according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - SE



ALTEMP Q NB 50

Version Revision Date: Date of last issue: 2023-06-23 Print Date: 2024-

1.14 2024-06-28 Date of first issue: 2015-07-06 06-28

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

1.1 Product identifier

Product name : ALTEMP Q NB 50

Article-No. : 005011

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

Use of the : Grease

Substance/Mixture

Recommended restrictions

on use

Restricted to professional users.

1.3 Details of the supplier of the safety data sheet

Company : Klüber Lubrication München GmbH & Co. KG

Geisenhausenerstr. 7 81379 München Deutschland

Tel.: +49 (0) 89 7876 0 Fax: +49 (0) 89 7876 333

info@klueber.com

E-mail address of person

responsible for the SDS

mcm@klueber.com

National contact : Klüber Lubrication Nordic A/S

Vasagatan 36 111 20 Stockholm

Sweden

Tel: +46 8 59098600 Fax: +46 8 59098601 klueber.se@klueber.com

1.4 Emergency telephone number

Emergency telephone

number

112 - ask for poison information

+49 89 7876 700 (24 hrs)

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - SE



ALTEMP Q NB 50

Version Revision Date: Date of last issue: 2023-06-23 Print Date: 2024-

1.14 2024-06-28 Date of first issue: 2015-07-06 06-28

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Short-term (acute) aquatic hazard, H400: Very toxic to aquatic life.

Category 1

Long-term (chronic) aquatic hazard, H410: Very toxic to aquatic life with long lasting

Category 1 effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :

¥2>

Signal word : Warning

Hazard statements : H410 Very toxic to aquatic life with long lasting

effects.

Precautionary statements : Prevention:

P273 Avoid release to the environment.

Response:

P391 Collect spillage.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - SE $\,$



ALTEMP Q NB 50

Version Revision Date: Date of last issue: 2023-06-23 Print Date: 2024-

1.14 2024-06-28 Date of first issue: 2015-07-06 06-28

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : solid lubricant

Mineral oil.

barium complex soap

Components

Components		_			
Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	specific concentration limit M-Factor Notes Acute toxicity estimate	Concentration (% w/w)	
trizinc bis(orthophosphate)	7779-90-0 231-944-3 030-011-00-6 01-2119485044-40- XXXX	Aquatic Acute1; H400 Aquatic Chronic1; H410	M-Factor: 1/1	>= 30 - < 50	
barium salts	1282612-27-4 433-080-4 056-002-00-7 01-0000017924-63- 0001	Acute Tox.4; H302 Acute Tox.4; H332	Note A, Note 1	>= 10 - < 20	
zinc oxide	1314-13-2 215-222-5 030-013-00-7 01-2119463881-32- XXXX	Aquatic Acute1; H400 Aquatic Chronic1; H410	M-Factor: 1/1	>= 2,5 - < 10	
Substances with a workplace exposure limit :					
White mineral oil (petroleum)	8042-47-5 232-455-8 01-2119487078-27- XXXX	Not classified		>= 10 - < 20	
Distillates (petroleum), solvent-dewaxed heavy paraffinic;	64742-65-0 265-169-7	Not classified	Note L	>= 10 - < 20	



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - SE



ALTEMP Q NB 50

Date of last issue: 2023-06-23 Print Date: 2024-Version Revision Date:

Date of first issue: 2015-07-06 1.14 2024-06-28 06-28

Baseoil — unspecified	649-474-00-6 01-2119471299-27- XXXX			
Distillates (petroleum), hydrotreated light naphthenic; Baseoil — unspecified	64742-53-6 265-156-6 649-466-00-2	Not classified	Note L	>= 1 - < 10

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

If inhaled Remove person to fresh air. If signs/symptoms continue, get

medical attention.

Keep patient warm and at rest.

If unconscious, place in recovery position and seek medical

advice.

Keep respiratory tract clear.

If breathing is irregular or stopped, administer artificial

respiration.

In case of skin contact Take off all contaminated clothing immediately.

Wash off immediately with soap and plenty of water.

Get medical attention immediately if irritation develops and

persists.

Wash clothing before reuse.

Thoroughly clean shoes before reuse.

In case of eye contact Rinse immediately with plenty of water, also under the eyelids,

for at least 10 minutes.

If eye irritation persists, consult a specialist.

If swallowed Move the victim to fresh air.

If unconscious, place in recovery position and seek medical

advice.

Keep respiratory tract clear.

Do not induce vomiting without medical advice.

Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms No symptoms known or expected.

Risks None known.



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - SE



ALTEMP Q NB 50

Version Revision Date: Date of last issue: 2023-06-23 Print Date: 2024-

1.14 2024-06-28 Date of first issue: 2015-07-06 06-28

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or

carbon dioxide.

