

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

- **1.1 Product identifier**
- **Trade name:** TechniEtch Al80
- **Article number:** STD0608
- **1.2 Relevant identified uses of the substance or mixture and uses advised against** Industrial only
- **Application of the substance / the preparation :**
 - Semiconductors industry
 - Plating industry
 - Electronic and microelectronic industry
 - PCB industry
 - Laboratory
 - Water treatment
 - Photovoltaic industry
 - Resins stripping
 - Stripping - Cleaning
 - Metal etching
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
 - TECHNIC France
 - 15, rue de la Montjoie
 - F-93210 SAINT DENIS
 - +33(0)149465100
- **Further information obtainable from:**
 - Département sécurité du produit / Chemicals Hazards dpt
 - Contact : fds.technic@technic.fr
- **1.4 Emergency telephone number:**
 - +33 1 45 42 59 59 (ORFILA)
 - +33 1 49 46 51 00 (Technic - La Plaine Saint Denis)
- Members of the public seeking specific information on poisons should contact:
- In England and Wales: NHS 111 - dial 111
- In Scotland: NHS 24 - dial 111

SECTION 2: Hazards identification

- **2.1 Substance or mixture classification**
- **Classification according to Regulation (EC) No 1272/2008**



corrosion

Skin Corr. 1A H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.



Acute Tox. 4 H302 Harmful if swallowed.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
 - The product is classified and labelled according to the GB CLP regulation.
- **Hazard pictograms** GHS05, GHS07
- **Signal word** Danger

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· **Hazard-determining components of labelling:**

phosphoric acid
nitric acid
Acetic acid

· **Hazard statements**

H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.

· **Precautionary statements**

P264 Wash thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor.
P321 Specific treatment (see on this label).
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/national/international regulations.

· **Additional information:**

Product contains: Restricted explosives precursors. Making available, introduction, possession and use according to Regulation (EU) 2019/1148, Article 5 (1) and (3).

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

· **3.2 Mixtures**

· **Description:** Mixture: consisting of the following components.

· **Dangerous components:**

CAS: 7664-38-2 EINECS: 231-633-2 Reg.nr.: 01-2119485924-24-xxxx	phosphoric acid ⚠ Met. Corr.1, H290; Skin Corr. 1B, H314; Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302 Specific concentration limits: Skin Corr. 1B; H314: $C \geq 25\%$ Skin Irrit. 2; H315: $10\% \leq C < 25\%$ Eye Irrit. 2; H319: $10\% \leq C < 25\%$	50-100%
CAS: 64-19-7 EINECS: 200-580-7 Reg.nr.: 01-2119475328-30-xxxx	Acetic acid ⚠ Flam. Liq. 3, H226; ⚠ Skin Corr. 1A, H314 Specific concentration limits: Skin Corr. 1A; H314: $C \geq 90\%$ Skin Corr. 1B; H314: $25\% \leq C < 90\%$ Skin Irrit. 2; H315: $10\% \leq C < 25\%$ Eye Irrit. 2; H319: $10\% \leq C < 25\%$	2.5-10%
CAS: 7697-37-2 EINECS: 231-714-2 Reg.nr.: 01-2119487297-23-xxxx	nitric acid ⚠ Ox. Liq. 2, H272; ⚠ Met. Corr.1, H290; Skin Corr. 1A, H314; Eye Dam. 1, H318, EUH071 Specific concentration limits: Ox. Liq. 2; H272: $C \geq 99\%$ Ox. Liq. 3; H272: $70\% \leq C < 99\%$	2.5-10%

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· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

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SECTION 4: First aid measures

· **4.1 Description of first aid measures**

· **General information:**

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· **After inhalation:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

Take the clothes off. Wash for 15 minutes.

Call a doctor immediately.

· **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

· **After swallowing:**

Seek immediate medical advice.

Rinse mouth out with water

Do not eat, do not vomit

· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

· **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

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SECTION 5: Firefighting measures

· **5.1 Extinguishing media**

· **Suitable extinguishing agents:**

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· **5.2 Special hazards arising from the substance or mixture** No further relevant information available.

· **5.3 Advice for firefighters**

· **Protective equipment:**

Mouth respiratory protective device.

Wear fire thermal protection.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

· **6.2 Environmental precautions:**

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

· **6.3 Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralising agent.

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

· **6.4 Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

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SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Wear gloves and safety glasses.

