

## Safety Data Sheet

according to UK REACH Regulation

### Fast Etch 5 / Spinetch E

Revision date: 29.09.2022

Product code: 34214

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

##### 1.1. Product identifier

Fast Etch 5 / Spinetch E

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

###### Use of the substance/mixture

Laboratory chemicals

##### 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)

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

###### GB CLP Regulation

Met. Corr. 1; H290  
Acute Tox. 1; H310  
Acute Tox. 3; H301  
Skin Corr. 1A; H314  
Eye Dam. 1; H318

Full text of hazard statements: see SECTION 16.

##### 2.2. Label elements

###### GB CLP Regulation

###### Hazard components for labelling

sulphuric acid  
nitric acid  
Hydrofluoric acid

**Signal word:** Danger

###### Pictograms:



###### Hazard statements

H290	May be corrosive to metals.
H310	Fatal in contact with skin.
H301	Toxic if swallowed.
H314	Causes severe skin burns and eye damage.

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**Precautionary statements**

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P262	Do not get in eyes, on skin, or on clothing.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P270	Do not eat, drink or smoke when using this product.
P264	Wash hands thoroughly after handling.
P234	Keep only in original packaging.
P310	Immediately call a POISON CENTER/doctor.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P361+P364	Take off immediately all contaminated clothing and wash it before reuse.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P390	Absorb spillage to prevent material damage.
P405	Store locked up.
P406	Store in a corrosion-resistant container with a resistant inner liner.
P501	Dispose of contents/container to hazardous or special waste collection point.

**Special labelling of certain mixtures**

EUH071	Corrosive to the respiratory tract.
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**SECTION 3: Composition/information on ingredients**

**3.2. Mixtures**

**Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
7664-93-9	sulphuric acid			75 - < 80 %
	231-639-5	016-020-00-8	01-2119458838-20	
	Met. Corr. 1, Skin Corr. 1A, Eye Dam. 1; H290 H314 H318			
7697-37-2	nitric acid			5 - < 10 %
	231-714-2	007-030-00-3	01-2119487297-23	
	Ox. Liq. 3, Met. Corr. 1, Acute Tox. 3, Skin Corr. 1A; H272 H290 H331 H314 EUH071			
7664-39-3	hydrofluoric acid ... %			1 - < 5 %
	231-634-8	009-003-00-1		
	Acute Tox. 1, Acute Tox. 2, Acute Tox. 2, Skin Corr. 1A; H310 H330 H300 H314			

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

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**Specific Conc. Limits, M-factors and ATE**

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
7664-93-9	231-639-5	sulphuric acid	75 - < 80 %
		oral: LD50 = 2140 mg/kg Skin Corr. 1A; H314: >= 15 - 100 Skin Irrit. 2; H315: >= 5 - < 15 Eye Irrit. 2; H319: >= 5 - < 15	
7697-37-2	231-714-2	nitric acid	5 - < 10 %
		inhalation: ATE 2,65 mg/l (vapours) Ox. Liq. 3; H272: >= 65 - 100 Skin Corr. 1A; H314: >= 20 - 100 Skin Corr. 1B; H314: >= 5 - < 20	
7664-39-3	231-634-8	hydrofluoric acid ... %	1 - < 5 %
		inhalation: ATE = 0,5 mg/l (vapours); inhalation: ATE = 0,05 mg/l (dusts or mists); inhalation: LC50 = 1610 ppm (gases); dermal: ATE = 5 mg/kg; oral: ATE = 5 mg/kg Skin Corr. 1A; H314: >= 7 - 100 Skin Corr. 1B; H314: >= 1 - < 7 Eye Irrit. 2; H319: >= 0,1 - < 1	

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

**SECTION 5: Firefighting measures**

**5.1. Extinguishing media**

**SECTION 6: Accidental release measures**

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

**7.2. Conditions for safe storage, including any incompatibilities**

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

**Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
7664-39-3	Hydrogen fluoride (as F)	1.8	1.5		TWA (8 h)	WEL
		3	2.5		STEL (15 min)	WEL
7697-37-2	Nitric acid	1	2.6		STEL (15 min)	WEL
7664-93-9	Sulphuric acid (mist)	-	0.05		TWA (8 h)	WEL

**DNEL/DMEL values**

CAS No	Substance	Exposure route	Effect	Value
7664-93-9	sulphuric acid			
	Worker DNEL, long-term	inhalation	local	0,05 mg/m <sup>3</sup>

**PNEC values**

CAS No	Substance	Value
	Environmental compartment	
7664-93-9	sulphuric acid	
	Micro-organisms in sewage treatment plants (STP)	8,8 mg/l

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**8.2. Exposure controls**

**SECTION 9: Physical and chemical properties**

**9.1. Information on basic physical and chemical properties**

Physical state:	Liquid
Colour:	gelblich
Odour:	stechend
pH-Value:	<1
Density:	1,47 g/cm <sup>3</sup>

**SECTION 10: Stability and reactivity**

**SECTION 11: Toxicological information**

**11.1. Information on hazard classes as defined in GB CLP Regulation**

**ATEmix calculated**

ATE (oral) 125,0 mg/kg; ATE (dermal) 125,0 mg/kg; ATE (inhalation vapour) 9,74 mg/l; ATE (inhalation dust/mist) 1,250 mg/l