Unsuitable extinguishing

media

High volume water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion : Carbon oxides

products Oxides of phosphorus

Metal oxides

5.3 Advice for firefighters

Special protective equipment:

for firefighters

In the event of fire, wear self-contained breathing apparatus.

Use personal protective equipment. Exposure to decomposition products may be a hazard to health.

Further information : Standard procedure for chemical fires.

Collect contaminated fire extinguishing water separately. This

must not be discharged into drains.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Evacuate personnel to safe areas.

Ensure adequate ventilation. Do not breathe vapours, aerosols.

Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions

Environmental precautions : Do not allow contact with soil, surface or ground water.

If the product contaminates rivers and lakes or drains inform

respective authorities.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Pick up and transfer to properly labelled containers.



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - SE



ALTEMP Q NB 50

Version Revision Date: Date of last issue: 2023-06-23 Print Date: 2024-

1.14 2024-06-28 Date of first issue: 2015-07-06 06-28

6.4 Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Avoid contact with skin and eyes.

For personal protection see section 8.

Smoking, eating and drinking should be prohibited in the

application area.

Wash hands and face before breaks and immediately after

handling the product.

Do not get in eyes or mouth or on skin.

Do not get on skin or clothing.

Do not ingest. Do not repack.

These safety instructions also apply to empty packaging which

may still contain product residues. Keep container closed when not in use.

Hygiene measures : Wash face, hands and any exposed skin thoroughly after

handling.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

Store in original container. Keep container closed when not in use. Keep in a dry, cool and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in accordance with the particular national regulations. Keep in properly labelled containers.

7.3 Specific end use(s)

Specific use(s) : Specific instructions for handling, not required.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

	0.4.0.1.1), , , , , , , , , , , , , , , , , , ,	0 1 1	Б.
Components	CAS-No.	Value type (Form	Control parameters	Basis
		of exposure)		
White mineral oil	8042-47-5	NGV (Mist)	1 mg/m3	SE AFS
(petroleum)			, and the second	(2020-09-28)
		KGV (Mist)	3 mg/m3	SE AFS
			_	(2020-09-28)



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - SE $\,$



ALTEMP Q NB 50

 Version
 Revision Date:
 Date of last issue: 2023-06-23
 Print Date: 2024

 1.14
 2024-06-28
 Date of first issue: 2015-07-06
 06-28

	Further information: Indicative short term limit value shall be used as a recommended maximum value and should not be exceeded			
Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil — unspecified	64742-65-0	NGV (Mist)	1 mg/m3	SE AFS (2020-09-28)
		KGV (Mist)	3 mg/m3	SE AFS (2020-09-28)
	Further information: Indicative short term limit value shall be used as a recommended maximum value and should not be exceeded			
zinc oxide	1314-13-2	NGV (Total dust)	5 mg/m3	SE AFS (2018-02-19)
Distillates (petroleum), hydrotreated light naphthenic; Baseoil — unspecified	64742-53-6	NGV (Mist)	1 mg/m3	SE AFS (2020-09-28)
		KGV (Mist)	3 mg/m3	SE AFS (2020-09-28)
	Further information: Indicative short term limit value shall be used as a recommended maximum value and should not be exceeded			

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
White mineral oil (petroleum)	Workers	Inhalation	Long-term systemic effects	164,56 mg/m3
	Workers	Skin contact	Long-term systemic effects	217,05 mg/kg
Distillates (petroleum), solvent- dewaxed heavy paraffinic; Baseoil — unspecified	Workers	Inhalation	Long-term systemic effects	2,73 mg/m3
	Workers	Skin contact	Long-term systemic effects	0,97 mg/kg
Distillates (petroleum), hydrotreated light naphthenic; Baseoil — unspecified	Workers	Inhalation	Long-term systemic effects	5,58 mg/m3
	Workers	Inhalation	Long-term systemic effects	2,73 mg/m3
	Workers	Skin contact	Long-term systemic effects	0,97 mg/kg

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - SE



ALTEMP Q NB 50

Version Revision Date: Date of last issue: 2023-06-23 Print Date: 2024-

1.14 2024-06-28 Date of first issue: 2015-07-06 06-28

Substance name	Environmental Compartment	Value
trizinc bis(orthophosphate)	Fresh water	0,085 mg/l
	Marine water	0,0425 mg/l
	Microbiological Activity in Sewage	0,59 mg/l
	Treatment Systems	
	Fresh water sediment	867,4 mg/kg
	Marine sediment	957,7 mg/kg
	Soil	490,7 mg/kg
Distillates (petroleum), solvent-	Oral	9,33 mg/kg
dewaxed heavy paraffinic;		
Baseoil — unspecified		
zinc oxide	Fresh water	0,0179 mg/l
	Marine water	0,009 mg/l
	Sewage treatment plant	0,1245 mg/l
	Fresh water sediment	182,8 mg/kg
	Marine sediment	201,9 mg/kg
	Soil	103,4 mg/kg

8.2 Exposure controls

Engineering measures

Handle only in a place equipped with local exhaust (or other appropriate exhaust).

