

Safety Data Sheet

according to UK REACH Regulation

PowerEtch - hydrochloric acid-sulfuric acid mixture for etching

Revision date: 12.07.2023

Product code: 19344.xxxxx

Page 1 of 12

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

1.1. Product identifier

PowerEtch - hydrochloric acid-sulfuric acid mixture for etching

UFI: HSJQ-V1GE-T00C-N0J2

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

Use of the substance/mixture

For use as an etchant in metallography. Intended for scientific research and development.

Uses advised against

Any non-intended use.

1.3. Details of the supplier of the safety data sheet

Company name:	MORPHISTO GmbH	
Street:	Schumannstr. 142/144	
Place:	D-63069 Offenbach	
Telephone:	+49 (0) 69 / 400 3019-60	Telefax: +49 (0) 69 / 400 3019-64
E-mail:	info@morphisto.de	
Contact person:	Morphisto GmbH	
E-mail:	gefahrstoffmanagement@morphisto.de	
Internet:	http://www.morphisto.de	

1.4. Emergency telephone number:

Poison Information Center Mainz, Germany, Tel: +49(0)6131/19240

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Met. Corr. 1; H290
Skin Corr. 1; 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%
hydrochloric acid %

Signal word: Danger

Pictograms:



Hazard statements

H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.

Precautionary statements

P234 Keep only in original packaging.
P260 Do not breathe mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P310 Immediately call a POISON CENTER/doctor.

Safety Data Sheet

according to UK REACH Regulation

PowerEtch - hydrochloric acid-sulfuric acid mixture for etching

Revision date: 12.07.2023

Product code: 19344.xxxxx

Page 2 of 12

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Labelling of packages where the contents do not exceed 125 ml

Signal word: Danger

Pictograms:



Hazard statements

H314

Precautionary statements

P260-P280-P303+P361+P353-P305+P351+P338-P310

2.3. Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulating and toxic (PBT) or very persistent and very bioaccumulating (vPvB) at levels of 0.1% or higher. Ecological information: The substance/mixture does not contain any components that are considered to be hazardous according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in amounts of 0.1 % or more have endocrine disrupting properties. Toxicological information: The substance/mixture does not contain any components that are to be classified according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in quantities of 0.1 % or more have endocrine disrupting properties.

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...%			50 - < 55 %
	231-639-5	016-020-00-8		
	Met. Corr. 1, Skin Corr. 1A, Eye Dam. 1; H290 H314 H318			
7647-01-0	hydrochloric acid ... %			1 - < 5 %
	231-595-7	017-002-01-X	01-2119484862-27	
	Met. Corr. 1, Skin Corr. 1B, Eye Dam. 1, STOT SE 3; H290 H314 H318 H335			

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	
7664-93-9	231-639-5	sulphuric acid...%	50 - < 55 %
		oral: LD50 = 2140 mg/kg Skin Corr. 1A; H314: >= 15 - 100 Skin Irrit. 2; H315: >= 5 - < 15 Eye Irrit. 2; H319: >= 5 - < 15	
7647-01-0	231-595-7	hydrochloric acid ... %	1 - < 5 %
		Skin Corr. 1B; H314: >= 25 - 100 Skin Irrit. 2; H315: >= 10 - < 25 Eye Irrit. 2; H319: >= 10 - < 25 STOT SE 3; H335: >= 10 - 100	

SECTION 4: First aid measures

Safety Data Sheet

according to UK REACH Regulation

PowerEtch - hydrochloric acid-sulfuric acid mixture for etching

Revision date: 12.07.2023

Product code: 19344.xxxxx

Page 3 of 12

4.1. Description of first aid measures**General information**

First aider: Pay attention to self-protection! Remove affected person from the danger area and lay down. Put victim at rest, cover with a blanket and keep warm. Take off immediately all contaminated clothing. In the case of all acid injuries, it is essential to consult a doctor. Chemical burns may be noticed after several hours!

After inhalation

Provide fresh air. In case of irregular breathing or respiratory arrest provide artificial respiration. No mouth-to-mouth or mouth-to-nose resuscitation. Use Ambu bag or ventilator. Call a physician immediately. Remove person to fresh air and keep comfortable for breathing.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. Call a physician immediately.

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

After ingestion

Observe risk of aspiration if vomiting occurs. Never give anything by mouth to an unconscious person or a person with cramps. Do NOT induce vomiting. Adverse human health effects and symptoms: Gastric perforation. Call a physician immediately. Rinse mouth immediately and drink plenty of water.

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

Causes severe burns. Immediate medical treatment required because corrosive injuries that are not treated are hard to cure.

