



Q-ULTRA CLEAN

1. Identification of the substance or preparation:

Q-Ultra Clean

Use of the substance/preparation: Cleaning of stainless steel, aluminium and non-ferrous metal surfaces

Company/undertaking identification:



Marie-Curie-Straße 14-18
D-46446 Emmerich

2. Hazards identification

Classification

Indications of danger: Harmful, Irritant

R-phrases:

Harmful by inhalation, in contact with skin and if swallowed
Irritating to eyes and skin

3. Composition/information on ingredients

Chemical characterization: Mixture

Hazardous components

EG-No.	CAS-No.	Chemical name	Quantity	Classification
231-633-2	7664-38-2	Phosphoric acid	20 – 30%	C R34
231-634-8	7664-39-2	Hydrofluoric acid	< 1%	T+, C R26/27/28-35

Full text of each relevant R-phrases can be found in heading 18.

4. First aid measures:

General information

Remove soaked clothing immediately and remove the injured person from the zone of danger (attention: protect yourself)

After skin contact:	wash immediately with plenty of soap and water, rinse well.
After inhalation:	fresh air supply, resting position, body warming, if necessary respiration aid. In case of unconsciousness resting or transporting in a lateral stable position. Consult immediately a physician or medical officer.
After contacting the eyes:	If product gets into the eye, keep eyelid open and rinse the open eye for several minutes with running water and consult a physician.
After ingestion:	Let water be swallowed in little sips (dilution effect). Provide fresh air. Immediately get medical attention.

5. Fire fighting measures:

Suitable extinguishing media:	CO ₂ extinguishing powder or water spray jet. Fight wider spread fire with water spray jet or alcohol resistant foam.
Special protective equipment for fire-fighters:	Not necessary
Additional information:	closed containers in designated fire zones should be cooled with water to avoid them bursting.

6. Accidental release measures:

Personal precautionary measures:	Not necessary
Environmental precautions:	prevent from getting into canals, drains or sewage system. In case of damage at Sea (shipcargo) inform the local authorities.

Method for cleaning up/taking up: use a neutralisation solution (f. i. soda lye, calcium hydroxide, alkali) after dilution with plenty of water. Keep the room ventilated.

7. Handling and storage:

Handling

Indication for safe handling: store in closed plastic containers, in a cool place with appropriate ventilation / exhaust and out of the direct sunlight. Put them in a catching tub, be careful with the construction materials and the volumes.

Protective personal equipment. Keep food and drinks away. Remove soaked clothes immediately. Wash your hands before breaks or leaving for the day. If necessary use hermetic closing glasses (plastic glass) protective shield, rubber/plastic gloves, acid proof clothing and shoes.

Storage

Requirements for storage rooms and vessels

Keep container closed in a cool well ventilated place. Protect against UV radiation/sunlight. Provide for retaining containers, eg. Floor pan without outflow.

Advice on storage compatibility

Not necessary

8. Exposure controls/personal protection

Exposure limit values

CAS-No.	Chemical name	ml/ m ³	mg/m ³	F/ml	Category	Origin
7664-39-3	Hydrogenfluoride	1.8 3	1.5 2.5		TWA (8H) STEL (15 min)	WEL WEL
7664-38-2	Orthophosphoric acid		1 2		TWA (8H) STEL (15 min)	WEL WEL

Additional advice on control parameters

Refer to chapter 7. Additional information about structure of technical plants; materials has to be resistant against hydrofluoric acid.

Exposure controls

Protective and hygiene measures

Keep away from food, dring and animal feedingstuffs. Take off immediately all contaminated closing. Wash hands before breaks and at the end of work.

Respiratory protection

Not necessary

Hand protection

Advisable: tested protective gloves are to be worn; suitable material PE, PVC

Eye protection

Tightly sealed safety glasses. Eye-shade

Skin protection

Advisable: chemical resistant suit. Chemical resistant safety shoes.