Personal protective equipment

Eye/face protection : Safety glasses

Hand protection

Material : Nitrile rubber
Break through time : > 10 min
Protective index : Class 1

Remarks : For prolonged or repeated contact use protective gloves. The

break through time depends amongst other things on the material, the thickness and the type of glove and therefore

has to be measured for each case.

The selected protective gloves have to satisfy the

specifications of Regulation (EU) 2016/425 and the standard

EN 374 derived from it.

Skin and body protection : Choose body protection in relation to its type, to the

concentration and amount of dangerous substances, and to

the specific work-place.

Respiratory protection : Not required; except in case of aerosol formation.

Filter type : Filter type P

Protective measures : The type of protective equipment must be selected according

to the concentration and amount of the dangerous substance

at the specific workplace.



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - SE



ALTEMP Q NB 50

Version Revision Date: Date of last issue: 2023-06-23 Print Date: 2024-

1.14 2024-06-28 Date of first issue: 2015-07-06 06-28

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state : paste

Colour : white

Odour : characteristic

Odour Threshold : No data available

Melting point/range : No data available

Boiling point/boiling range : No data available

Flammability (solid, gas) : Combustible Solids

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit / Lower

flammability limit

No data available

Flash point : Not applicable

Auto-ignition temperature : No data available

Decomposition temperature : No data available

pH : Not applicable

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : Not applicable

Solubility(ies)

Water solubility : insoluble

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

No data available



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - SE



ALTEMP Q NB 50

Version Revision Date: Date of last issue: 2023-06-23 Print Date: 2024-

1.14 2024-06-28 Date of first issue: 2015-07-06 06-28

Vapour pressure : < 0,001 hPa (20 °C)

Relative density : 1,440 (20 °C)

Reference substance: Water The value is calculated

Density : 1,44 g/cm3

(20 °C)

Bulk density : No data available

Relative vapour density : No data available

Particle characteristics

Particle size : Not applicable

Particle Size Distribution : Not applicable

9.2 Other information

Explosives : Not explosive

Oxidizing properties : No data available

Self-ignition : No data available

Evaporation rate : No data available

Sublimation point : No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No hazards to be specially mentioned.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid : No conditions to be specially mentioned.

10.5 Incompatible materials

Materials to avoid : No materials to be especially mentioned.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - SE



ALTEMP Q NB 50

Version Revision Date: Date of last issue: 2023-06-23 Print Date: 2024-

1.14 2024-06-28 Date of first issue: 2015-07-06 06-28

10.6 Hazardous decomposition products

No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

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

Acute toxicity

Product:

Acute oral toxicity : Acute toxicity estimate: > 2.000 mg/kg

Method: Calculation method

Acute inhalation toxicity : Remarks: Harmful by inhalation.

Acute toxicity estimate: > 5 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist Method: Calculation method

Acute dermal toxicity : Remarks: This information is not available.

Components:

trizinc bis(orthophosphate):

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg

Method: OECD Test Guideline 401

barium salts:

Acute oral toxicity : LD50 (Rat): Assessment: The component/mixture is

moderately toxic after single ingestion.

Acute inhalation toxicity : Assessment: The component/mixture is moderately toxic after

short term inhalation.

Acute dermal toxicity : LD50 (Rat): > 2.000 mg/kg

Method: OECD Test Guideline 402

GLP: yes

Assessment: The substance or mixture has no acute dermal

toxicity

zinc oxide:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): > 5,7 mg/l

a brand of

FREUDENBERG

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - SE



ALTEMP Q NB 50

Version Revision Date: Date of last issue: 2023-06-23 Print Date: 2024-

1.14 2024-06-28 Date of first issue: 2015-07-06 06-28

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

Assessment: The substance or mixture has no acute

inhalation toxicity

Acute dermal toxicity : LD50 (Rat): > 2.000 mg/kg

Method: OECD Test Guideline 402

GLP: yes

Assessment: The substance or mixture has no acute dermal

toxicity

White mineral oil (petroleum):

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg

Method: OECD Test Guideline 401

GLP: yes

Acute inhalation toxicity : LC50 (Rat): > 5 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

GLP: yes

Assessment: The substance or mixture has no acute

inhalation toxicity

Acute dermal toxicity : LD50 (Rabbit): > 2.000 mg/kg

Method: OECD Test Guideline 402

GLP: yes

Assessment: The substance or mixture has no acute dermal

toxicity

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil — unspecified:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg

Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 (Rabbit): > 5.000 mg/kg

Method: OECD Test Guideline 402

Distillates (petroleum), hydrotreated light naphthenic; Baseoil — unspecified:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg

Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 (Rabbit): > 5.000 mg/kg

Skin corrosion/irritation

Product:

Remarks : This information is not available.



