

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Lipase solvent pH 7.00 ± 0.05 (20 °C)

Revision date: 08.12.2021

Product code: 14992

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

1.1. Product identifier

Lipase solvent pH 7.00 ± 0.05 (20 °C)

UFI: T4HA-51MH-600A-V2RE

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

Use of the substance/mixture

Laboratory chemicals

Industrial uses: Uses of substances as such or in preparations at industrial sites

Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Uses advised against

Do not use for private purposes (household).

1.3. Details of the supplier of the safety data sheet

Company name:	Fa. Bernd Kraft GmbH	
Street:	Stempelstraße 6	
Place:	D-47167 Duisburg	
Telephone:	0203/5194-0	Telefax: 0203/5194-290
e-mail:	info@berndkraft.de	
Contact person:	Abteilung Produktsicherheit	Telephone: 0203/5194-107/117
e-mail:	produktsicherheit@berndkraft.de	
Internet:	www.berndkraft.de	
Responsible Department:	Abteilung Produktsicherheit	

1.4. Emergency telephone number:

For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls accepted)

Further Information

This product is a mixture. REACH Registration Number see section 3.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Skin Sens. 1A; H317

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Hazard components for labelling

maleic anhydride

Signal word: Warning

Pictograms:



Hazard statements

H317 May cause an allergic skin reaction.

Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

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P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
 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.

2.3. Other hazards

No data available

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixtures in aqueous solution

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
7647-14-5	sodium chloride			< 1 %
	231-598-3		01-2119485491-33	
108-31-6	maleic anhydride			< 1 %
	203-571-6	607-096-00-9	01-2119472428-31	
	Acute Tox. 4, Skin Corr. 1B, Eye Dam. 1, Resp. Sens. 1, Skin Sens. 1A, STOT RE 1; H302 H314 H318 H334 H317 H372 EUH071			

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
7647-14-5	231-598-3	sodium chloride	< 1 %
	dermal: LD50 = > 10000 mg/kg; oral: LD50 = 3550 mg/kg		
108-31-6	203-571-6	maleic anhydride	< 1 %
	dermal: LD50 = 2620 mg/kg; oral: LD50 = 1090 mg/kg Skin Sens. 1A; H317: >= 0,001 - 100		

Further Information

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of = 0.1 % (w/w).

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

No data available

After inhalation

Provide fresh air.

After contact with skin

Wash immediately with: Water

Take off immediately all contaminated clothing and wash it before reuse.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water.

In case of eye irritation consult an ophthalmologist.

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After ingestion

Rinse mouth immediately and drink plenty of water.
Call a doctor if you feel unwell.

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

Allergic reactions

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

No data available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media

no restriction

5.2. Special hazards arising from the substance or mixture

Non-combustible liquids

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Use water spray jet to protect personnel and to cool endangered containers.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Provide adequate ventilation.
Use personal protection equipment.
Avoid contact with skin, eyes and clothes.
Remove persons to safety.
Emergency procedures
Do not breathe dust/fume/gas/mist/vapours/spray.

For emergency responders

Precautionary statements For emergency responders : Personal protection equipment: see section 8

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

For cleaning up

Clean contaminated articles and floor according to the environmental legislation.

Other information

Provide adequate ventilation.
Do not breathe dust/fume/gas/mist/vapours/spray.
Wear breathing apparatus if exposed to vapours/dusts/aerosols.

6.4. Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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Advice on safe handling

Handle and open container with care.
Keep container tightly closed.
Do not breathe vapour/aerosol.
Avoid contact with skin, eyes and clothes.

Advice on protection against fire and explosion

Usual measures for fire prevention.

Advice on general occupational hygiene

Wash contaminated clothing prior to re-use.
Do not breathe vapour/aerosol.
Avoid contact with skin, eyes and clothes.

Further information on handling

Wash contaminated clothing before reuse.
Wash hands before breaks and after work.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Store in a well-ventilated place. Keep container tightly closed.

Further information on storage conditions

Store in a dry place.

