

Trade name: Lubricant for joining FLOWTITE® GRP pipes

Not Classified as Hazardous According to criteria of NOHSC Australia

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

1.1 Product identifier

Trade name: Lubricant for joining FLOWTITE® GRP pipes

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

Relevant identified uses:

Lubricant

Release agent

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

RPC Pipe Systems

11 Christie Rd

Lonsdale, 5160, South Australia

Phone +61 8 8329 1111

Fax +61 8 8329 1122

Email: enquiries@rpcpipesystems.com

http://www.rpcpipesystems.com

1.4 Emergency telephone number: +61 4 5856 5050

SECTION 2: Hazards identification

2.1 Risk Phrases

R22 Harmful if swallowed.

R38 Irritating to skin.

R41 Risk of serious damage to eyes.

2.2 Hazard Classification None Allocated

2.3 ADG Classification Classified as Non Hazardous for transport by road or rail according to the Australian Code for the Transport of Dangerous Goods by Road and Rail

2.4 Poisons Schedule N/A

2.5 Hazchem Code N/A

* SECTION 3: Composition/information on ingredients

3.1 Mixture

Description: Mixture of the substances listed below with harmless additions.

Dangerous components:

CAS: 68411-30-3 Benzenesulfonic acid, C10-13-alkyl derivatives, sodium salts Xn R22; Xi R38-41 < 5.0%

CAS: 61827-42-7 Polymer Isotridecylalcohol, etoxylated Xn R22; Xi R41 < 1.0%

SECTION 4: First aid measures

4.1 Description of first aid measures

General information Instantly remove any clothing soiled by the product.

After inhalation Supply fresh air.

After skin contact Rinse with warm water.

After eye contact Rinse opened eye for several minutes under running water. Then consult doctor.

After swallowing Seek medical treatment.

4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Fire fighting measures

5.1 Extinguishing media

Suitable extinguishing agents

CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

For safety reasons unsuitable extinguishing agents Water with a full water jet.

5.2 Special hazards arising from the substance or mixture Carbon monoxide (CO) and carbon dioxide (CO₂)

5.3 Advice for fire fighters

Protective equipment:

Do not inhale explosion gases or combustion gases.

Wear self-contained breathing apparatus.

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

Particular danger of slipping on leaked/spilled product.

6.2 Environmental precautions: Do not allow to enter drainage system, surface or ground water.**6.3 Methods and material for containment and cleaning up:**

Collect mechanically.

Dispose of the material collected according to regulations.

6.4 Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

SECTION 7: Handling and storage**7.1 Precautions for safe handling** No special measures required.**Information about protection against explosions and fires:** No special measures required.**7.2 Conditions for safe storage, including any incompatibilities****Storage****Requirements to be met by storerooms and containers:** Store only in the original container.**Information about storage in one common storage facility:** Not required.**Further information about storage conditions:**

Keep container tightly sealed.

Protect from frost.

Recommended storage temperature: room temperature**7.3 Specific end use(s)** No further relevant information available.**SECTION 8: Exposure controls/personal protection****Additional information about design of technical systems:** No further data; see item 7.**8.1 Control parameters****Components with critical values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

8.2 Exposure controls**Personal protective equipment****General protective and hygienic measures**

The usual precautionary measures should be adhered to when handling the lubricant.

Breathing equipment: Not required.**Protection of hands:**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Protective gloves.

Material of gloves Nitrile rubber, NBR**Penetration time of glove material**

The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Not suitable are gloves made of the following materials:

Leather gloves

Strong gloves

Eye protection: Safety glasses**Body protection:** Protective work clothing.**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties****General Information****Appearance:****Form:** Paste**Colour:** Whitish**Smell:** Characteristic**pH-value (50 g/l) at 20 °C:** 9.0 (CB-A-025)

acc.to DIN 51369

Change in condition

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Melting point/Melting range: Not determined
Boiling point/Boiling range: Not determined
Flash point: Not applicable
Inflammability (solid, gaseous) Not determined
Ignition temperature: Not determined
Danger of explosion: Not determined
Density Not determined
Solubility in / Miscibility with Water: insoluble
Viscosity:
kinematic: Not applicable
9.2 Other information No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity
10.2 Chemical stability
Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
10.3 Possibility of hazardous reactions None in case of appropriate storage, handling and transport
10.4 Conditions to avoid No further relevant information available.
10.5 Incompatible materials: No further relevant information available.
10.6 Hazardous decomposition products: None in case of appropriate storage/handling/transport.