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - SE



ALTEMP Q NB 50

Version Revision Date: Date of last issue: 2023-06-23 Print Date: 2024-

1.14 2024-06-28 Date of first issue: 2015-07-06 06-28

Components:

trizinc bis(orthophosphate):

Species : Rabbit

Assessment : No skin irritation Result : No skin irritation

barium salts:

Species : Rabbit

Assessment : No skin irritation

Method : OECD Test Guideline 404

Result : No skin irritation

GLP : yes

zinc oxide:

Species : Rabbit

Assessment : No skin irritation

Method : OECD Test Guideline 404

Result : No skin irritation

White mineral oil (petroleum):

Species : Rabbit

Assessment : No skin irritation

Method : OECD Test Guideline 404

Result : No skin irritation

GLP : yes

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil — unspecified:

Species : Rabbit

Assessment : No skin irritation

Method : OECD Test Guideline 404

Result : No skin irritation

GLP : yes

Distillates (petroleum), hydrotreated light naphthenic; Baseoil — unspecified:

Species : Rabbit

Assessment : No skin irritation Result : No skin irritation

Serious eye damage/eye irritation

Product:

Remarks : This information is not available.



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - SE



ALTEMP Q NB 50

Version Revision Date: Date of last issue: 2023-06-23 Print Date: 2024-

1.14 2024-06-28 Date of first issue: 2015-07-06 06-28

Components:

trizinc bis(orthophosphate):

Species : Rabbit

Assessment : No eye irritation

Method : OECD Test Guideline 405

Result : No eye irritation

GLP : yes

barium salts:

Species : Rabbit

Assessment : No eye irritation

Method : OECD Test Guideline 405

Result : No eye irritation

GLP : yes

zinc oxide:

Species : Rabbit

Assessment : No eye irritation

Method : OECD Test Guideline 405

Result : No eye irritation

GLP : yes

White mineral oil (petroleum):

Species : Rabbit

Assessment : No eye irritation

Method : OECD Test Guideline 405

Result : No eye irritation

GLP : yes

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil — unspecified:

Species : Rabbit

Assessment : No eye irritation

Method : OECD Test Guideline 405

Result : No eye irritation

GLP : yes

Distillates (petroleum), hydrotreated light naphthenic; Baseoil — unspecified:

Species : Rabbit

Assessment : No eye irritation

Method : OECD Test Guideline 405

Result : No eye irritation

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - SE



ALTEMP Q NB 50

Version Revision Date: Date of last issue: 2023-06-23 Print Date: 2024-

1.14 2024-06-28 Date of first issue: 2015-07-06 06-28

Respiratory or skin sensitisation

Product:

Remarks : This information is not available.

Components:

trizinc bis(orthophosphate):

Species : Guinea pig

Assessment : Does not cause skin sensitisation.

Method : OECD Test Guideline 406

Result : Does not cause skin sensitisation.

GLP : yes

barium salts:

Test Type : Maximisation Test

Species : Guinea pig

Assessment : Does not cause skin sensitisation.

Method : OECD Test Guideline 406

Result : Does not cause skin sensitisation.

GLP : yes

zinc oxide:

Test Type : Maximisation Test

Species : Guinea pig

Assessment : Does not cause skin sensitisation.

Method : OECD Test Guideline 406

Result : Does not cause skin sensitisation.

GLP : yes

White mineral oil (petroleum):

Test Type : Maximisation Test

Species : Guinea pig

Assessment : Does not cause skin sensitisation.

Method : OECD Test Guideline 406

Result : Does not cause skin sensitisation.

GLP : yes

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil — unspecified:

Species : Guinea pig

Assessment : Does not cause skin sensitisation.

Method : OECD Test Guideline 406

Result : Does not cause skin sensitisation.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - SE



ALTEMP Q NB 50

Version Revision Date: Date of last issue: 2023-06-23 Print Date: 2024-

1.14 2024-06-28 Date of first issue: 2015-07-06 06-28

GLP : yes

Distillates (petroleum), hydrotreated light naphthenic; Baseoil — unspecified:

Species : Guinea pig

Assessment : Does not cause skin sensitisation.