9. Physical and chemical properties:

General information

Form: liquid
Colour: green
Smell: acidulous

Important health, safety and environmental information

pH value : ca. 1,4

Changes in the physical state

Boiling point : ca 106° C
Flash point : not applicable

Flammability

Solid : not applicable
Gas : not applicable

Explosive properties

Not applicable

Lower explosion limits: not applicable
Upper explosion limits: not applicable

Oxidizing properties None/not

Density at 20°C: 1,25 g/m³
Solubility in water: 100%

10. Stability and reactivity:

Conditions to avoid

Temperature of decomposition: 175°C

Hazardous decomposition products

None/not

11. Toxicological information

Acute toxicity

Irritant effect on the skin: mild irritant
Irritant effect on the eye: irritant

Sensitising effects

No danger of sensitization

Additional information on tests

After ingestion: irritant on mouth, throat, gullet and stomach

12. Ecological information

Ecotoxicity

Water Hazard Class: 1 (self classification)

Must not enter sewage or feeder ditch undiluted or unneutralized. The toxic effect for fish and bacteria begins below pH 6.0 and rises with smaller pH factor.

13. Disposal considerations

Advice on disposal

Dispose used acid solution by neutralisation with lime hydrate solution in a suitable container. Filter accrued neutral mud and dispose as hazardous waste.

Waste disposal

190205 Wastes from waste management facilities, off site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use.

Classified as hazardous waste.

Waste disposal number of used products

190205 Wastes from waste management facilities, off site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use.

Classified as hazardous waste.

Waste disposal number of contaminated packaging

190205 Wastes from waste management facilities, off site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use.

Classified as hazardous waste.

Contaminated packaging

Waste disposal according to official state regulations.

14. Transportation information

Land transport: ADR/RID

ADR/RID - GGVS/E class: 8 corrosive material
UN -Number: 1805
Classification code: C1
Packaging group: III
Limited quantity: LQ7
Technical name: PHOSPHORIC ACID LIQUID

Other applicable information (land transport):

Special provisions: 274

E2

: 2

E

E1

: 3

Inland waterways transport: ADNR

ADNR class: 8 corrosive material
UN -Number: 1805
Classification code: C1
Hazard label: 8
Packaging group: III
Limited quantity: LQ 7
Technical name: PHOSPHORIC ACID LIQUID

Other applicable information (waterways transport):

Special provisions: 2740802

Marine transport: IMDG

IMDG class: 8 corrosive material
UN-Number: 1805
Hazard label: 8
Packaging group: III
Limited quantity: 5 L
EmS: F-A, S-B
Technical name: PHOSPHORIC ACID LIQUID

Other applicable information (marine transport):

Special provisions: 274 944

Special provisions: 223

Air transport: ICAO

ICAO class: 8 corrosive material
UN-Number: 1805
Hazard label: 8
Packaging group: III
Limited quantity: 1 L
IATA-packing instructions-Passenger: 819
IATA-max quantity-Passenger: 5 L
IATA-max quantity-Cargo: 60 L
Technical name: PHOSPORIC ACID LIQUID
Other applicable information (air transport):

E2
: Y808
30 L
E1
: Y819
60

15. Regulatory information

Labelling

Danger symbols:

Xi-irritant

Xn-Harmful



Hazardous component(s) to be indicated on label

Hydrofluoric acid <1%

R-Phrases

20/21/22
36/38

Harmful by inhalation and in contact with skin and is swallowed
Irritation to eyes and skin

S-Phrases

7/9

26
27
36/37/39

keep the container closed and stored in a cool place with appropriate ventilation.
after contacting the eyes, rinse with water and contact a physician.
remove soaked, contaminated clothes immediately.
wear appropriate protective clothing , gloves and glasses or shield during work
in case of an accident or nausea contact immediately a physician or medical officer (when possible show him the container label).

National regulatory information

Water contamination class (D): 1 slightly water contaminating

16. Other information

Full text of R-Phrases referred to under sections 2 and 3

20/21/22	Harmful by inhalation and in contact with skin and is swallowed
36/38	Irritation to eyes and skin
34	Causes burns
35	Causes severe burns
36/38	Irritating to eyes and skin

The indications in this technical specification sheet are based on our present level of knowledge.

It's not allowed to use the product for other purposes then mentioned above without permission in writing.

We have neither knowledge nor control of the actual working conditions of the user.

The user is responsible for meeting all the necessary legal conditions.

This technical specification sheet describes the safety requirements for our products. It is not an assurance of product's properties nor is it valid as a basis for contractual legal relation.