

**SAFETY DATA SHEET****A-300LW**

The safety data sheet is in accordance with Commission Regulation (EU) 2020/878 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

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

Date issued	26.02.2014
Revision date	13.07.2023

1.1. Product identifier

Product name	A-300LW
Synonyms	6311BJ

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

Use of the substance / mixture	Cement additive. Oil well cementing. Gas-migration prevention additive.
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1.3. Details of the supplier of the safety data sheet**Supplier**

Company name	Baker Hughes Norge AS
Office address	Kontinentalvegen 8
Postal address	Kontinentalvegen 8
Postcode	4056
City	TANANGER
Country	Norway
Telephone number	+47 51 71 75 00
Fax	+47 51 71 75 01
Email	BHNorwayHS&ETeam@bakerhughes.com
Website	www.bakerhughes.com

1.4. Emergency telephone number

Emergency telephone	Telephone number: +47 21 93 06 78 Description: CHEMTREC Nødtelefonnummer (NO)
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Telephone number: +47 22 59 13 00

Description: Giftinformasjonen

Telephone number: +47 51 69 46 24

Description: Beredskapstelefon

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Skin Sens. 1; H317

Substance / mixture hazardous
properties

May cause an allergic skin reaction.

2.2. Label elements

Hazard pictograms (CLP)



Composition on the label

2-Methylisothiazol-3(2H)-one

Signal word

Warning

Hazard statements

H317 May cause an allergic skin reaction.

Precautionary statements

P261 Avoid breathing vapours.
P362+P364 Take off contaminated clothing and wash it before reuse.
P280 Wear protective gloves.
P302+P352 IF ON SKIN: Wash with plenty of water / .
P333+P313 If skin irritation or rash occurs: Get medical advice / attention.
P501 Dispose of contents / container to an approved waste facility.

2.3. Other hazards

PBT / vPvB

The chemical contains no PBT or vPvB substances.

Health effect

This chemical contains a substance which may penetrate the skin.

Other hazards

None of the substances listed in section 3.2 are listed on ECHA's Endocrine
disruptor assessment list.

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Substance	Identification	Classification	Contents	Notes
Silicon dioxide, amorphous	CAS No.: 7631-86-9 EC No.: 215-545-4 REACH Reg. No.: 01-2119379499-16		≥ 25 ≤ 50 %	2
1,2-Ethanediol	CAS No.: 107-21-1 EC No.: 203-473-3	Acute Tox. 4; H302 STOT RE 2; H373	< 10 %	

	Index No.: 603-027-00-1		
	REACH Reg. No.: 01-2119456816-28		
2-Methylisothiazol-3(2H)-one	CAS No.: 2682-20-4	Acute Tox. 2; H330	< 0,1 %
	EC No.: 220-239-6	Acute Tox. 3; H311	
	Index No.: 613-326-00-9	Acute Tox. 3; H301	
		Skin Corr. 1B; H314	
		Eye Dam. 1; H318	
		Skin Sens. 1A; H317	
		Aquatic Acute 1; H400;	
		M-factor 10	
		Aquatic Chronic 1; H410;	
		M-factor 1	

²Substance with a workplace exposure limit

Remarks, substance	CAS No 2682-20-4 has specific concentration limits: Skin Sens. 1A; H317: C ≥ 0,0015 %
	For ATE-value(-s), see section 11.
Substance comments	See section 16 for explanation of hazard statements (H) listed above.

SECTION 4: First aid measures

4.1. Description of first aid measures

General	Emergency telephone number: see section 1.4. In case of unconsciousness or severe accidents, call 112.
Inhalation	Fresh air and rest. Get medical attention if any discomfort continues.
Skin contact	Remove contaminated clothing. Flush skin thoroughly with water. Wash skin with soap and water. Consult a doctor if symptoms should occur.
Eye contact	Promptly rinse eyes with plenty of water (tempered at 20-30°C) for at least 15 minutes. Remove contact lenses and open eyes wide apart. Get medical attention if any discomfort continues.
Ingestion	Rinse mouth with water. Drink small amounts of water. Do not induce vomiting. Get medical attention if any discomfort continues. Never give liquid to an unconscious person. In case of spontaneous vomiting, the head must be kept low to avoid that the stomach contents may enter the lungs.

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

Acute symptoms and effects	No symptoms are known or expected with normal use.
Delayed symptoms and effects	May cause sensitization by skin contact. Allergic skin reactions: symptoms may include redness, swelling, blistering and itching.

4.3. Indication of any immediate medical attention and special treatment needed

Other information	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. No specific information from the
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manufacturer.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Improper extinguishing media	Do not use water jet.