Method : OECD Test Guideline 406

Result : Does not cause skin sensitisation.

Germ cell mutagenicity

Product:

Genotoxicity in vitro : Remarks: No data available

Genotoxicity in vivo : Remarks: No data available

Components:

trizinc bis(orthophosphate):

Germ cell mutagenicity-

Assessment

Tests on bacterial or mammalian cell cultures did not show

mutagenic effects.

barium salts:

Genotoxicity in vitro : Test Type: Ames test

Method: OECD Test Guideline 471

Result: negative

GLP: yes

zinc oxide:

Germ cell mutagenicity-

Assessment

Tests on bacterial or mammalian cell cultures did not show

mutagenic effects.

White mineral oil (petroleum):

Genotoxicity in vitro : Test Type: Ames test

Method: Mutagenicity (Salmonella typhimurium - reverse

mutation assay) Result: negative

GLP: yes

Germ cell mutagenicity-

Assessment

mutagenic effects.

Tests on bacterial or mammalian cell cultures did not show

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil — unspecified:

Genotoxicity in vitro : Test system: Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - SE



ALTEMP Q NB 50

Version Revision Date: Date of last issue: 2023-06-23 Print Date: 2024-

1.14 2024-06-28 Date of first issue: 2015-07-06 06-28

Result: negative

Genotoxicity in vivo : Species: Mouse

Application Route: Oral

Method: OECD Test Guideline 474

Result: negative

Carcinogenicity

Product:

Remarks : No data available

Components:

trizinc bis(orthophosphate):

Carcinogenicity - : Not classifiable as a human carcinogen.

Assessment

zinc oxide:

Carcinogenicity - : Not classifiable as a human carcinogen.

Assessment

White mineral oil (petroleum):

Carcinogenicity - : No evidence of carcinogenicity in animal studies.

Assessment

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil — unspecified:

Species : Mouse Application Route : Dermal

Method : OECD Test Guideline 451

Result : negative

Reproductive toxicity

Product:

Effects on fertility : Remarks: No data available

Effects on foetal : Remarks: No data available

development

Components:

trizinc bis(orthophosphate):

Reproductive toxicity - : - Fertility -

Assessment No toxicity to reproduction

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - SE



ALTEMP Q NB 50

Version Revision Date: Date of last issue: 2023-06-23 Print Date: 2024-

1.14 2024-06-28 Date of first issue: 2015-07-06 06-28

- Teratogenicity -

No effects on or via lactation

zinc oxide:

Reproductive toxicity - : - Fertility -

Assessment No toxicity to reproduction

- Teratogenicity -

No toxicity to reproduction

White mineral oil (petroleum):

Reproductive toxicity - : - Fertility -

Assessment

No toxicity to reproduction

- Teratogenicity -

No effects on or via lactation

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil — unspecified:

Effects on foetal : Species: Rat

development Application Route: Dermal

General Toxicity Maternal: NOAEL: 30 mg/kg body weight Developmental Toxicity: NOAEL: 30 mg/kg body weight

Method: OECD Test Guideline 414

STOT - single exposure

Product:

Remarks : No data available

Components:

zinc oxide:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, single exposure.

White mineral oil (petroleum):

Assessment : The substance or mixture is not classified as specific target

organ toxicant, single exposure.

STOT - repeated exposure

Product:

Remarks : No data available



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - SE



ALTEMP Q NB 50

Version Revision Date: Date of last issue: 2023-06-23 Print Date: 2024-

1.14 2024-06-28 Date of first issue: 2015-07-06 06-28

Components:

zinc oxide:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

White mineral oil (petroleum):

Assessment : The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

Repeated dose toxicity

Product:

Remarks : This information is not available.

Components:

barium salts:

NOAEL : 150 mg/kg

White mineral oil (petroleum):

NOAEL : 1.800 mg/kg

Exposure time : 90 d

Aspiration toxicity

Product:

This information is not available.

Components:

trizinc bis(orthophosphate):

No aspiration toxicity classification

zinc oxide:

No aspiration toxicity classification

White mineral oil (petroleum):

No aspiration toxicity classification

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil — unspecified:

No aspiration toxicity classification



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - SE



ALTEMP Q NB 50

Version Revision Date: Date of last issue: 2023-06-23 Print Date: 2024-

1.14 2024-06-28 Date of first issue: 2015-07-06 06-28

Distillates (petroleum), hydrotreated light naphthenic; Baseoil — unspecified:

No aspiration toxicity classification

11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components

considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

Further information

Product:

Remarks : Risks of irreversible effects after a single exposure.

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to fish : Remarks: Very toxic to aquatic organisms, may cause long-

term adverse effects in the aquatic environment.

