

Safety Data Sheet J564 Environmental Guar Slurry

1. Identification of the substance/preparation and of the Company/undertaking

1.1 Product identifier

Product name J564 Environmental Guar Slurry
Product code J564

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

Recommended use Used as a gelling agent in oilfield applications

Uses advised against Consumer use

1.3 Details of the supplier of the safety data sheet

Supplier identification
Schlumberger Oilfield UK PLC
Victory House, Churchill Court
Manor Royal, Crawley
West Sussex RH10 9LU
+ 47 920 12570
SDS@slb.com

1.4 Emergency Telephone Number

Emergency telephone - (24 Hour) Australia +61 2801 44558, Asia Pacific +65 3158 1074, China +86 10 5100 3039, Europe +44 (0) 1235 239 670, Middle East and Africa +44 (0) 1235 239 671, New Zealand +64 9929 1483, USA 001 281 561 1600

2. Hazards Identification

2.1 Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Health hazards

Acute oral toxicity	Category 4
Acute dermal toxicity	Category 4
Acute inhalation toxicity - dust/mist	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2

Environmental hazards Not classified

Physical Hazards Not classified

2.2 Label Elements

**Signal word**

WARNING

Hazard statements

H302 - Harmful if swallowed

H312 - Harmful in contact with skin

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H332 - Harmful if inhaled

EU specific hazard statements

EUH210 - Safety data sheet available on request

Precautionary Statements - EU (28, 1272/2008)

P403 + P235 - Store in a well-ventilated place. Keep cool

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Supplementary precautionary statements

P270 - Do not eat, drink or smoke when using this product

P330 - Rinse mouth

P363 - Wash contaminated clothing before reuse

P302 + P350 - IF ON SKIN: Gently wash with plenty of soap and water

P322 - Specific measures (see supplemental first aid instructions on this label)

P261 - Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray

P271 - Use only outdoors or in a well-ventilated area

P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P312 - Call a POISON CENTER or doctor/ physician if you feel unwell

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P321 - Specific treatment (see supplemental first aid instructions on this label)

P332 + P313 - If skin irritation occurs: Get medical advice/ attention

P362 - Take off contaminated clothing and wash before reuse

P264 - Wash face, hands and any exposed skin thoroughly after handling

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P337 + P313 - If eye irritation persists: Get medical advice/attention

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower

Classification according to EU Directives 67/548/EEC or 1999/45/EC**Indication of danger**

Xn - Harmful

R-code(s)

R20/21/22; R36/38

Contains

2-butoxyethanol

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

2.3 Other data

Not classified as PBT/vPvB by current EU criteria

Combustible liquid

Contaminated surfaces will be extremely slippery

3. Composition/information on Ingredients

3.1 Substances

Not Applicable

3.2 Mixtures

Component	EC-No.	CAS-No	Weight % - range	Classification (67/548)	Classification (Reg. 1272/2008)	REACH registration number
2-butoxyethanol	203-905-0	111-76-2	30 - 60	Xn; R20/21/22 Xi; R36/38	Acute Tox. 4 (H302) Acute Tox. 4 (H312) Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)	01-2119475108-36-x xxx

Comments

The product contains other ingredients which do not contribute to the overall classification.

4. First aid measures

4.1 Description of first-aid measures
Inhalation

If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

Ingestion

Rinse mouth. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Seek medical attention if irritation occurs.

Skin contact

Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention immediately if symptoms occur.

Eye contact

Remove contact lenses. Promptly wash eyes with lots of water while lifting eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

4.2 Most important symptoms and effects, both acute and delayed

General advice The severity of the symptoms described will vary dependant of the concentration and the length of exposure. If adverse symptoms develop, the casualty should be transferred to hospital as soon as possible.

Main symptoms

Inhalation Please see Section 11. Toxicological Information for further information.

Ingestion Please see Section 11. Toxicological Information for further information.