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

Treat symptomatically. After rinsing, treat large areas of skin with calcium gluconate gel several times (see above). Continue the treatment even after having achieved freedom from pain (at least 15 min). Calcium gluconate should be injected in the case of 2nd/3rd degree burns.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

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

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

May cause fire or explosion; strong oxidiser. Vapours can form explosive mixtures with air. In case of fire may be liberated: Sulfur oxides. Hydrochloric gas.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. 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****General advice**

Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment. Material, acid-resistant. Provide adequate ventilation.

Safety Data Sheet

according to UK REACH Regulation

PowerEtch - hydrochloric acid-sulfuric acid mixture for etching

Revision date: 12.07.2023

Product code: 19344.xxxxx

Page 4 of 12

For non-emergency personnel

Clear danger zone. Follow emergency plan. Consult an expert. Remove victim out of the danger area.

For emergency responders

Move undamaged containers from immediate hazard area if it can be done safely.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers).

6.3. Methods and material for containment and cleaning up**For containment**

Contain leaks or spills within cabinets with removable trays.

For cleaning up

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

Other information

Apply chemical neutralizers. Clean contaminated articles and floor according to the environmental legislation.

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**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. Use extractor hood (laboratory). Handle and open container with care. Always close containers tightly after the removal of product. Wear personal protection equipment (refer to section 8).

Material, acid-resistant. Clear contaminated areas thoroughly.

Advice on protection against fire and explosion

Vapours/aerosols must be exhausted directly at the point of origin.: SECTION 10: Stability and reactivity.

Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff.

Further information on handling

Take off contaminated clothing and wash it before reuse. Street clothing should be stored separately from work clothing. Contaminated work clothing should not be allowed out of the workplace. Wash hands and face before breaks and after work and take a shower if necessary. Draw up and observe skin protection programme. When using do not eat, drink, smoke, sniff.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations. Unsuitable container/equipment material: Metal. Keep only in original packaging. Make sure spills can be contained (e.g. sump pallets or kerbed areas).

Hints on joint storage

Do not store together with: food and feed. pharmaceuticals. Infectious substances. Radioactive substances. Explosive substances. Oxidizing substances. Oxidizing liquids. Organic peroxides. Self-reactive substances and mixtures. Pyrophoric solids. Substances which in contact with water form flammable gases. Ammonium nitrate and preparations containing ammonium nitrate.metals.

Further information on storage conditions

Ensure adequate ventilation. Recommended storage temperature: 15 - 25°C. Keep away from heat. Protect

Safety Data Sheet

according to UK REACH Regulation

PowerEtch - hydrochloric acid-sulfuric acid mixture for etching

Revision date: 12.07.2023

Product code: 19344.xxxxx

Page 5 of 12

from moisture. Protect from direct sunlight. Protect containers against damage. Protect from light.

7.3. Specific end use(s)

For use as an etchant in metallography. Intended for scientific research and development.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
7647-01-0	Hydrogen chloride (gas and aerosol mists)	1	2		TWA (8 h)	WEL
		5	8		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 ³
Worker DNEL, acute		inhalation	local	0,1 mg/m ³

PNEC values

CAS No	Substance	Value
7664-93-9	sulphuric acid...%	
Environmental compartment		
Freshwater		0,003 mg/l
Marine water		0 mg/l
Freshwater sediment		0,002 mg/kg
Marine sediment		0,002 mg/kg
Micro-organisms in sewage treatment plants (STP)		8,8 mg/l

8.2. Exposure controls



Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. Technical measures and the application of suitable work processes have priority over personal protection equipment. Ensure adequate ventilation. Use extractor hood (laboratory). Provide washing facilities at the workplace, provide an eye shower or eyewash bottle and mark them.

Individual protection measures, such as personal protective equipment

Eye/face protection

Suitable eye protection: goggles. Safety goggles with side protection. In case of increased risk add protective face shield.

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

Safety Data Sheet

according to UK REACH Regulation

PowerEtch - hydrochloric acid-sulfuric acid mixture for etching

Revision date: 12.07.2023

Product code: 19344.xxxxx

Page 6 of 12

recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Suitable material: Acid-resistant. FKM (fluororubber). Thickness of material: 0,7 mm. Breakthrough time (maximum wearing time): >480 min.

Before using check leak tightness / impermeability. Protect skin by using skin protective cream.

Skin protection

Use of protective clothing. Material, acid-resistant

Respiratory protection

In case of inadequate ventilation wear respiratory protection. When working with acids: Respiratory protection is required at: aerosol or mist formation. Type: ABEK (combination filter for gases and vapours, identification colour: brown/grey/yellow/green). or gas filtering equipment (EN 141). Type: B. Identification color: grey.

Environmental exposure controls

Do not allow uncontrolled discharge of product into the environment.