Toxicity to daphnia and other :

aquatic invertebrates

Remarks: No data available

Toxicity to algae/aquatic

plants

Remarks: No data available

Toxicity to microorganisms

Remarks: No data available

Components:

trizinc bis(orthophosphate):

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 0,14 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 1,08 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

GLP: yes

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - SE



ALTEMP Q NB 50

Version Revision Date: Date of last issue: 2023-06-23 Print Date: 2024-

1.14 2024-06-28 Date of first issue: 2015-07-06 06-28

Toxicity to algae/aquatic

plants

: EC50 (Pseudokirchneriella subcapitata (green algae)): >

0,136 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

M-Factor (Acute aquatic

toxicity)

1

M-Factor (Chronic aquatic

toxicity)

: 1

barium salts:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 100 mg/l

Exposure time: 96 h Test Type: static test

Method: OECD Test Guideline 203

GLP: yes

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 100 mg/l

Exposure time: 48 h Test Type: Immobilization

Method: OECD Test Guideline 202

GLP: yes

Toxicity to algae/aquatic

plants

ErC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l

Exposure time: 72 h

Test Type: Growth inhibition Method: OECD Test Guideline 201

GLP: yes

Toxicity to microorganisms : EC50 (Bacteria): > 1.000 mg/l

Exposure time: 3 h

Test Type: Respiration inhibition Method: OECD Test Guideline 209

GLP: yes

zinc oxide:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): 1,55 mg/l

Exposure time: 96 h Test Type: static test

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 1 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EC50 (Pseudokirchneriella subcapitata (green algae)): 0,136

mg/l

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - SE



ALTEMP Q NB 50

Version Revision Date: Date of last issue: 2023-06-23 Print Date: 2024-

1.14 2024-06-28 Date of first issue: 2015-07-06 06-28

Exposure time: 72 h Test Type: static test

Method: OECD Test Guideline 201

GLP: yes

M-Factor (Acute aquatic

toxicity)

: 1

Toxicity to microorganisms : EC50 (activated sludge): > 1.000 mg/l

Exposure time: 3 h

Method: OECD Test Guideline 209

GLP: yes

Toxicity to daphnia and other :

aquatic invertebrates (Chronic toxicity)

0,04 mg/l

Exposure time: 21 d

Species: Daphnia magna (Water flea)

Test Type: semi-static test

Method: OECD Test Guideline 211

M-Factor (Chronic aquatic

toxicity)

: 1

White mineral oil (petroleum):

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l

Exposure time: 96 h Test Type: static test

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia (water flea)): > 100 mg/l

Exposure time: 48 h Test Type: Immobilization

Method: OECD Test Guideline 202

Toxicity to daphnia and other :

aquatic invertebrates (Chronic toxicity)

NOEC: >= 1.000 mg/l Exposure time: 21 d

ic toxicity) Species: Daphnia magna (Water flea)

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil — unspecified:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): > 100 mg/l

Exposure time: 96 h Test Type: static test

Method: OECD Test Guideline 203

GLP: yes

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 10.000 mg/l

Exposure time: 48 h

Test Type: static test

Method: OECD Test Guideline 202

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - SE



ALTEMP Q NB 50

Date of last issue: 2023-06-23 Print Date: 2024-Version **Revision Date:**

2024-06-28 Date of first issue: 2015-07-06 1.14 06-28

Toxicity to algae/aquatic

plants

NOEC (Pseudokirchneriella subcapitata (green algae)): > 100

mg/l

Exposure time: 72 h Test Type: static test

Method: OECD Test Guideline 201

Toxicity to daphnia and other :

aquatic invertebrates (Chronic toxicity)

NOEC: 10 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea)

Distillates (petroleum), hydrotreated light naphthenic; Baseoil — unspecified:

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 10.000 mg/l

Exposure time: 48 h Test Type: Immobilization

Method: OECD Test Guideline 202

12.2 Persistence and degradability

Product:

Remarks: No data available Biodegradability

Physico-chemical

removability

Remarks: No data available

Components:

trizinc bis(orthophosphate):

Biodegradability Remarks: The methods for determining biodegradability are

not applicable to inorganic substances.

barium salts:

Biodegradability Test Type: Primary biodegradation

Inoculum: activated sludge Result: Not rapidly biodegradable

Biodegradation: 16,8 %

Exposure time: 28 d

Method: OECD Test Guideline 301F

GLP: ves

zinc oxide:

Remarks: The methods for determining biodegradability are Biodegradability

not applicable to inorganic substances.