7.3. Specific end use(s)

Laboratory chemicals

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

CAS No	Substance	ppm	mg/m ³	fib/cm ³	Category	Origin
108-31-6	Maleic anhydride (Inhalable Fraction and Vapour)	0.1	-		TWA (8 h)	

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DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
7647-14-5	sodium chloride			
Worker DNEL, acute		dermal	systemic	295,52 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	443,28 mg/m ³
Consumer DNEL, acute		inhalation	systemic	443,28 mg/m ³
Worker DNEL, long-term		dermal	systemic	295,52 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	126,65 mg/kg bw/day
Consumer DNEL, acute		dermal	systemic	126,65 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	126,65 mg/kg bw/day
Consumer DNEL, acute		oral	systemic	126,65 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	2068,62 mg/m ³
Worker DNEL, acute		inhalation	systemic	2068,62 mg/m ³
108-31-6	maleic anhydride			
Worker DNEL, long-term		inhalation	systemic	0,4 mg/m ³
Worker DNEL, acute		inhalation	systemic	0,8 mg/m ³
Worker DNEL, long-term		inhalation	local	0,4 mg/m ³
Worker DNEL, acute		inhalation	local	0,8 mg/m ³

PNEC values

CAS No	Substance	Environmental compartment	Value
7647-14-5	sodium chloride		
		Freshwater	5 mg/l
		Micro-organisms in sewage treatment plants (STP)	500 mg/l
		Soil	4,86 mg/kg
108-31-6	maleic anhydride		
		Freshwater	0,1 mg/l
		Freshwater (intermittent releases)	0,428 mg/l
		Marine water	0,01 mg/l
		Freshwater sediment	0,334 mg/kg
		Marine sediment	0,033 mg/kg
		Micro-organisms in sewage treatment plants (STP)	44,6 mg/l
		Soil	0,042 mg/kg

8.2. Exposure controls

Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

Individual protection measures, such as personal protective equipment

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Eye/face protection

goggles

Hand protection

Protective gloves are recommended Company KCL GmbH, D-36124 Eichenzell, email: vertrieb@kcl.de With specification (test according to EN374):

By long-term hand contact

Recommended glove articles: KCL 741 Dermatril® L

Recommended material: NBR (Nitrile rubber) 0,11 mm

Wearing time with permanent contact: > 480 min

By short-term hand contact

Recommended glove articles: KCL 741 Dermatril® L

Recommended material: NBR (Nitrile rubber) 0,11 mm

Wearing time with occasional contact (splashes): > 480 min

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet (>, <) supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Skin protection

Wear suitable protective clothing.

Wash hands before breaks and after work.

Respiratory protection

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Environmental exposure controls

Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	colourless
Odour:	odourless
Odour threshold:	No data available

Changes in the physical state

Melting point/freezing point:	No data available
Boiling point or initial boiling point and boiling range:	No data available
Sublimation point:	No data available
Softening point:	No data available
Pour point:	No data available
No data available:	
Flash point:	No data available

Flammability

Solid/liquid:	No data available
Gas:	No data available

Explosive properties

No data available

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Lower explosion limits:	No data available
Upper explosion limits:	No data available
Auto-ignition temperature:	No data available
Self-ignition temperature	
Solid:	No data available
Gas:	No data available
Decomposition temperature:	No data available
pH-Value:	7
Viscosity / dynamic:	No data available
Viscosity / kinematic:	No data available
Flow time:	No data available
Water solubility:	Soluble in: Water
Solubility in other solvents	
No data available	
Dissolution rate:	No data available
Partition coefficient n-octanol/water:	No data available
Dispersion stability:	No data available
Vapour pressure:	No data available
Vapour pressure:	No data available
Density:	No data available
Relative density:	No data available
Bulk density:	No data available
Relative vapour density:	No data available
Particle characteristics:	No data available

9.2. Other information

Information with regard to physical hazard classes

Sustaining combustion:	No data available
Oxidizing properties	
No data available	

Other safety characteristics

Solvent separation test:	No data available
Solvent content:	No data available
Solid content:	No data available
Evaporation rate:	No data available

Further Information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available

10.2. Chemical stability

No data available

10.3. Possibility of hazardous reactions

No data available

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10.4. Conditions to avoid

No data available

10.5. Incompatible materials

No data available

10.6. Hazardous decomposition products

No data available

Further information

No data available

SECTION 11: Toxicological information

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

Toxicokinetics, metabolism and distribution

There are no data available on the mixture itself.