5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards	The chemical is not classified as flammable. Containers can burst violently when heated, due to excess pressure build-up.
Hazardous combustion products	May include, but is not limited to: Carbon monoxide (CO). Carbon dioxide (CO ₂). Metal oxides.

5.3. Advice for firefighters

Personal protective equipment	Use compressed air equipment when the chemical is involved in fire. In case of evacuation, an approved protection mask should be used. See also section 8.
Other information	Containers close to fire should be removed immediately or cooled with water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal protection measures	Provide adequate ventilation. Use protective equipment as referred to in section 8. Avoid inhalation of vapours and aerosol spray. Avoid contact with skin and eyes.
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6.2. Environmental precautions

Environmental precautionary measures	Do not allow to enter into sewer, water system or soil.
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6.3. Methods and material for containment and cleaning up

Clean up	Stop the leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Do not use sawdust or other combustible material. Collect in suitable containers and deliver as waste according to section 13.
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6.4. Reference to other sections

Other instructions	See also sections 7, 8 and 13.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling	Provide adequate ventilation. Use protective equipment as referred to in section 8. Avoid inhalation of vapours and aerosols and contact with skin and eyes. Persons susceptible to allergic reactions should not handle this product.
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Protective safety measures

Advice on general occupational hygiene

Do not eat, drink or smoke during work. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage

Store in tightly closed original container in a dry, cool and well-ventilated place. Keep upright.

Conditions for safe storage

Packaging compatibilities

Store in original container.

Advice on storage compatibility

Keep away from: Food and feed.

7.3. Specific end use(s)

Specific use(s)

See section 1.2.

SECTION 8: Exposure controls / personal protection

8.1. Control parameters

Substance	Identification	Exposure limits	TWA Year
Silica amorphous, respirable dust		Limit value (8 h) : 1,5 mg/m ³	
1,2-Ethanediol	CAS No.: 107-21-1	Limit value (8 h) : 20 ppm Limit value (8 h) : 52 mg/m ³ Limit value (short term) Value: 40 ppm Limit value (short term) Value: 104 mg/m ³ Exposure limit letter Letter code: H E S 5	

Control parameters comments

Explanation of the notations:
E = The EU has an indicative limit value and/or remark for the substance.
H = Chemicals that can be absorbed through the skin.
5) The occupational exposure limit is based on a calculation of the amount of gas and particulate (aerosol) of the substance.
S = The short-term exposure limit: the average concentration of a chemical substance in an employee's breathing zone that must not be exceeded over a given reference period. The reference period is 15 minutes unless otherwise specified.
References (laws/regulations):
Norwegian regulation on exposure limits: FOR-2011-12-06-1358 Forskrift om tiltaks- og grenseverdier (sist endret gjennom FOR-2023-03-24-412).

DNEL / PNEC

DNEL

Group: Professional
Route of exposure: Long-term inhalation (local)
Value: 35 mg/m³
Comments: Applies to CAS 107-21-1.

Group: Professional
 Route of exposure: Long-term dermal (systemic)
 Value: 106 mg/kg bw/day
 Comments: Applies to CAS 107-21-1.

8.2. Exposure controls

Precautionary measures to prevent exposure

Instruction on measures to prevent exposure

Reference is made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

Technical measures to prevent exposure

Provide adequate ventilation. The personal protective equipment must be CE-marked and the latest version of the standards shall be used. The protective equipment and the specified standards recommended below are only suggestions, and should be selected on advice from the supplier of such equipment.

A risk assessment of the work place/work activities (the actual risk) may lead to other control measures. The protection equipment's suitability and durability will depend on application.

Eye / face protection

Eye protection equipment

Description: Wear tight-fitting goggles or face shield.

Reference to relevant standard: EN 166 (Personal eye-protection. Specifications).

Additional eye protection measures

Eye wash facilities should be available at the work place. Either a fixed eye wash facility connected to the drinking water (preferably warm water) or a portable disposable unit.

Hand protection

Suitable gloves type

Polyvinyl chloride (PVC). Rubber gloves.

Breakthrough time

Value: > 8 hour(s)

Thickness of glove material

Comments: No specific information from the manufacturer.

Hand protection equipment

Description: Use protective gloves that are suitable for the application. Glove thickness must be chosen in consultation with the glove supplier, who can inform about the breakthrough time for the glove. The gloves abilities may vary among the different glove manufacturers.

Reference to relevant standard: EN ISO 374 (Protective gloves against chemicals and micro-organisms). EN 420 (Protective gloves - General requirements and test methods).

Additional hand protection measures

Replace gloves if signs of wear and tear. Gloves must only be worn on clean, dry hands.

Skin protection

Recommended protective clothing

Description: Wear appropriate protective clothing to protect against skin contact.