SECTION 11: Toxicological information

11.1 Information on toxicological effects
Acute toxicity:
Primary irritant effect:
on the skin: No irritant effect.
on the eye: light irritation possible

SECTION 12: Ecological information

12.1 Toxicity
Aquatic toxicity: No further relevant information available.
12.2 Persistence and degradability No further relevant information available.
12.3 Bioaccumulative potential No further relevant information available.
12.4 Mobility in soil No further relevant information available.
12.5 Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.
12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

Disposal of the spilled or waste product must be done in accordance with applicable local state and federal government recommendations.

SECTION 14: Transport information

This product is not classified as a Dangerous Good, according to the Australian Code for the Transport of Dangerous Goods by Road and Rail

14.1 UN-Number None Allocated
14.2 UN proper shipping name Soap based lubricant
14.3 DG Class None Allocated
14.4 Hazchem Group None Allocated
14.5 Packing Group None Allocated

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
National regulations
Water hazard class: Water hazard class 2 (Self-assessment): hazardous for water.
15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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*** SECTION 16: Other information**

This data is based on our present knowledge. However, it shall not constitute a guarantee for any specific product features

and shall not establish a legally valid contractual relationship.

Relevant phrases

R22 Harmful if swallowed.

R38 Irritating to skin.

R41 Risk of serious damage to eyes.

Department issuing data specification sheet: product safety department

Contact: enquiries@rpcpipesystems.com

FINAL REPORT

Report ID : 142592

Report Information

Submitting Organisation : 00120137 : RPC Pipe Systems Pty Ltd
Account : 140563 : RPC Pipe Systems Pty Ltd
AWQC Reference : 140563-2014-CSR-1 : Prod Test: Pipe Jointing Lubricant
Project Reference : PT-2363
Product Designation : Neutrex - Plastic Pipe Lubricant
Composition of Product : Cream/Paste Lubricant.
Product Manufacturer : Kuhbier Lubrication + Packaging GmbH & Co. KG., GERMANY.
Use of Product : In-Line Applications/Pipe Jointing Lubricant.
Sample Selection: As provided by the submitting organisation.
Testing Requested : **AS/NZS 4020:2005 TESTING OF PRODUCTS FOR USE IN CONTACT WITH DRINKING WATER**
Product Type : Composite
Samples : Samples were prepared and controlled as described in Appendix A of AS/NZS 4020:2005
Extracts : Extracts were prepared as described in Appendix C, D, E, F, G, H.
Project Completion Date : 31-Jul-2014
Project Comment : The results presented herein demonstrate compliance of Neutrex - Plastic Pipe Lubricant to AS/NZS 4020 when tested an an exposure of 1000 mm²/L at 20°C ± 2°C.

PLEASE NOTE THAT THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL

THE RESULTS STATED IN THIS REPORT RELATE TO THE SAMPLE OF THE PRODUCT SUBMITTED FOR TESTING. ANY CHANGES IN THE MATERIAL FORMULATION, PROCESS OF MANUFACTURE, THE METHOD OF APPLICATION, OR THE SURFACE AREA-TO-VOLUME RATIO IN THE END USE, COULD AFFECT THE SUITABILITY OF THE PRODUCT FOR USE IN CONTACT WITH DRINKING WATER



Michael Glasson
APPROVED SIGNATORY



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Summary of Results

APPENDIX	RESULTS
C – Taste of Water Extract	Passed at an exposure of 1000 mm ² per Litre.
D – Appearance of Water Extract	Passed at an exposure of 2500 mm ² per Litre.
E – Growth of Aquatic Micro-organisms	Passed at an exposure of 2500 mm ² per Litre.
F – Cytotoxic Activity of Water Extract	Passed at an exposure of 1000 mm ² per Litre.
G – Mutagenic Activity of Water Extract	Passed at an exposure of 2500 mm ² per Litre.
H – Extraction of Metals	Passed at an exposure of 2500 mm ² per Litre.

