SDS no. J511 Version 2

Revision date 31/Aug/2015 Supersedes date 21/Feb/2011



Safety Data Sheet Stabilizer/Delay Agent J511

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

1.1 Product identifier

Product name Stabilizer/Delay Agent J511

Product code J511

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

Recommended Use Used as a fracturing additive in oilfield applications

Uses advised against Consumer use

1.3 Details of the supplier of the safety data sheet

Supplier

Schlumberger Oilfield Australia Pty Ltd ABN: 74 002 459 225 ACN: 002 459 225 256 St. Georges Terrace, Perth WA 6000 +47 5157 7424 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 001 281 595 3518, Canada 001 613 996 6666

2. Hazards identification

2.1 Classification of the substance or mixture

GHS - Classification Classification according to (EC) No. 1272/2008

Health hazards Not classified

Environmental hazards Not classified

Physical Hazards Not classified

2.2 Label elements

Signal word

None

Hazard statements

This product is not classified as hazardous therefore no (H) hazard statements assigned.

Precautionary statements

This product is not classified as hazardous therefore has no (P) precautionary statements assigned.

Contains

Aliphatic polyol

2.3 Other data

Not classified as PBT/vPvB by current EU criteria

Australian statement of hazardous/dangerous nature

Classified as Non-Hazardous according to the criteria of NOHSC. NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.

3. Composition/information on ingredients

3.1 Substances

Component	EC-No.	CAS-No	Weight % - range	Classification (67/548)	Classification (Reg. 1272/2008)	REACH registration number
Aliphatic polyol	Listed	Proprietary	60-100	=	Not classified	No data available

3.2 Mixtures

Not Applicable

4. First aid measures

4.1 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. Get medical attention if symptoms occur.

Skin contact Wash off immediately with soap and plenty of water removing all contaminated clothes and

shoes. Get medical attention if symptoms occur.

Eye contact Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact

lenses, if present, after the first five minutes, then continue rinsing eye. Get medical

attention if any discomfort continues.

4.2 Most important symptoms and effects, both acute and delayed

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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

Water Fog, Alcohol Foam, CO2, Dry Chemical.

Extinguishing media which shall not be used for safety reasons

None known.

5.2 Special hazards arising from the substance or mixture

Unusual fire and explosion hazards

None known.

Hazardous combustion products

When heated strongly or burned, oxides of carbon and harmful organic chemical fumes are released.

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

Use personal protective equipment. See also section 8.

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. Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and materials for containment and cleaning up

Methods for containment

Prevent further leakage or spillage if safe to do so. Cover powder spill with plastic sheet or tarp to minimize spreading.

Methods for cleaning up

Avoid generating or breathing dust. Take up mechanically and collect in suitable container for 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 handling causing generation of dust. Avoid contact with skin and eyes. Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

Hygiene measures

Use good work and personal hygiene practices to avoid exposure. Wash hands and face before breaks and immediately after handling the product Remove contaminated clothing. Do not eat, drink or smoke when using this product.

7.2 Conditions for safe storage, including any incompatibilities

Ensure adequate ventilation. Provide appropriate exhaust ventilation at places where dust **Technical measures/precautions**

is formed. Keep airborne concentrations below exposure limits.

Keep away from open flames, hot surfaces and sources of ignition. Protect from moisture Storage precautions

Keep containers tightly closed in a dry, cool and well-ventilated place. Store away from

incompatibles, Oxidizing agents

Chemical storage. Storage class

Use specially constructed containers only Packaging material

7.3 Specific end uses

See Section 1.2.

8. Exposure controls/personal protection

8.1 Control parameters

Exposure limits NUI = Nuisance dust, TWA 4mg/m³ Respirable Dust, 10mg/m³ Total Dust.

Component	EU OEL	Austria	Australia	Denmark
Aliphatic polyol	Not determined	Not determined	Not determined	Not determined
Component	Malaysia	France	Germany	Hungary
Aliphatic polyol	Not determined	Not determined	Not determined	Not determined
	•			
Component	New Zealand	Italy	Netherlands	Norway
Aliphatic polyol	Not Determined	Not determined	Not determined	Not determined
· · ·	•	•	•	
Component	Poland	Portugal	Romania	Russia



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Aliphatic polyol	Not determined	Not determined	Not determined	10 mg/m ³ MAC
Component	Spain	Switzerland	Turkey	UK
Aliphatic polyol	Not determined	Not determined	Not determined	Not determined

Notes

No biological limit allocated

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

Ensure adequate ventilation. Mechanical ventilation or local exhaust ventilation is required.

Personal protective equipment

Eye protection Safety glasses with side-shields.

Use protective gloves made of:, Nitrile, Neoprene gloves, Rubber, PVC, Frequent change is Hand protection

advisable.

Respiratory protection Use the indicated respiratory protection if the occupational exposure limit is exceeded

and/or in case of product release (dust), Effective dust mask, Type P2, At work in confined

or poorly ventilated spaces, respiratory protection with air supply must be used. Skin and body protection

Wear suitable protective clothing, Eye wash and emergency shower must be available at

the work place.

Wash hands before breaks and immediately after handling the product, Remove and wash Hygiene measures

contaminated clothing before re-use.