Additional skin protection measures

Emergency shower should be available at the workplace.

Respiratory protection

Recommended respiratory protection

Description: In case of inadequate ventilation or risk of inhalation of vapours, use suitable respiratory equipment with combination filter (type A2/P2).
Reference to relevant standard: EN 14387 (Respiratory protective devices. Gas filter(s) and combined filter(s). Requirements, testing, marking). EN 143 (Respiratory protective devices - Particle filters - Requirements, testing, marking).

Appropriate environmental exposure control

Environmental exposure controls Do not allow to enter into sewer, water system or soil.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Colour	Milky.
Odour	Odorless.
pH	Status: In delivery state Value: 9 - 10
Freezing point	Value: - 5 °C
Boiling point / boiling range	Value: 100 °C
Flash point	Comments: Not relevant.
Flammability	May be combustible at high temperature.
Explosion limit	Comments: Not specified by the manufacturer.
Vapour pressure	Value: 2,3 kPa Test reference: 17,5 mm Hg
Vapour density	Comments: Not specified by the manufacturer.
Particle characteristics	Comments: Not relevant.
Relative density	Value: 1,205 - 1,215 Temperature: 20 °C
Density	Comments: Not specified by the manufacturer.
Solubility	Medium: Water Comments: Not specified by the manufacturer.
Partition coefficient: n-octanol/ water	Comments: Not specified by the manufacturer.
Auto-ignition temperature	Comments: Not specified by the manufacturer.
Decomposition temperature	Comments: Not specified by the manufacturer.
Viscosity	Value: < 8 cSt Type: Kinematic

9.2. Other information

Other physical and chemical properties

Physical and chemical properties No further information is available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No test data available.

10.2. Chemical stability

Stability The chemical is stable under normal conditions of storage and use.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Under normal conditions of storage and use, no dangerous reactions will occur.

10.4. Conditions to avoid

Conditions to avoid Not specified by the manufacturer.

10.5. Incompatible materials

Materials to avoid Not specified by the manufacturer.

10.6. Hazardous decomposition products

Hazardous decomposition products None under normal conditions. See also section 5.2.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Effect tested: ATEmix calculated
Route of exposure: Oral
Value: 100 mg/kg
Comments: Applies to CAS: 2682-20-4.

Effect tested: ATEmix calculated
Route of exposure: Dermal
Value: 300 mg/kg
Comments: Applies to CAS: 2682-20-4.

Effect tested: ATEmix calculated
Route of exposure: Inhalation (vapour)
Value: 0,5 mg/l
Comments: Applies to CAS: 2682-20-4.

Route of exposure: Oral
Value: 500 mg/kg
Comments: Applies to CAS 107-21-1.

Other information regarding health hazards

Acute toxicity, mixture estimate Route of exposure: Oral

	Value: 8333,3 mg/kg Comments: ATEmix
Assessment of acute toxicity, classification	Based on available data, the classification criteria are not met.
Assessment of skin corrosion / irritation, classification	Based on available data, the classification criteria are not met.
Assessment of eye damage or irritation, classification	Based on available data, the classification criteria are not met.
Assessment of respiratory sensitisation, classification	Based on available data, the classification criteria are not met.
Assessment of skin sensitisation, classification	May cause an allergic skin reaction.
Assessment of germ cell mutagenicity, classification	Based on available data, the classification criteria are not met.
Assessment of carcinogenicity, classification	Based on available data, the classification criteria are not met.
Assessment of reproductive toxicity, classification	Based on available data, the classification criteria are not met.
Assessment of specific target organ toxicity - single exposure, classification	Based on available data, the classification criteria are not met.
Assessment of specific target organ toxicity - repeated exposure, classification	Based on available data, the classification criteria are not met.
Assessment of aspiration hazard, classification	Based on available data, the classification criteria are not met.

Symptoms of exposure

In case of ingestion	No specific information from the manufacturer.
In case of skin contact	Contains components which may penetrate the skin.
In case of inhalation	No specific information from the manufacturer.
In case of eye contact	No specific information from the manufacturer.

11.2 Other information

Endocrine disruption	None of the substances listed in section 3.2 are listed on ECHA's Endocrine disruptor assessment list.
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SECTION 12: Ecological information

12.1. Toxicity

Aquatic toxicity, fish	Toxicity type: Acute Value: 8050000 µg/l Effect dose concentration: LC50 Exposure time: 96 hour(s) Species: Pimephales promelas Comments: Applies to CAS 107-21-1. Fresh water
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Aquatic toxicity, crustacean

Value: 2,38 - 4,9
 Effect dose concentration: NOEC
 Exposure time: 3,267 month(s)
 Comments: Applies to CAS: 2682-20-4. (Literature value)

Toxicity type: Acute
 Value: 100000 µg/l
 Effect dose concentration: LC50
 Exposure time: 48 hour(s)
 Species: Crangon crangon
 Comments: Applies to CAS 107-21-1. Marine water

Toxicity type: Acute
 Value: 10000000 µg/l
 Effect dose concentration: LC50
 Exposure time: 48 hour(s)
 Species: Daphnia magna
 Comments: Applies to CAS 107-21-1. Fresh water.