**Acute toxicity**

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
7664-93-9	sulphuric acid				
	oral	LD50 2140 mg/kg	Rat	Am Ind Hyg Assoc J. 1969 Sep-Oct; 30(5):	The study was performed as part of a ser
7697-37-2	nitric acid				
	inhalation vapour	ATE 2,65 mg/l			
7664-39-3	hydrofluoric acid ... %				
	oral	ATE 5 mg/kg			
	dermal	ATE 5 mg/kg			
	inhalation vapour	ATE 0,5 mg/l			
	inhalation dust/mist	ATE 0,05 mg/l			
	inhalation (1 h) gas	LC50 1610 ppm	Rat		

**SECTION 12: Ecological information**

**12.1. Toxicity**

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
7664-93-9	sulphuric acid					
	Acute algae toxicity	ErC50 mg/l	> 100	72 h	Desmodesmus subspicatus	Study report (2009) OECD Guideline 201
	Acute crustacea toxicity	EC50 mg/l	> 100	48 h	Daphnia magna	Study report (2009) OECD Guideline 202
	Fish toxicity	NOEC mg/l	0,025	65 d	Jordanella floridae	Water Research Vol. 11, 612 - 626, 1977 Groups of sexually mature flagfish
7697-37-2	nitric acid					
	Acute fish toxicity	LC50 mg/l	1559	96 h	Topeka shiner	Environmental Toxicology and Chemistry, other: ASTM E729-26
	Fish toxicity	NOEC mg/l	268	30 d	juvenile Topeka shiner and with juvenile Fathead m	Study report (2009) Growth tests estimated the test chemical
	Algae toxicity	NOEC mg/l	> 419	10 d	several benthic diatoms; see results	Marine Biology 43:307-315 (1977) Ten cultures of benthic diatoms were iso
	Acute bacteria toxicity	(EC50 mg/l)	> 1000	3 h	Activated sludge	Study report (2008) OECD Guideline 209

**12.5. Results of PBT and vPvB assessment**

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

**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.

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

**SECTION 14: Transport information**

**Land transport (ADR/RID)**

<b>14.1. UN number or ID number:</b>	UN 2922
<b>14.2. UN proper shipping name:</b>	CORROSIVE LIQUID, TOXIC, N.O.S. (Hydrofluoric acid, nitric acid)
<b>14.3. Transport hazard class(es):</b>	8
<b>14.4. Packing group:</b>	I
Hazard label:	8+6.1
Classification code:	CT1
Special Provisions:	274
Limited quantity:	0
Excepted quantity:	E0
Transport category:	1
Hazard No:	886
Tunnel restriction code:	C/D

**Inland waterways transport (ADN)**

<b>14.1. UN number or ID number:</b>	UN 2922
<b>14.2. UN proper shipping name:</b>	CORROSIVE LIQUID, TOXIC, N.O.S. (Hydrofluoric acid, nitric acid)
<b>14.3. Transport hazard class(es):</b>	8
<b>14.4. Packing group:</b>	I
Hazard label:	8+6.1

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Classification code: CT1  
Special Provisions: 274 802  
Limited quantity: 0  
Excepted quantity: E0

**Marine transport (IMDG)**

**14.1. UN number or ID number:** UN 2922  
**14.2. UN proper shipping name:** CORROSIVE LIQUID, TOXIC, N.O.S. (Hydrofluoric acid, nitric acid)  
**14.3. Transport hazard class(es):** 8  
**14.4. Packing group:** I  
Hazard label: 8+6.1  
Special Provisions: 274  
Limited quantity: 0  
Excepted quantity: E0  
EmS: F-A, S-B

**Air transport (ICAO-TI/IATA-DGR)**

**14.1. UN number or ID number:** UN 2922  
**14.2. UN proper shipping name:** CORROSIVE LIQUID, TOXIC, N.O.S. (Hydrofluoric acid, nitric acid)  
**14.3. Transport hazard class(es):** 8  
**14.4. Packing group:** I  
Hazard label: 8+6.1  
Special Provisions: A3 A803  
Limited quantity Passenger: Forbidden  
Passenger LQ: Forbidden  
Excepted quantity: E0  
IATA-packing instructions - Passenger: 850  
IATA-max. quantity - Passenger: 0.5 L  
IATA-packing instructions - Cargo: 854  
IATA-max. quantity - Cargo: 2.5 L

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**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 3, Entry 75

**National regulatory information**

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

**SECTION 16: Other information**

**Classification for mixtures and used evaluation method according to GB CLP Regulation**

Classification	Classification procedure
Met. Corr. 1; H290	On basis of test data
Acute Tox. 1; H310	
Acute Tox. 3; H301	Calculation method
Skin Corr. 1A; H314	
Eye Dam. 1; H318	On basis of test data

**Relevant H and EUH statements (number and full text)**

H272 May intensify fire; oxidiser.

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H290	May be corrosive to metals.
H300	Fatal if swallowed.
H301	Toxic if swallowed.
H310	Fatal in contact with skin.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
EUH071	Corrosive to the respiratory tract.

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