Test Methods

Test(s) in Appendix	AWQC Test Method	Reference Method
C	T0320-01	AS/NZS 4020:2005
D	TO029-01 & TO018-01	APHA 2130b
E	TO014-03	APHA 4500 O C
F	TM-001	AS/NZS 4020:2005
G	TM-002	AS/NZS 4020:2005
H	TIC-006	EPA 200.8

Summary Comment : Not applicable.

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CLAUSE 6.2 Taste of Water Extract

Sample Description	The sample was applied upon a glass substrate with dimensions 25 mm x 100 mm providing a surface area of approximately 1000 mm ² per Litre. Extracts were prepared using 2500 mL volumes of 50 mg/L hardness water.
Extraction Temperature	20°C ± 2°C.
Test Method	Taste of Water Extract (Appendix C)
Test Information	
Scaling Factor	Not applied.
Results	Not detected.
Evaluation	The product passed the requirements of clause 6.2 when tested at an exposure of 1000 mm ² per Litre.
Number of Samples	2.
Test Comment	Not applicable.



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CLAUSE 6.3 Appearance of Water Extract

Sample Description The sample was applied upon a glass substrate with dimensions 25 mm x 100 mm providing a surface area of approximately 2500 mm² per Litre. Extracts were prepared using 1000 mL volumes of 50 mg/L hardness water.

Extraction Temperature 20°C ± 2°C.

Test Method Appearance of Water Extract (Appendix D)

Scaling Factor Not applied.

Results

	<u>Test (- Blank)</u>	<u>Maximum Allowed</u>	<u>Units</u>
Colour	<1	5	HU
Turbidity	0.1	0.5	NTU

Evaluation The product passed the requirements of clause 6.3 when tested at an exposure of 2500 mm² per Litre.

Number of Samples 1.

Test Comment Not applicable.



Andrew Ford
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CLAUSE 6.4 Growth of Aquatic Micro-organisms

Sample Description The sample was applied upon a glass substrate with dimensions 25 mm x 100 mm providing a surface area of approximately 2500 mm² per Litre. Extracts were prepared using 1000 mL volumes of test water.

Test Method Growth of Aquatic Micro-organisms (Appendix E)

Inoculum The volume of the inoculum was 100 mL

Scaling Factor Not applied.

Results			
	Mean Dissolved Oxygen	Control	7.4 mg/L
	Mean Dissolved Oxygen Difference	Positive Reference	4.4 mg/L
		Negative Reference	<0.1 mg/L
		Test	0.10 mg/L

Evaluation The product passed the requirements of clause 6.4 when tested at an exposure of 2500 mm² per Litre.

Number of Samples 1.

Test Comment Not applicable.



Thuy Diep
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CLAUSE 6.5 Cytotoxic Activity of Water Extract

Sample Description The sample was applied upon a glass substrate with dimensions 25 mm x 100 mm providing a surface area of approximately 1000 mm² per Litre. Extracts were prepared using 2500 mL volumes of 50 mg/L hardness water.

Extraction Temperature 20°C ± 2°C.

Test Method Cytotoxic Activity of Water Extract (Appendix F)

Scaling Factor Not applied. Cytotoxic when tested at an exposure of 2500 mm²/L

Results Non-cytotoxic.

Evaluation The product passed the requirements of clause 6.5 when tested at an exposure of 1000 mm² per Litre.

Number of Samples 2.

Test Comment The test extracts and blank extracts were used to prepare nutrient growth medium and subsequently used to grow a cell line (ATCC Number CCL 81) in the analysis. In addition zinc sulphate (0.4 mmol) was used for the positive control in the analysis.



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CLAUSE 6.6 Mutagenic Activity of Water Extract

Sample Description The sample was applied upon a glass substrate with dimensions 25 mm x 100 mm providing a surface area of approximately 2500 mm² per Litre. Extracts were prepared using 1000 mL volumes of 50 mg/L hardness water.

Extraction Temperature 20°C ± 2°C.

Test Method Mutagenic Activity of Water Extract (Appendix G)

Scaling Factor Not applied.