White mineral oil (petroleum):

Test Type: Primary biodegradation Biodegradability

> Inoculum: activated sludge Result: Not rapidly biodegradable

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - SE



ALTEMP Q NB 50

Version Revision Date: Date of last issue: 2023-06-23 Print Date: 2024-

1.14 2024-06-28 Date of first issue: 2015-07-06 06-28

Biodegradation: 31 % Exposure time: 28 d

Method: OECD Test Guideline 301B

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil — unspecified:

Biodegradability : Test Type: aerobic

Inoculum: activated sludge Result: Not rapidly biodegradable

Biodegradation: 31 % Exposure time: 28 d

Method: OECD Test Guideline 301B

GLP: yes

12.3 Bioaccumulative potential

Product:

Bioaccumulation : Remarks: No data available

Components:

barium salts:

Partition coefficient: n-

octanol/water

log Pow: 0,9 - 18

White mineral oil (petroleum):

Partition coefficient: n-

octanol/water

Pow: > 6

Distillates (petroleum), hydrotreated light naphthenic; Baseoil — unspecified:

Partition coefficient: n-

octanol/water

: log Pow: 1,99

12.4 Mobility in soil

Product:

Mobility : Remarks: No data available

Distribution among : Remarks: No data available

environmental compartments

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered

to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - SE



ALTEMP Q NB 50

Version Revision Date: Date of last issue: 2023-06-23 Print Date: 2024-

1.14 2024-06-28 Date of first issue: 2015-07-06 06-28

0.1% or higher.

Components:

trizinc bis(orthophosphate):

Assessment : Remarks: Not applicable

zinc oxide:

Assessment : Remarks: Not applicable

White mineral oil (petroleum):

Assessment : Non-classified PBT substance. Non-classified vPvB substance

12.6 Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components

considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

12.7 Other adverse effects

Product:

Additional ecological

information

Very toxic to aquatic organisms, may cause long-term adverse

effects in the aquatic environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water

courses or the soil.

Do not dispose of with domestic refuse.

Dispose of as hazardous waste in compliance with local and

national regulations.

Waste codes should be assigned by the user based on the

application for which the product was used.

Contaminated packaging : Packaging that is not properly emptied must be disposed of as

the unused product.

Dispose of waste product or used containers according to

local regulations.



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - SE



ALTEMP Q NB 50

Version Revision Date: Date of last issue: 2023-06-23 Print Date: 2024-

1.14 2024-06-28 Date of first issue: 2015-07-06 06-28

The following Waste Codes are only suggestions:

Waste Code : used product, unused product

12 01 12**, spent waxes and fats

uncleaned packagings

15 01 10*, packaging containing residues of or contaminated

by hazardous substances

SECTION 14: Transport information

14.1 UN number or ID number

 ADR
 : UN 3077

 RID
 : UN 3077

 IMDG
 : UN 3077

 IATA
 : UN 3077

14.2 UN proper shipping name

ADR : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(Zinc Phosphate, zinc oxide)

RID : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(Zinc Phosphate, zinc oxide)

IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(Zinc Phosphate, zinc oxide)

IATA : Environmentally hazardous substance, solid, n.o.s.

(Zinc Phosphate, zinc oxide)

14.3 Transport hazard class(es)

 ADR
 : 9

 RID
 : 9

 IMDG
 : 9

 IATA
 : 9

14.4 Packing group

ADR

Packing group : III
Classification Code : M7
Hazard Identification Number : 90
Labels : 9



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - SE



ALTEMP Q NB 50

Version Revision Date: Date of last issue: 2023-06-23 Print Date: 2024-

1.14 2024-06-28 Date of first issue: 2015-07-06 06-28

Tunnel restriction code : (-)

RID

Packing group : III
Classification Code : M7
Hazard Identification Number : 90
Labels : 9

IMDG

Packing group : III
Labels : 9
EmS Code : F-A, S-F

IATA (Cargo)

Packing instruction (cargo : 956

aircraft)

Packing instruction (LQ) : Y956
Packing group : III

Labels : Miscellaneous Dangerous Goods

IATA (Passenger)

Packing instruction : 956

(passenger aircraft)

Packing instruction (LQ) : Y956
Packing group : III

Labels : Miscellaneous Dangerous Goods

14.5 Environmental hazards

ADR

Environmentally hazardous : yes

RID

Environmentally hazardous : yes

IMDG

Marine pollutant : yes

IATA (Passenger)

Environmentally hazardous : yes

IATA (Cargo)

Environmentally hazardous : yes

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Maritime transport in bulk according to IMO instruments

Remarks : Not applicable for product as supplied.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - SE



ALTEMP Q NB 50

Date of last issue: 2023-06-23 Print Date: 2024-Version **Revision Date:**

Date of first issue: 2015-07-06 1.14 2024-06-28 06-28

SECTION 15: Regulatory information

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)

Conditions of restriction for the following entries should be considered:

Number on list 75

If you intend to use this product as tattoo ink, please contact your

vendor.