Skin contact Please see Section 11. Toxicological Information for further information.

Eye contact Please see Section 11. Toxicological Information for further information.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician Treat symptomatically.

5. Fire-fighting measures**5.1 Extinguishing media****Suitable extinguishing media**

Use extinguishing media appropriate for surrounding material.

Extinguishing media which shall not be used for safety reasons

None known.

5.2 Special hazards arising from the substance or mixture**Precautions against fire and explosion**

None known.

Hazardous combustion products

Fire or high temperatures create: Carbon oxides (COx), Harmful organic chemical fumes.

5.3 Advice for firefighters**Special protective equipment for fire-fighters**

As in any fire, wear self-contained breathing apparatus and full protective gear.

Special Fire-Fighting Procedures

Containers close to fire should be removed immediately or cooled with water.

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

Keep away from heat, sparks, and flame. Keep away from sources of ignition - No smoking. Avoid breathing vapours or mists. Avoid contact with the skin and the eyes. Use personal protective equipment. See also section 8.

Contaminated surfaces will be extremely slippery.

6.2 Environmental precautions

The product should not be allowed to enter drains, water courses or the soil.

Environmental exposure controls

Avoid release to the environment.

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

Prevent further leakage or spillage if safe to do so. Dike far ahead of liquid spill for later disposal.

Methods for cleaning up

Absorb with earth, sand or other non-combustable material and transfer to containers for later disposal. After cleaning, flush away traces with water.

6.4 Reference to other sections

See section 13 for more information.

7. Handling and Storage

7.1 Precautions for safe handling**Handling**

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin and eyes. Do not breathe vapors or spray mist. Avoid spills and splashing during use.

Hygiene measures

Use good work and personal hygiene practices to avoid exposure. When using do not smoke, eat or drink. Wash hands and face before breaks and immediately after handling the product.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures/precautions Ensure adequate ventilation. Keep airborne concentrations below exposure limits.

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep away from direct sunlight. To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded.

Storage class Chemical storage.

Packaging material Use specially constructed containers only. Steel or high density polyethylene (HDPE) container approved for flammables.

7.3 Specific end uses

See also Section 1.2.

8. Exposure Controls/Personal Protection

8.1 Control parameters

Component	EU OEL - Third List	Austria	Australia	Denmark
2-butoxyethanol	Possibility of significant uptake through the skin 20 ppm TWA; 98 mg/m ³ TWA	Not determined	skin notation 20 ppm TWA; 96.9 mg/m ³ TWA 50 ppm STEL; 242 mg/m ³ STEL	20 ppm 98 mg/m ³
Component	Finland	France	Germany	Hungary
2-butoxyethanol	Not determined	2 ppm 9.8 mg/m ³	10 ppm MAK 49 mg/m ³ MAK	Not determined
Component	New Zealand	Italy	Netherlands	Norway
2-butoxyethanol	25 ppm TWA 121 mg/m ³ TWA skin notation	Not determined	100 mg/m ³ GW	10 ppm 50 mg/m ³
Component	Poland	Portugal	Romania	Russia
2-butoxyethanol	200 mg/m ³ STEL Skin 98 mg/m ³ TWA	20 ppm TWA	Not determined	5 mg/m ³ MAC
Component	Spain	Switzerland	Turkey	UK
2-butoxyethanol	50 ppm VLA-EC 245 mg/m ³ VLA-EC Skin 20 ppm VLA-ED indicative limit value 98 mg/m ³ VLA-ED indicative limit value	20 ppm STEL 98 mg/m ³ STEL Skin 10 ppm MAK 49 mg/m ³ MAK	50 ppm STEL 246 mg/m ³ STEL Skin 20 ppm TWA 98 mg/m ³ TWA	50 ppm STEL 246 mg/m ³ STEL Skin 25 ppm TWA 123 mg/m ³ TWA

Component Information

Derived No Effect Level (DNEL)