SECTION 9: Physical and chemical properties
9.1. Information on basic physical and chemical properties

Physical state:	liquid	
Colour:	clear	
Odour:	Irritant, stinging	
Melting point/freezing point:		not determined
Boiling point or initial boiling point and boiling range:		56,1 °C
Flammability:		not applicable not applicable
Lower explosion limits:		not determined
Upper explosion limits:		not determined
Flash point:		>100 °C
Auto-ignition temperature:		not determined
Decomposition temperature:		not determined
pH-Value (at 20 °C):		0-1
Viscosity / kinematic:		not determined
Water solubility:		easily soluble
Solubility in other solvents		not determined
Partition coefficient n-octanol/water:		not determined
Vapour pressure:		23 hPa
(at 20 °C)		
Vapour pressure:		123 hPa
(at 50 °C)		
Density:		1,41 g/cm ³
Relative vapour density:		not determined

9.2. Other information
Information with regard to physical hazard classes
Explosive properties

The product is not: Explosive.

Sustaining combustion:

Not sustaining combustion

Self-ignition temperature

Solid:

not applicable

Gas:

not applicable

Oxidizing properties

The product is not: oxidising.

Safety Data Sheet

according to UK REACH Regulation

PowerEtch - hydrochloric acid-sulfuric acid mixture for etching

Revision date: 12.07.2023

Product code: 19344.xxxxx

Page 7 of 12

Other safety characteristics

Evaporation rate: not determined

SECTION 10: Stability and reactivity
10.1. Reactivity

Possibility of hazardous reactions. May cause fire or explosion; strong oxidiser. Corrosive to metals.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Exothermic reaction with: Base, Peroxides, Oxidizing agent.

10.4. Conditions to avoid

Keep away from heat. Safe handling: see section 7

10.5. Incompatible materials

Metal. Keep away from: Base, Oxidizing agent, Peroxides. Alkalis (alkalis).

10.6. Hazardous decomposition products

Resulting from the use of the product: Chlorine. Hydrochloric gas. Sulfur oxides.

SECTION 11: Toxicological information
11.1. Information on hazard classes as defined in GB CLP Regulation
Acute toxicity

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

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
7664-93-9	sulphuric acid...%				
	oral	LD50 2140 mg/kg	Rat	suppliers SDS.	

Irritation and corrosivity

Causes severe skin burns and eye damage. (On basis of test data)

Causes serious eye damage. (On basis of test data)

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.

11.2. Information on other hazards
Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

Safety Data Sheet

according to UK REACH Regulation

PowerEtch - hydrochloric acid-sulfuric acid mixture for etching

Revision date: 12.07.2023

Product code: 19344.xxxxx

Page 8 of 12

Further information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 12: Ecological information

12.1. Toxicity

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

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
7664-93-9	sulphuric acid...%					
	Acute algae toxicity	ErC50 >100 mg/l	72 h		suppliers SDS.	
	Acute crustacea toxicity	EC50 >100 mg/l	48 h		suppliers SDS.	
7647-01-0	hydrochloric acid ... %					
	Acute fish toxicity	LC50 862 mg/l	96 h	Leuciscus idus		

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

12.4. Mobility in soil

The product has not been tested.

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.

12.7. Other adverse effects

No information available.

Further information

Avoid release to the environment. slightly hazardous to water.

Harmful effect on fish, plankton and sessile organisms due to pH shift. Water-soluble compounds can be formed by the action of acids, which are substances harmful to water in the sense of the EC Water Protection Directive

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation. Hazardous waste according to Directive 2008/98/EC (waste framework directive). Consult the local waste disposal expert about waste disposal. Control report for waste code/ waste marking according to (EWC) European Waste Catalogue:

List of Wastes Code - residues/unused products

060101 WASTES FROM INORGANIC CHEMICAL PROCESSES; wastes from the manufacture, formulation, supply and use (MFSU) of acids; sulphuric acid and sulphurous acid; hazardous waste

List of Wastes Code - used product

060101 WASTES FROM INORGANIC CHEMICAL PROCESSES; wastes from the manufacture, formulation, supply and use (MFSU) of acids; sulphuric acid and sulphurous acid; hazardous waste

Safety Data Sheet

according to UK REACH Regulation

PowerEtch - hydrochloric acid-sulfuric acid mixture for etching

Revision date: 12.07.2023

Product code: 19344.xxxxx

Page 9 of 12

Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled.