9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state Solid Powder **Appearance** Odor Odorless Color White **Odor threshold** Not applicable

@ 50 g/l





<u>Property</u> <u>Values</u> <u>Remarks</u>

pH Not applicable pH @ dilution 6 - 7

Melting/freezing point 95 °C / 203 °F
Boiling point/range No information available

Flash point Not Applicable
Evaporation rate (BuAc =1) Not Applicable
Flammability (solid, gas) Not Applicable

Flammability (solid, gas) Not Applicabl

Upper flammability limit
Lower flammability limit
No information available
No information available

Vapor pressureNot applicableVapor densityNot applicable

Specific gravity 1.5 @ 20 °C

Bulk density No information available

Relative density ~ 1.5 (@ 20°C) Water solubility Soluble in water

Solubility in other solvents
Autoignition temperature
Decomposition temperature

No information available
No information available
> 242 °C / 468 °F

Kinematic viscosity

Dynamic viscosity

Log Pow

No information available
No information available

Explosive properties No information available

Oxidizing properties None known.

9.2 Other information

Pour pointNo information availableMolecular weightNo information available

VOC content(%) None

Density No information available

10. Stability and reactivity

10.1 Reactivity

No specific reactivity hazards associated with this product.

10.2 Chemical stability

Stable under normal temperature conditions and recommended use.

10.3 Possibility of Hazardous Reactions

Hazardous polymerization

Hazardous polymerization does not occur.

10.4 Conditions to avoid

Avoid heat, flames and other sources of ignition. Avoid dust formation. Protect from moisture.

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 Inhalation of dust may cause shortness of breath, tightness of the chest, a sore throat and

cough.

Eye contact Dust may cause mechanical irritation.

Repeated exposure may cause skin dryness or cracking. Skin contact

Ingestion Ingestion may cause stomach discomfort.

Unknown acute toxicity Not Applicable.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Aliphatic polyol	= 15900 mg/kg (Rat)	No data available	No data available

Sensitization This product does not contain any components suspected to be sensitizing.

Mutagenic effects This product does not contain any known or suspected mutagens.

Carcinogenicity This product does not contain any known or suspected carcinogens.

This product does not contain any known or suspected reproductive hazards. Reproductive toxicity

Routes of exposure Inhalation. Skin contact. Eye contact.

Routes of entry Inhalation.

Specific target organ toxicity

(single exposure)

Specific target organ toxicity

(repeated exposure)

Not classified

Not classified.

Aspiration hazard Not Applicable.

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

This product is not considered toxic to algae.

Toxicity to fish

This product is not considered toxic to fish.

Toxicity to daphnia and other aquatic invertebrates

This product is not considered toxic to invertebrates.

Component	Toxicity to fish	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates
Aliphatic polyol	No information available	No information available	No information available

12.2 Persistence and degradability

Product is not biodegradable.

12.3 Bioaccumulative potential

The product does not contain any substances expected to be bioaccumulating.

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

Contaminated packaging

Dispose of in accordance with local regulations.

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Empty containers should be taken for local recycling, recovery or waste disposal.



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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: EWC waste disposal No: 07 07 99, 16 03 06

14. Transport information

14.1 UN Number

Not regulated

14.2 Proper shipping name

The product is not covered by international regulation on the transport of dangerous goods

14.3 Hazard class(es)

ADR/RID/ADN/ADG Hazard class
IMDG Hazard class
ICAO Hazard class/division

Not regulated
Not regulated

14.4 Packing group

ADR/RID/ADN/ADG Packing group

IMDG Packing group

ICAO Packing group

Not regulated
Not regulated
Not regulated

14.5 Environmental hazard

Nο

14.6 Special precautions

Not Applicable

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

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

No Poison Schedule number allocated.

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.

National Code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition [NOHSC: 2011 (2003)].

National Occupational Health and Safety Commission's Approved Criteria for Classifying Hazardous Substances [NOHSC:1008 (2004) 3rd Edition].



National Occupational Health and Safety Commission's Exposure Standards for Atmospheric Contaminants in the occupational Environment [NOHSC:1003 (1995)].

Safe Work Australia.

Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP).

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by road or rail.

International inventories

USA (TSCA)	Complies
European Union (EINECS and ELINCS)	Complies
Canada (DSL)	Complies
Philippines (PICCS)	Complies
Japan (ENCS)	Complies
China (IECSC)	Complies
Australia (AICS)	Complies
Korean (KECL)	Complies
New Zealand (NZIoC)	Complies

15.2 Chemical Safety Report

No information available

16. Other information

Prepared by Global Regulatory Compliance - Chemicals (GRC - Chemicals), Nicola Anderson

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Version 2

The following sections have been U

revised:

Updated according to GHS/CLP, No changes with regard to classification have been made.

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

This product is not classified as hazardous therefore no (H) hazard statements assigned.

Disclaimer

The information contained herein is considered in good faith as reliable of the date issued and is based upon on measurements, tests or data derived from supplier's own study or furnished by others. In providing this SDS information, Supplier makes no express or implied warranties as to the information or product; merchantability or fitness of purpose; any express or implied warranty; or non-infringement of intellectual property rights; and supplier assumes no responsibility for any direct, special or consequential damages, results obtained, or the activities of others. To the maximum extent permitted by law, supplier's warranty obligations and buyer's sole remedies are as stated in separate agreement between the parties.