Short term exposure local effects

2-butoxyethanol

Inhalation 246 mg/m³

Short term exposure systemic effects

2-butoxyethanol

Dermal 89 mg/kg

Inhalation 663 mg/m³

Long term exposure systemic effects

2-butoxyethanol

Dermal 75 mg/kg

Inhalation 98 mg/m³

Predicted No Effect Concentration (PNEC)

2-butoxyethanol

Fresh Water 8.8 mg/l

Sea Water 0.88 mg/l

Fresh water sediment 34.6 mg/kg

Sea sediment 3.46 mg/kg

Soil 3.13 mg/kg

Impact on Sewage Treatment 463 mg/l

Intermittent release 9.1 mg/l

8.2 Exposure controls

All chemical Personal Protective Equipment (PPE) should be selected based on an assessment of both the chemical hazard present and the risk of exposure to those hazards. The PPE recommendations below are based on an assessment of the chemical hazards associated with this product. Where this product is used in a mixture with other products or fluids, additional hazards may be created and as such further assessment of risk may be required. The risk of exposure and need of respiratory protection will vary from workplace to workplace and should be assessed by the user in each situation.

Engineering measures to reduce exposure

Control the source. Ensure adequate ventilation. Keep airborne concentrations below exposure limits.

Personal protective equipment

Eye protection	Tightly fitting safety goggles.
Hand protection	Impervious gloves made of: PVC, Neoprene, Frequent change is advisable.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment, Use respirator with organic vapor protection (A, brown), Type A/P2.
Skin and body protection	Chemical resistant apron, Eye wash and emergency shower must be available at the work place.

Hygiene measures

Wash hands before eating, drinking or smoking, Remove and wash contaminated clothing before re-use.



9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Slurry
Odour	ether-like
Colour	tan
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks</u>
pH	Not applicable	
pH @ dilution		
Melting/freezing point	No information available	
Boiling point/range	~ 170 °C	
Flash Point	~ 66 °C	PMCC
Evaporation rate	No information available	
Flammability (solid, gas)	Not Applicable	
Flammability Limits in Air		
Upper flammability Limit	10.6% ; 2-Butoxyethanol	
Lower flammability limit	1.1%; 2-Butoxyethanol	
Vapor pressure	0.1 kPa	@ 25 °C
Vapor density	4.1 @ Air = 1	
Specific gravity	1.06@20C	
Bulk density	No information available	Not Applicable

Relative density	No information available	
Water solubility	Miscible with water	
Solubility in other solvents	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity		No information available
Viscosity, dynamic	No information available	
Log Pow		See Section 12 for additional Ecological Information

Explosive properties	No information available
Oxidizing properties	None known.

9.2 Other information

Pour point	No information available
Molecular weight	No information available
VOC content(%)	> 50
Density VALUE	No information available

10. Stability and Reactivity

10.1 Reactivity

Stable under recommended storage conditions.

10.2 Chemical stability

Stable under normal temperature conditions and recommended use.

10.3 Possibility of Hazardous Reactions

Hazardous polymerization

Hazardous polymerisation does not occur.

10.4 Conditions to avoid

Heat, flames and sparks.

10.5 Incompatible materials

Oxidizing agents.

10.6 Hazardous decomposition products

See also section 5.2.

11. Toxicological Information

11.1 Information on toxicological effects

Acute toxicity

Inhalation	Harmful by inhalation.
Eye contact	Causes serious eye irritation.

Skin contact	Harmful in contact with skin. Causes skin irritation. Components of the product may be absorbed into the body through the skin.
Ingestion	Harmful if swallowed.
Acute toxicity	.