SECTION 14: Transport information
Land transport (ADR/RID)

14.1. UN number or ID number:	UN 3264
14.2. UN proper shipping name:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.(sulphuric acid%, hydrochloric acid %)
14.3. Transport hazard class(es):	8
14.4. Packing group:	II
Hazard label:	8



Classification code:	C1
Special Provisions:	274
Limited quantity:	1 L
Excepted quantity:	E2
Transport category:	2
Hazard No:	80
Tunnel restriction code:	E

Inland waterways transport (ADN)

14.1. UN number or ID number:	UN 3264
14.2. UN proper shipping name:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.(sulphuric acid%, hydrochloric acid %)
14.3. Transport hazard class(es):	8
14.4. Packing group:	II
Hazard label:	8



Classification code:	C1
Special Provisions:	274
Limited quantity:	1 L
Excepted quantity:	E2

Marine transport (IMDG)

14.1. UN number or ID number:	UN 3264
14.2. UN proper shipping name:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Sulphuric acid %, hydrochloric acid %)
14.3. Transport hazard class(es):	8
14.4. Packing group:	II
Hazard label:	8



Special Provisions:	274
Limited quantity:	1 L
Excepted quantity:	E2
EmS:	F-A, S-B
Segregation group:	1 - acids

Air transport (ICAO-TI/IATA-DGR)

Safety Data Sheet

according to UK REACH Regulation

PowerEtch - hydrochloric acid-sulfuric acid mixture for etching

Revision date: 12.07.2023

Product code: 19344.xxxxx

Page 10 of 12

14.1. UN number or ID number:	UN 3264
14.2. UN proper shipping name:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.(Sulphuric acid %, hydrochloric acid %)
14.3. Transport hazard class(es):	8
14.4. Packing group:	II
Hazard label:	8



Special Provisions:	A3 A803
Limited quantity Passenger:	0.5 L
Passenger LQ:	Y840
Excepted quantity:	E2
IATA-packing instructions - Passenger:	851
IATA-max. quantity - Passenger:	1 L
IATA-packing instructions - Cargo:	855
IATA-max. quantity - Cargo:	30 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

Warning: strongly corrosive.

14.7. Maritime transport in bulk according to IMO instruments

not applicable

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

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers. Observe employment restrictions for women of child-bearing age.

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

Skin resorption/Sensitization: Permeates easily through outer skin and causes poisoning.

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

sulphuric acid...%

hydrochloric acid ... %

SECTION 16: Other information
Changes

This data sheet contains changes from the previous version in section(s): 2,4,7,9,10,11,12,14,15,16.

Rev. 1,00; 03.02.2021; New generation for the purpose of customer order.

Rev. 1,1; 20.05.2021; Recipe adjustment.

Rev. 2,0; 12.07.2023; general adjustment(s)

Safety Data Sheet

according to UK REACH Regulation

PowerEtch - hydrochloric acid-sulfuric acid mixture for etching

Revision date: 12.07.2023

Product code: 19344.xxxxx

Page 11 of 12

Abbreviations and acronyms

CLP: Classification, labelling and Packaging
 REACH: Registration, Evaluation and Authorization of Chemicals
 GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
 UN: United Nations
 CAS: Chemical Abstracts Service
 DNEL: Derived No Effect Level
 DMEL: Derived Minimal Effect Level
 PNEC: Predicted No Effect Concentration
 ATE: Acute toxicity estimate
 LC50: Lethal concentration, 50%
 LD50: Lethal dose, 50%
 LL50: Lethal loading, 50%
 EL50: Effect loading, 50%
 EC50: Effective Concentration 50%
 ErC50: Effective Concentration 50%, growth rate
 NOEC: No Observed Effect Concentration
 BCF: Bio-concentration factor
 PBT: persistent, bioaccumulative, toxic
 vPvB: very persistent, very bioaccumulative
 ADR: Accord européen sur le transport des marchandises dangereuses par Route
 (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 RID: Regulations concerning the international carriage of dangerous goods by rail
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
 (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation
 intérieures)
 IMDG: International Maritime Code for Dangerous Goods
 EmS: Emergency Schedules
 MFAG: Medical First Aid Guide
 IATA: International Air Transport Association
 ICAO: International Civil Aviation Organization
 MARPOL: International Convention for the Prevention of Marine Pollution from Ships
 IBC: Intermediate Bulk Container
 SVHC: Substance of Very High Concern
 For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>

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

Classification	Classification procedure
Met. Corr. 1; H290	On basis of test data
Skin Corr. 1; H314	On basis of test data
Eye Dam. 1; H318	On basis of test data

Relevant H and EUH statements (number and full text)

H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.

Further Information

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 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

Safety Data Sheet

according to UK REACH Regulation

PowerEtch - hydrochloric acid-sulfuric acid mixture for etching

Revision date: 12.07.2023

Product code: 19344.xxxxx

Page 12 of 12

necessarily valid for the new made-up material.

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