

PURABYK-R 5531

Version 3.1
SDS_AU

Revision Date: 16.04.2026

Date of last issue: 15.01.2025
Print Date 22.04.2026

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : PURABYK-R 5531
Product code : 000000000000121785

Manufacturer or supplier's details

Company : BYK-Chemie GmbH
Address : Abelstrasse 45
46483 Wesel
Telephone : +49 281 670-23532
Telefax : +49 281 670-23533
E-mail address : GHS.BYK@altana.com
Emergency telephone number : 18000 74234 (toll –free number, access from Australia only)
+61 2 8014 4558

Importer

Company : Alchemy Agencies Pty Ltd
Level 15, 28 Freshwater Place
Southbank, Victoria, Australia 3006
Tel: +61 3 9116 6359

Use of the Sub-
stance/Mixture : Rheology Additive

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Skin sensitisation : Category 1

GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : H317 May cause an allergic skin reaction.

Precautionary statements : **Prevention:**
P261 Avoid breathing mist or vapours.
P272 Contaminated work clothing should not be allowed out of the workplace.

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P280 Wear protective gloves.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of water.

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

P362 + P364 Take off contaminated clothing and wash it before reuse.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards which do not result in classification

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture
Chemical nature : Solution of a modified urea

Components

Chemical name	CAS-No.	Concentration (% w/w)
4-morpholinecarbaldehyde	4394-85-8	>= 50 -<= 100
lithium chloride	7447-41-8	>= 1 -< 3

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.

If inhaled : If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.

In case of skin contact : If on skin, rinse well with water.

In case of eye contact : Flush eyes with water as a precaution.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.

Most important symptoms and effects, both acute and delayed : No information available.
May cause an allergic skin reaction.

Notes to physician : No information available.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Foam

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Unsuitable extinguishing media	: Carbon dioxide (CO ₂) Dry chemical High volume water jet
Hazardous combustion products	: Carbon oxides Nitrogen oxides (NO _x) Halogenated compounds Metal oxides Hydrogen chloride Hydrogen cyanide (hydrocyanic acid)
Specific extinguishing methods	: Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Special protective equipment for firefighters	: Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Use personal protective equipment.
Environmental precautions	: Prevent product from entering drains. Prevent further leakage or spillage if safe to do so.
Methods and materials for containment and cleaning up	: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion	: Normal measures for preventive fire protection.
Advice on safe handling	: Do not breathe vapours/dust. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Dispose of rinse water in accordance with local and national regulations. Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.
Hygiene measures	: Wash hands before breaks and at the end of workday.
Conditions for safe storage	: Keep container tightly closed in a dry and well-ventilated place. Electrical installations / working materials must comply with the technological safety standards.
Further information on storage stability	: No decomposition if stored and applied as directed.

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SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

Personal protective equipment

Hand protection

Material : Nitrile rubber
Break through time : > 480 minRemarks : Wear suitable gloves.
Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles
Skin and body protection : Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIESAppearance : liquid
Colour : yellow - brown
Odour : characteristic
Odour Threshold : No data available
pH : 6 (20 °C)
Concentration: 10 %
Method: Universal pH-value indicator
Melting point/ range : ca. < 0 °C
Method: derived
Boiling point/boiling range : ca. 244 °C
Method: derived
Flash point : 126 °C
Method: 49 (Pensky-Martens)
Evaporation rate : No data available
Upper explosion limit / Upper flammability limit : No data available
Lower explosion limit / Lower flammability limit : No data available
Vapour pressure : ca. 1 hPa (20 °C)
Method: derived
Relative vapour density : No data available

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Relative density	:	No data available
Density	:	ca. 1.18 g/cm ³ (20 °C, 1,013 hPa) Method: 4 (20°C oscillating U-tube)
Solubility(ies)	:	
Water solubility	:	partly miscible
Solubility in other solvents	:	No data available
Auto-ignition temperature	:	> 200 °C Method: M0062 (Analytics Wesel)
Decomposition temperature	:	No data available
Viscosity	:	
Viscosity, dynamic	:	ca. 1,024 mPa.s (20 °C) Method: P/K 20°C
Viscosity, kinematic	:	No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No decomposition if stored and applied as directed.
Chemical stability	:	No decomposition if stored and applied as directed.
Possibility of hazardous reactions	:	No decomposition if stored and applied as directed.
Conditions to avoid	:	Heat, flames and sparks.
Incompatible materials	:	Strong oxidizing agents Acids Bases
Hazardous decomposition products	:	No decomposition if stored and applied as directed.

SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity**

Not classified due to lack of data.

Product:Acute oral toxicity : Acute toxicity estimate: > 2,000 mg/kg
Method: Calculation method**Components:****4-morpholinecarbaldehyde:**

Acute oral toxicity : LD50 (Rat): > 7,360 mg/kg

Acute dermal toxicity : LD50 (Rabbit): > 18,400 mg/kg
Method: OECD Test Guideline 402**lithium chloride:**

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Acute oral toxicity : LD50 (Rat): 526 mg/kg
GLP: No information available.

