information available	No information available
Kinematic viscosity	68 mm ² /s @ 40 °C	ASTM D 445-97
Dynamic viscosity	No information available	No information available
Density	0.9900 g/cm ³ @ 20 °C	ASTM D 1298-99

9.2 Other information

Bulk Density	No information available
Explosive properties	Not an explosive.
Oxidizing properties	The substance or mixture is not classified as oxidizing.
Softening point	No information available
Molecular weight	1300 g/mol
Volatile Organic Compound (VOC) content, wt.%	Not a VOC
Percent Volatile, wt.%	Not a VOC

10. STABILITY AND REACTIVITY

10.1 Reactivity

Reactivity

No information available.

10.2 Chemical stability

Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous polymerization

Hazardous polymerization does not occur.

10.4 Conditions to avoid

Conditions to avoid

None.

10.5 Incompatible materials**Materials to avoid**

Reaction with strong acids. Reaction with oxidants.

10.6 Hazardous decomposition products**Hazardous decomposition products**

Can decompose slowly with localized heating above 150°C.

11. TOXICOLOGICAL INFORMATION**11.1 Information on toxicological effects****Acute health hazard****Eye contact**

This product is not considered to be an eye irritant.

Skin contact

This product is not considered to be a skin irritant.

Ingestion

Low toxicity by this route.

Inhalation

None known.

Acute toxicity**Oral LD50** > 2,000 mg/kg (analogy)**Dermal LD50** No information available**Inhalation LC50** No information available**Skin corrosion/irritation**

not irritating (analogy)

Serious eye damage/eye irritation

not irritating (analogy)

Sensitization

No information available

Germ cell mutagenicity

No information available

Carcinogenicity

No information available

Reproductive toxicity

No information available

Specific target organ toxicity - Single exposure

No information available

Specific target organ toxicity - Repeated exposure

No information available

Aspiration hazard

No information available

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Acute aquatic toxicity

Fish	LC50 > 100 mg/l (analogy)
Crustacea	No information available
Bacteria toxicity	EC0 > 100 mg/l (analogy)
Algae/aquatic plants	No information available

12.2 Persistence and degradability

Persistence and degradability

No information available

Ultimate biodegradation

Readily and rapidly degradable. All organic substances contained in the product achieve > 60% BOD/COD or CO₂ liberation, or > 70% DOC reduction in tests for ease of degradability. Threshold values for 'readily degradable' (e.g. to OECD method 301) are reached.

12.3 Bioaccumulative potential

Bioaccumulative potential

No information available

12.4 Mobility in soil

Mobility

No information available.

12.5 Results of PBT and vPvB assessment

PBT and vPvB assessment

No information available

12.6 Other adverse effects

Other information

No other ecological studies have been carried out on this product.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Disposal of wastes

Dispose of according to regulations.

Contaminated packaging

Packaging that cannot be cleaned are to be disposed of in the same manner as the product. Disposal must be made according to official regulations.

14. TRANSPORT INFORMATION

US DOT Not regulated

- 14.1. UN number
- 14.2. UN proper shipping name
- 14.3. Transport hazard class(es)
- 14.4. Packing group
- 14.5. Environmental hazards
- 14.6. Special precautions for user

Land transport (ADR/RID) Not regulated

- 14.1. UN number
- 14.2. UN proper shipping name
- 14.3. Transport hazard class(es)
- 14.4. Packing group
- 14.5. Environmental hazards
- 14.6. Special precautions for user

Air transport (ICAO-TI / IATA-DGR) Not regulated

- 14.1. UN number
- 14.2. UN proper shipping name
- 14.3. Transport hazard class(es)
- 14.4. Packing group
- 14.5. Environmental hazards
- 14.6. Special precautions for user

Sea transport (IMDG) Not regulated

- 14.1. UN number
- 14.2. UN proper shipping name
- 14.3. Transport hazard class(es)
- 14.4. Packing group
- 14.5. Environmental hazards
- 14.6. Special precautions for user

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

15. REGULATORY INFORMATION

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

International Inventories

Australia (AICS)

All ingredients are on the inventory or exempt from listing

Canada (DSL)

All ingredients are on the inventory or exempt from listing

Canada (NDSL)

None of the ingredients are on the inventory.

China (IECSC)

All ingredients are on the inventory or exempt from listing

European Union (EINECS)

All ingredients are on the inventory or exempt from listing

European Union (ELINCS)

None of the ingredients are on the inventory.

Japan (ENCS)

All ingredients are on the inventory or exempt from listing

South Korea (KECL)

All ingredients are on the inventory or exempt from listing

Philippines (PICCS)

All ingredients are on the inventory or exempt from listing

United States (TSCA)

All ingredients are on the inventory or exempt from listing

Legend

AICS - Australian Inventory of Chemical Substances

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

IECSC - China Inventory of Existing Chemical Substances

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

15.2 Chemical Safety Report

No information available.

16. OTHER INFORMATION

Product code 5008157

Revision date 2020-Feb-07

Full text of H-Statements referred to under sections 2 and 3

None

Key or legend to abbreviations and acronyms used in the safety data sheet

NAV - Not available

This safety data sheet complies with the requirements of: Regulation (EC) No. 1907/2006.

Additional information

GEOLube® is a registered trademark of GEO Specialty Chemicals, Inc.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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 process, unless specified in the text.