

Reagenz 781159 Kalibrierlösung c(HF) = 40 mg/l

Revision date: 31.07.2020

Product code: 781159

Page 1 of 10

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

1.1. Product identifier

Reagenz 781159 Kalibrierlösung c(HF) = 40 mg/l

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

Use of the substance/mixture

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

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

Laboratory chemicals

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

This mixture is not classified as hazardous in accordance with Regulation (EC) No 1272/2008.

2.2. Label elements

Regulation (EC) No 1272/2008

Special labelling of certain mixtures

EUH210 Safety data sheet available on request.

2.3. Other hazards

No data available

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixtures in aqueous solution

Reagenz 781159 Kalibrierlösung c(HF) = 40 mg/l

Revision date: 31.07.2020

Product code: 781159

Page 2 of 10

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
64-19-7	acetic acid			1 - < 5 %
	200-580-7	607-002-00-6	01-2119475328-30	
	Flam. Liq. 3, Skin Corr. 1A; H226 H314			

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		
64-19-7	200-580-7	acetic acid	1 - < 5 %
	inhalation: LC50 = 11,4 mg/l (vapours); oral: LD50 = 3310 mg/kg Skin Corr. 1A; H314: >= 90 - 100 Skin Corr. 1B; H314: >= 25 - < 90 Skin Irrit. 2; H315: >= 10 - < 25 Eye Irrit. 2; H319: >= 10 - < 25		

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

After contact with eyes

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

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

No data available

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.

Reagenz 781159 Kalibrierlösung c(HF) = 40 mg/l

Revision date: 31.07.2020

Product code: 781159

Page 3 of 10

Additional information

Use water spray jet to protect personnel and to cool endangered containers.
Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

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 containment

Cover drains.
Prevent spread over a wide area (e.g. by containment or oil barriers).
Collect in closed and suitable containers for disposal.
Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

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

Advice on safe handling

Handle and open container with care.
Keep container tightly closed.
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

Reagenz 781159 Kalibrierlösung c(HF) = 40 mg/l

Revision date: 31.07.2020

Product code: 781159

Page 4 of 10

Requirements for storage rooms and vessels

storage temperature <= 8°C

Hints on joint storage

No data available

Further information on storage conditions

Store in a dry place.

Protect against: Light

Keep cool. Protect from sunlight.

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
64-19-7	Acetic acid	10	25		TWA (8 h)	
		20	50		STEL (15 min)	

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
64-19-7	acetic acid			
Worker DNEL, long-term		inhalation	local	25 mg/m ³
Worker DNEL, acute		inhalation	local	25 mg/m ³
Consumer DNEL, long-term		inhalation	local	25 mg/m ³
Consumer DNEL, acute		inhalation	local	25 mg/m ³

PNEC values

CAS No	Substance	Value
Environmental compartment		
64-19-7	acetic acid	
Freshwater		3,058 mg/l
Freshwater (intermittent releases)		30,58 mg/l
Marine water		0,306 mg/l
Freshwater sediment		11,36 mg/kg
Marine sediment		1,136 mg/kg
Micro-organisms in sewage treatment plants (STP)		85 mg/l
Soil		0,47 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

Eye/face protection

goggles

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Reagenz 781159 Kalibrierlösung c(HF) = 40 mg/l

Revision date: 31.07.2020

Product code: 781159

Page 5 of 10

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

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

Trade name/designation: KCL 741 Dermatril® L
Recommended material: NBR (Nitrile rubber) 0,11 mm
Wearing time with permanent contact: > 480 min

By short-term hand contact

Trade name/designation: 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

Respiratory protection necessary at: aerosol or mist formation

Environmental exposure controls

Do not empty into 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
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Reagenz 781159 Kalibrierlösung c(HF) = 40 mg/l

Revision date: 31.07.2020

Product code: 781159

Page 6 of 10

Gas: No data available

Explosive properties

No data available

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: No data available

Viscosity / dynamic: No data available

Viscosity / kinematic: No data available

Flow time: No data available

Water solubility: No data available

Solubility in other solvents

No data available

Partition coefficient n-octanol/water: No data available

Vapour pressure: No data available

Vapour pressure: No data available

Density: No data available

Bulk density: No data available

Relative vapour density: 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

Protect against:

Light

Heat

10.3. Possibility of hazardous reactions

No data available

Reagenz 781159 Kalibrierlösung c(HF) = 40 mg/l

Revision date: 31.07.2020

Product code: 781159

Page 7 of 10

10.4. Conditions to avoid

Light
Heat

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	
64-19-7	acetic acid					
	oral	LD50 mg/kg	3310	Rat	J Ind Hyg Toxicol, Vol 23, PP 78-82 (194)	The sodium salt of acetic acid was admin
	inhalation (4 h) vapour	LC50	11,4 mg/l	Rat	Study report (1980)	OECD Guideline 403

Irritation and corrosivity

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

Sensitising effects

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

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.

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.

Practical experience

There are no data available on the mixture itself.

11.2. Information on other hazards

Other information

There are no data available on the mixture itself.

Further information

There are no data available on the mixture itself.

Reagenz 781159 Kalibrierlösung c(HF) = 40 mg/l

Revision date: 31.07.2020

Product code: 781159

Page 8 of 10

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
64-19-7	acetic acid					
	Acute fish toxicity	LC50 mg/l	> 1000	96 h	Oncorhynchus mykiss	Study report (2005) other: SOP E257
	Acute algae toxicity	ErC50 mg/l	> 1000	72 h	Skeletonema costatum	Study report (2005) ISO 10253
	Acute crustacea toxicity	EC50 mg/l	> 1000	48 h	Daphnia magna	Study report (1990) OECD Guideline 202

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
64-19-7	acetic acid	-0,17

BCF

CAS No	Chemical name	BCF	Species	Source
64-19-7	acetic acid	3,16	fish	Environ. Toxicol. Ch

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.

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.

12.7. Other adverse effects

Do not empty into drains.

Further information

Discharge into the environment must be avoided.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

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

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Reagenz 781159 Kalibrierlösung c(HF) = 40 mg/l

Revision date: 31.07.2020

Product code: 781159

Page 9 of 10

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

EU regulatory information

Restrictions on use (REACH, annex XVII):
Entry 40, Entry 75

National regulatory information

Water hazard class (D): 1 - slightly hazardous to water

SECTION 16: Other information

Relevant H and EUH statements (number and full text)

- H226 Flammable liquid and vapour.
- H314 Causes severe skin burns and eye damage.
- EUH210 Safety data sheet available on request.

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.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Reagenz 781159 Kalibrierlösung c(HF) = 40 mg/l

Revision date: 31.07.2020

Product code: 781159

Page 10 of 10

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.)