Results

	<u>Bacteria Strain</u>		<u>Number of Revertants per Plate</u>			
	S9	Blank	Sample Extract	Positive Controls		
<i>Salmonella typhimurium</i> TA98	-	29, 26, 26	25, 27, 19	2036, 1890, 1839		<u>NPD</u> (20µg)
Mean ± Standard deviation		27.0 ± 1.7	23.7 ± 4.2	1921.7 ± 102.2		
	+	18, 25, 19	25, 21, 17	1568, 1824, 2427		<u>2-AF</u> (20µg)
Mean ± Standard deviation		20.7 ± 3.8	21.0 ± 4.0	1939.7 ± 441.0		
<i>Salmonella typhimurium</i> TA100	-	269, 285, 295	288, 271, 243	991, 897, 881		<u>Azide</u> (1.0µg)
Mean ± Standard deviation		283.0 ± 13.1	267.3 ± 22.7	923.0 ± 59.4		
	+	154, 209, 190	154, 198, 165	1909, 2065, 1870		<u>2-AF</u> (20µg)
Mean ± Standard deviation		184.3 ± 27.9	172.3 ± 22.9	1948.0 ± 103.2		
<i>Salmonella typhimurium</i> TA102	-	529, 592, 582	482, 508, 532	2872, 2920, 2736		<u>Mitomycin C</u> (10µg)
Mean ± Standard deviation		567.7 ± 33.9	507.3 ± 25.0	2842.7 ± 95.4		
	+	521, 479, 612	517, 479, 566			
Mean ± Standard deviation		537.3 ± 68.0	520.7 ± 43.6			

Comments S9 was used as a metabolic activator. NPD (4-nitro-o-phenylenediamine), Azide, and Mitomycin C are specific positive controls for strains TA98, TA100 and TA102 respectively while 2 - AF (2-aminofluorene) when used in conjunction with S9 is a positive control for both TA98 and TA100

Evaluation The product passed the requirements of clause 6.6 when tested at an exposure of 2500 mm² per Litre.

Number of Samples 1.

Test Comment Not applicable.



Peter Christopoulos
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CLAUSE 6.7 Extraction of Metals

Sample Description The sample was applied upon a glass substrate with dimensions 25 mm x 100 mm providing a surface area of approximately 2500 mm² per Litre. Extracts were prepared using 1000 mL volumes of 50 mg/L hardness water.

Extraction Temperature 20°C ± 2°C.

Test Method Extraction of Metals (Appendix H)

Scaling Factor Not applied.

Method of Analysis All methods used to determine concentrations of metals are based on those described in the 21st edition of Standard Methods for the Examination of Water and Wastewater published by the APHA, AWWA and WEF (2005). The methods have been adapted for the instrumentation in use at the Australian Water Quality Centre.

Concentration of the metals described in Table 2 of the AS/NZS 4020:2005 are determined as follows:

Antimony, Arsenic, Barium, Cadmium, Chromium, Copper, Lead, Mercury, Molybdenum, Nickel, Selenium and Silver by Inductively Coupled Plasma Mass Spectrometry.

Results	Limit of Reporting mg/L	Blank mg/L	Test 1 mg/L	Test 2 mg/L	Max Allowed mg/L
Final Extract					
Antimony	0.0005	<0.0005	<0.0005	<0.0005	0.003
Arsenic	0.0003	<0.0003	<0.0003	<0.0003	0.007
Barium	0.0005	<0.0005	<0.0005	<0.0005	0.7
Cadmium	0.0001	0.0003	<0.0001	<0.0001	0.002
Chromium	0.0001	<0.0001	<0.0001	<0.0001	0.05
Copper	0.0001	<0.0001	<0.0001	<0.0001	2.0
Lead	0.0001	<0.0001	<0.0001	0.0004	0.01
Mercury	0.00003	<0.00003	<0.00003	<0.00003	0.001
Molybdenum	0.0001	<0.0001	<0.0001	<0.0001	0.05
Nickel	0.0001	<0.0001	<0.0001	<0.0001	0.02
Selenium	0.0001	<0.0001	<0.0001	<0.0001	0.01
Silver	0.00003	<0.00003	<0.00003	<0.00003	0.1

Evaluation The product passed the requirements of clause 6.7 when tested at an exposure of 2500 mm² per Litre.

Number of Samples 1.

Test Comment Not applicable.



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