Ecotoxicity

The chemical is not classified as harmful to the environment.

12.2. Persistence and degradabilityPersistence and degradability
description/evaluation

There are no data available on the chemical itself.

Biodegradability

Comments: Not biodegradable. Applies to CAS: 2682-20-4.
 On basis of test data.

12.3. Bioaccumulative potential

Bioaccumulation, evaluation

Information on bioaccumulation is not available for the chemical.

Bioaccumulation, comments

Log Pow = -1,36. Low potential for bioaccumulation. Applies to CAS 107-21-1.
 CAS: 2682-20-4 Relevant data are missing.

12.4. Mobility in soil

Mobility

No specific information from the manufacturer.

12.5. Results of PBT and vPvB assessmentResults of PBT and vPvB
assessment

The chemical contains no PBT or vPvB substances.

12.6. Endocrine disrupting properties

Endocrine disrupting properties

None of the substances listed in section 3.2 are listed on ECHA's Endocrine disruptor assessment list.

12.7. Other adverse effects

Additional ecological information

Do not allow to enter into sewer, water system or soil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate methods of disposal for the chemical	Dispose of on site landfill area. The waste code (EWC-Code) is intended as a guide. The user must select a code if the use differs from the one mentioned below.
EWC waste code	EWC waste code: 061399 wastes not otherwise specified Classified as hazardous waste: No
Other information	Do not empty into drains.

SECTION 14: Transport information

Dangerous goods	No
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14.1. UN number

Comments	Not considered as dangerous goods under UN, IMO, ADR/RID or IATA/ICAO regulations.
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14.2. UN proper shipping name

Comments	Not relevant.
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14.3. Transport hazard class(es)

Comments	Not relevant.
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14.4. Packing group

Comments	Not relevant.
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14.5. Environmental hazards

IMDG Marine pollutant	No
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14.6. Special precautions for user

Special safety precautions for user	Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.
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14.7. Maritime transport in bulk according to IMO instruments

Transport in bulk (yes/no)	No
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SECTION 15: Regulatory information

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

References (laws/regulations)	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP-regulation) with later amendments. Regulation (EC) No 1907/2006 on the registration, evaluation, authorization and restriction of chemicals (REACH Regulation), with later amendments.
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Norwegian regulation on waste, 01.06.2004 no. 930, with later amendments.
Norwegian regulation on dangerous goods: FOR 2009-04-01 nr 384: Forskrift om landtransport av farlig gods med senere endringer, Direktoratet for samfunnssikkerhet og beredskap.

Comments

Contains no substances listed on the candidate list (REACH). This mixture does not meet the criteria for the restriction.

15.2. Chemical safety assessment

Chemical safety assessment performed

No

SECTION 16: Other information

Supplier's notes

The information contained in this SDS must be made available to all those who handle the product.

List of relevant H-phrases (Section 2 and 3)

H301 Toxic if swallowed.
H302 Harmful if swallowed.
H311 Toxic in contact with skin.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H330 Fatal if inhaled.
H373 May cause damage to organs through prolonged or repeated exposure
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

CLP classification, comments

Calculation method.

Key literature references and sources for data

Suppliers Safety data sheet dated: 04.07.2023

Abbreviations and acronyms used

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ATE: Acute Toxicity Estimate
EWC: European Waste Code (a code from the EU's common classification system for waste)
IATA: The International Air Transport Association
ICAO: The International Civil Aviation Organisation
IMDG: The International Maritime Dangerous Goods Code
IMO: International Maritime Organization
LC50: Median concentration lethal to 50% of a test population.
NOEC: No observed effect concentration
PBT: Persistent, Bioaccumulative and Toxic
RID: The Regulations concerning the International Carriage of Dangerous Goods by Rail
UN: United Nations
vPvB: very Persistent and very Bioaccumulative

Information added, deleted or revised

Sections being revised since previous version: 1-4, 6-12, 16.

Checking quality of information

This SDS is quality controlled by Kiwa Kompetanse AS in Norway, certified according to the Quality Management System requirements specified in ISO

	9001:2015.
Version	6
Prepared by	Kiwa Kompetanse AS, OBH