Component	LD50 Oral	LD50 Dermal	LD50 Inhalation
2-butoxyethanol	= 470 mg/kg (Rat)	= 220 mg/kg (Rabbit) = 2270 mg/kg (Rat)	= 2.21 mg/L (Rat) 4 h = 450 ppm (Rat) 4 h

Sensitisation	This product does not contain any components suspected to be sensitizing.
Mutagenic effects	No evidence of mutagenic properties.
Carcinogenicity	Not listed by IARC, USA NTP, USA OSHA or EU.
Reproductive toxicity	None known.
Routes of exposure	Inhalation. Skin contact. Eye contact. Ingestion.
Routes of entry	No route of entry noted.
Specific target organ toxicity (single exposure)	Not classified
Specific target organ toxicity (repeated exposure)	Not classified.
Aspiration hazard	No hazard from product as supplied.

12. Ecological Information

12.1 Toxicity

The product component(s) are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Toxicity to algae

See component information below.

Toxicity to fish

See component information below.

Toxicity to daphnia and other aquatic invertebrates

See component information below.

Component	Toxicity to fish	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates
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2-butoxyethanol 111-76-2 (30 - 60)	2950 mg/L LC50 (Lepomis macrochirus) = 96 h 1490 mg/L LC50 (Lepomis macrochirus) = 96 h	No information available	= 1698 - 1940 mg/L (LC50; Daphnia magna) = 1720 mg/L (EC50; water flea)
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12.2 Persistence and degradability

No product level data available.

12.3 Bioaccumulative potential

No product level data available.

12.4 Mobility in soil

Mobility

The product is water soluble, and may spread in water systems.

12.5 Results of PBT and vPvB assessment

Not classified as PBT/vPvB by current EU criteria.

12.6 Other adverse effects.

None known.

13. Disposal Considerations

13.1 Waste treatment methods

Waste from residues / unused products

Dispose of in accordance with local regulations.

Contaminated packaging

Dispose of in accordance with local regulations. Dispose of contents/container to an approved waste disposal plant.

EWC waste disposal No.

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used. The following Waste Codes are only suggestions: 16 03 05; 16 10 01

14. Transport Information

Not classified as dangerous in the meaning of transport regulations

14.1 UN number

Not regulated

14.2 Proper shipping name

Not regulated

14.3. Hazard class(es)

ADR/RID/ADN Hazard class	Not regulated
IMDG Hazard class	Not regulated
ICAO Hazard class/division	Not regulated

14.4 Packing group

ADR/RID/ADN Packing Group	Not regulated
IMDG Packing group	Not regulated
ICAO Packing group	Not regulated

14.5 Environmental hazard

No

14.6 Special precautions

Not Applicable

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

Not Applicable Please contact SDS@slb.com for info regarding transport in Bulk.

15. Regulatory Information

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

Australian Standard for the Uniform Scheduling of Drugs and Poisons

2-butoxyethanol
Schedule 6

Commission Regulation (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH). Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

This safety data sheet complies with the requirements of Regulation (EC) No. 1272/2008.

International inventories

USA, Toxic Substances Control Act inventory (TSCA)	Complies
European Union - EINECS and ELINCS	Complies
Canada, Domestic Substance List (DSL)	Complies
Philippines (PICCS)	Complies
Inventory - Japan - Existing and New Chemicals list	Does not Comply
China (IECSC)	Complies
Australia (AICS)	Does not Comply
Korea (KECL)	Complies
Inventory - New Zealand - Inventory of Chemicals (NZIoC)	Complies

15.2 Chemical Safety Report

No information available

16. Other Information

Prepared by	Global Chemical Regulatory Compliance (GCRC) , Beilin Li
Supersedes date	21/Oct/2008
Revision date	18/Jun/2014
Version	1

Text of R phrases mentioned in Section 3

Full text of R-phrases referred to under sections 2 and 3

R36/38 - Irritating to eyes and skin

R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed

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

H302 - Harmful if swallowed

H312 - Harmful in contact with skin

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H332 - Harmful if inhaled

EUH210 - Safety data sheet available on request

N/A - Not Applicable, N/D - Not Determined.

Disclaimer

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