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).

(EU SVHC)

This product does not contain substances of very high concern

(Regulation (EC) No

1907/2006 (REACH), Article 57).

Regulation (EC) No 1005/2009 on substances that

deplete the ozone layer

(EC 1005/2009)

: Not applicable

Regulation (EU) 2019/1021 on persistent organic

pollutants (recast)

(EU POP)

: Not applicable

Regulation (EU) No 649/2012 of the European

Parliament and the Council concerning the export and

import of dangerous chemicals

(EU PIC)

Not applicable

REACH - List of substances subject to authorisation

(Annex XIV)

(EU. REACH-Annex XIV)

Not applicable

Regulation (EU) 2019/1148 on the marketing and use of : Not applicable

explosives precursors

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

E1

ENVIRONMENTAL HAZARDS



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - SE



ALTEMP Q NB 50

Version Revision Date: Date of last issue: 2023-06-23 Print Date: 2024-

1.14 2024-06-28 Date of first issue: 2015-07-06 06-28

Volatile organic compounds : Directive 2010/75/EU of 24 November 2010 on industrial

emissions (integrated pollution prevention and control) Volatile organic compounds (VOC) content: 0,13 %

Other regulations:

Hygiene limits (AFS 2018:1), provisions - Occupational Safety and Health Administration's provisions on hygiene limits and general advice on the application of the provisions.

Take note of the Swedish Work Environment Authority regulations on Chemical Hazards in the Working Environment (AFS 2011:19)

15.2 Chemical safety assessment

This information is not available.

SECTION 16: Other information

Full text of H-Statements

H302 : Harmful if swallowed. H332 : Harmful if inhaled. H400 : Very toxic to aquatic life.

H410 : Very toxic to aquatic life with long lasting effects.

Full text of other abbreviations

Note 1 : The concentration stated or, in the absence of such

concentrations, the generic concentrations set out in this Regulation are the percentages by weight of the metallic element calculated with reference to the total weight of the

mixture.

Note A : Without prejudice to Article 17(2), the name of the substance

must appear on the label in the form of one of the designations given in Part 3. In Part 3, use is sometimes made of a general description such as "... compounds" or "... salts". In this case, the supplier is required to state on the label the correct name, due account being taken of section

1.1.1.4.

Note L : The harmonised classification as a carcinogen applies unless

it can be shown that the substance contains less than 3 % of

dimethyl sulphoxide extract as measured by IP 346

("Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions - Dimethyl

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - SE



ALTEMP Q NB 50

 Version
 Revision Date:
 Date of last issue: 2023-06-23
 Print Date: 2024

 1.14
 2024-06-28
 Date of first issue: 2015-07-06
 06-28

sulphoxide extraction refractive index method"Institute of Petroleum, London), in which case a classification in accordance with Title II of this Regulation shall be performed

also for that hazard class.

SE AFS : Sweden. Occupational Exposure Limit Values

SE AFS / NGV : Time Weighted Average SE AFS / KGV : Short Term Exposure Limit

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN -Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; 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; GHS - Globally Harmonized 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 Organization; ISHL - Industrial Safety and Health Law (Japan); ISO -International Organisation for Standardization; 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; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization 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; RID -Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Classification of the mixture: Classification procedure:

Aquatic Acute 1 H400 Calculation method
Aquatic Chronic 1 H410 Calculation method

This safety data sheet applies only to products as originally packed and labelled. The information contained therein may not be reproduced or modified without our express written permission. Any forwarding of this document is only permitted to the extent required by law. Any further, in



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - SE



ALTEMP Q NB 50

Version Revision Date: Date of last issue: 2023-06-23 Print Date: 2024-

1.14 2024-06-28 Date of first issue: 2015-07-06 06-28

particular public, dissemination of the safety data sheet (e.g. as a document for download from the Internet) is not permitted without our express written consent. We provide our customers with amended safety data sheets as prescribed by law. The customer is responsible for passing on safety data sheets and any amendments contained therein to its own customers, employees and other users of the product. We provide no guarantee that safety data sheets received by users from third parties are up-to-date. All information and instructions in this safety data sheet have been compiled to the best of our knowledge and are based on the information available to us on the day of publication. The information provided is intended to describe the product in relation to the required safety measures; it is neither an assurance of characteristics nor a guarantee of the product's suitability for particular applications and does not justify any contractual legal relationship. The existence of a safety data sheet for a particular jurisdiction does not necessarily mean that import or use within that jurisdiction is legally permitted. If you have any questions, please contact your responsible sales contact or authorized trading partner.