Acute toxicity

Based on available data, the classification criteria are not met.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
7647-14-5	sodium chloride				
	oral	LD50 mg/kg 3550	Rat	Study report	The study methodology followed appeared
	dermal	LD50 mg/kg > 10000	Rabbit	Study report	The study methodology followed appeared to
108-31-6	maleic anhydride				
	oral	LD50 mg/kg 1090	Rat	(1984)	OECD Guideline 401
	dermal	LD50 mg/kg 2620	Rabbit	Publication (1977)	The method used for skin absorption toxi

Irritation and corrosivity

Based on available data, the classification criteria are not met.

Sensitising effects

May cause an allergic skin reaction. (maleic anhydride)

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Information on likely routes of exposure

There are no data available on the mixture itself.

Specific effects in experiment on an animal

There are no data available on the mixture itself.

Additional information on tests

There are no data available on the mixture itself.

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Practical experience

There are no data available on the mixture itself.

11.2. Information on other hazards

Endocrine disrupting properties

There are no data available on the mixture itself.

Other information

There are no data available on the mixture itself.

Further information

There are no data available on the mixture itself.

SECTION 12: Ecological information

12.1. Toxicity

There are no data available on the mixture itself.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
7647-14-5	sodium chloride					
	Acute fish toxicity	LC50 mg/l	5840	96 h	Lepomis macrochirus	Study report (1985) other: ASTM E729
	Acute crustacea toxicity	EC50 mg/l	4136	48 h	Daphnia magna	J. fish. Res. Bd. Canada, 29: 1691-1700. OECD Guideline 202
	Fish toxicity	NOEC	252 mg/l	33 d	Pimephales promelas	Study report (1985) OECD Guideline 210
	Crustacea toxicity	NOEC	314 mg/l	21 d	Daphnia pulex	Memorandum of agreement No. 5429, Kentuc OECD Guideline 211
108-31-6	maleic anhydride					
	Acute fish toxicity	LC50	75 mg/l	96 h	Lepomis macrochirus	Publication (1982) other: EPA-660/3-75-009, EPA Methods for
	Acute algae toxicity	ErC50 mg/l	74,35	72 h	Pseudokirchneriella subcapitata	Study report (2010) OECD Guideline 201
	Acute crustacea toxicity	EC50 mg/l	42,81	48 h	Daphnia magna	Study report (2010) OECD Guideline 202
	Crustacea toxicity	NOEC	10 mg/l	21 d	Daphnia magna	Publication (1988) other: Prolonged toxicity test according

12.2. Persistence and degradability

There are no data available on the mixture itself.

12.3. Bioaccumulative potential

There are no data available on the mixture itself.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
108-31-6	maleic anhydride	-2,61

12.4. Mobility in soil

There are no data available on the mixture itself.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

There are no data available on the mixture itself.

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12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.
There are no data available on the mixture itself.

12.7. Other adverse effects

There are no data available on the mixture itself.

Further information

Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.
Send to a physico-chemical treatment facility under observation of official regulations. Do not empty into drains.

Contaminated packaging

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

14.7. Maritime transport in bulk according to IMO instruments

No dangerous good in sense of this transport regulation.

SECTION 15: Regulatory information

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

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EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3

Information according to 2012/18/EU (SEVESO III):

Not subject to 2012/18/EU (SEVESO III)

National regulatory information

Water hazard class (D):

-- non-hazardous to water

Additional information

No data available

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 1,7,8,9,11,12,13.

Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]

Classification	Classification procedure
Skin Sens. 1A; H317	Calculation method

Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H372	Causes damage to organs through prolonged or repeated exposure.
EUH071	Corrosive to the respiratory tract.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material. The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)