Acute inhalation toxicity : LC50 (Rat): > 5.57 mg/l
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
GLP: yes

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg
Method: OECD Test Guideline 402
GLP: yes

Skin corrosion/irritation

Not classified due to lack of data.

Product:

Remarks : May cause skin irritation and/or dermatitis.

Serious eye damage/eye irritation

Not classified due to lack of data.

Product:

Remarks : Vapours may cause irritation to the eyes, respiratory system and the skin.

Components:

lithium chloride:

Species : Rabbit
Result : Severe eye irritation
Method : OECD Test Guideline 405
GLP : yes

Respiratory or skin sensitisation

Skin sensitisation

May cause an allergic skin reaction.

Respiratory sensitisation

Not classified due to lack of data.

Product:

Remarks : Causes sensitisation.

Components:

lithium chloride:

Test Type : Buehler Test
Exposure routes : Skin contact
Species : Guinea pig
Method : OECD Test Guideline 406
Result : Did not cause sensitisation on laboratory animals.
GLP : yes

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Chronic toxicity

Germ cell mutagenicity

Not classified due to lack of data.

Product:

Genotoxicity in vitro : Remarks: No data available

Genotoxicity in vivo : Result: No data available

Carcinogenicity

Not classified due to lack of data.

Product:

Remarks : No data available

Reproductive toxicity

Not classified due to lack of data.

Product:

Effects on fertility : Remarks: No data available

Effects on foetal development : Remarks: No data available

STOT - single exposure

Not classified due to lack of data.

Product:

Remarks : No data available

STOT - repeated exposure

Not classified due to lack of data.

Product:

Remarks : No data available

Repeated dose toxicity

Product:

Remarks : No data available

Aspiration toxicity

Not classified due to lack of data.

Product:

No data available

Further information

Product:

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Remarks : No data available

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Product:**Toxicity to fish :
Remarks: No data availableToxicity to daphnia and other :
aquatic invertebrates Remarks: No data available**Components:****4-morpholinecarbaldehyde:**Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): > 500 mg/l
Exposure time: 96 h
Method: DIN 38412Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): > 500 mg/l
aquatic invertebrates Exposure time: 48 hToxicity to algae/aquatic : EC50 (Scenedesmus subspicatus): 23,880 mg/l
plants Exposure time: 72 hEC10 (Scenedesmus subspicatus): 17,040 mg/l
Exposure time: 72 h**lithium chloride:**Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 158 mg/l
Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 203
GLP: yesToxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 249 mg/l
aquatic invertebrates Exposure time: 48 h
Method: OECD Test Guideline 202
GLP: yesNOEC (Daphnia magna (Water flea)): 63.4 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
GLP: yesToxicity to algae/aquatic : (Desmodesmus subspicatus (green algae)): > 400 mg/l
plants Exposure time: 72 h
Method: OECD Test Guideline 201
GLP: yes

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Biodegradability : Remarks: No data available

Components:**4-morpholinecarbaldehyde:**Biodegradability : Result: Readily biodegradable.
Method: OECD Test Guideline 301A
GLP: yes**Bioaccumulative potential****Product:**

Bioaccumulation : Remarks: No data available

Components:**4-morpholinecarbaldehyde:**Bioaccumulation : Species: Cyprinus carpio (Carp)
Bioconcentration factor (BCF): < 1.9
Exposure time: 56 d
Method: OECD Test Guideline 305C**Mobility in soil**

No data available

Other adverse effects**Product:**

Additional ecological information : No data available

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**Waste from residues : Do not dispose of waste into sewer.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.
Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION**International Regulations****UNRTDG**UN number : Not applicable
Proper shipping name : Not applicable

SAFETY DATA SHEET



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Class : Not applicable
Subsidiary risk : Not applicable
Packing group : Not applicable
Labels : Not applicable

IATA-DGR

UN/ID No. : Not applicable
Proper shipping name : Not applicable
Class : Not applicable
Subsidiary risk : Not applicable
Packing group : Not applicable
Labels : Not applicable
Packing instruction (cargo aircraft) : Not applicable
Packing instruction (passenger aircraft) : Not applicable

IMDG-Code

UN number : Not applicable
Proper shipping name : Not applicable
Class : Not applicable
Subsidiary risk : Not applicable
Packing group : Not applicable
Labels : Not applicable
EmS Code : Not applicable
Marine pollutant : Not applicable

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

Not applicable for product as supplied.

National Regulations

ADG

UN number : Not applicable
Proper shipping name : Not applicable
Class : Not applicable
Subsidiary risk : Not applicable
Packing group : Not applicable
Labels : Not applicable
Hazchem Code : Not applicable

Special precautions for user

Not applicable

SECTION 15. REGULATORY INFORMATION

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

SECTION 16. OTHER INFORMATION

Revision Date : 16.04.2026
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Full text of other abbreviations

AllC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonised System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organisation; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardisation; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MERCOSUR - The Agreement for the Facilitation of the Transport of Dangerous Goods; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organisation for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

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.

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