· **Information about fire - and explosion protection:** No special measures required.

· 7.2 Conditions for safe storage, including any incompatibilities

· Storage:

· **Requirements to be met by storerooms and receptacles:** Storage temperature: 0-40°C· **Information about storage in one common storage facility:** Not required· **Further information about storage conditions:** Keep container tightly sealed.· **Recommended storage temperature:** 0 - 30°C· **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· **Ingredients with limit values that require monitoring at the workplace:**

7664-38-2 phosphoric acid

WEL Short-term value: 2 mg/m³Long-term value: 1 mg/m³

64-19-7 Acetic acid

WEL Short-term value: 50 mg/m³, 20 ppmLong-term value: 25 mg/m³, 10 ppm

7697-37-2 nitric acid

WEL Short-term value: 2.6 mg/m³, 1 ppm· **Additional information:** The lists valid during the making were used as basis.

· 8.2 Exposure controls

· **Appropriate engineering controls** No further data; see section 7.· **Individual protection measures, such as personal protective equipment**· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· **Hand protection**

Protective gloves

The glove material has to be impermeable and resistant to the preparation, according to EN 374

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

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- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye/face protection**



Tightly sealed goggles according to EN 166

- **Body protection:** Acid resistant protective clothing

- **Risk management measures**

Avoid exposure - obtain special instructions before use; Use barrier skin cream. Store work clothing separately. Remove soiled or soaked clothing immediately.

Respiratory protection according to: CEN 136, 140, 141, 143, 173 ; eyes protection according to: CEN 166 ; body protection according to: CEN 340, 465, 466, 497, 943 ; gloves according to: CEN 374 ; shoes according to: CEN 344, 345.

SECTION 9: Physical and chemical properties

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

- **General Information**

- **Physical state**

Fluid

- **Colour:**

Colourless

- **Odour:**

Recognisable

- **Odour threshold:**

Not determined.

- **Melting point/freezing point:**

Undetermined.

- **Boiling point or initial boiling point and boiling range**

121 °C

- **Flammability**

Not applicable.

- **Lower and upper explosion limit**

- **Lower:**

Not determined.

- **Upper:**

Not determined.

- **Flash point:**

69 °C

- **Decomposition temperature:**

Not determined.

- **pH at 20 °C**

<1

- **Viscosity:**

- **Kinematic viscosity**

Not determined.

- **Dynamic:**

Not determined.

- **Solubility**

- **water:**

Fully miscible.

- **Partition coefficient n-octanol/water (log value)**

Not determined.

- **Vapour pressure at 20 °C:**

23 hPa

- **Density and/or relative density**

- **Density at 20 °C:**

1.626 g/cm³

- **Relative density**

Not determined.

- **Vapour density**

Not determined.

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· **9.2 Other information**· **Appearance:**· **Form:**

Fluid

· **Important information on protection of health and environment, and on safety.**· **Ignition temperature:**

Product is not selfigniting.

· **Explosive properties:**

Product does not present an explosion hazard.

· **Change in condition**· **Evaporation rate**

Not determined.

· **Information with regard to physical hazard classes**· **Explosives**

Void

· **Flammable gases**

Void

· **Aerosols**

Void

· **Oxidising gases**

Void

· **Gases under pressure**

Void

· **Flammable liquids**

Void

· **Flammable solids**

Void

· **Self-reactive substances and mixtures**

Void

· **Pyrophoric liquids**

Void

· **Pyrophoric solids**

Void

· **Self-heating substances and mixtures**

Void

· **Substances and mixtures, which emit flammable gases in contact with water**

Void

· **Oxidising liquids**

Void

· **Oxidising solids**

Void

· **Organic peroxides**

Void

· **Corrosive to metals**

Void

· **Desensitised explosives**

Void

SECTION 10: Stability and reactivity

· **10.1 Reactivity** No further relevant information available.· **10.2 Chemical stability**· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.· **10.3 Possibility of hazardous reactions** No dangerous reactions known.· **10.4 Conditions to avoid** No further relevant information available.· **10.5 Incompatible materials:** No further relevant information available.· **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

· **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**· **Acute toxicity** Harmful if swallowed.· **Skin corrosion/irritation** Causes severe skin burns and eye damage.· **Serious eye damage/irritation** Causes serious eye damage.

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· 11.2 Information on other hazards

· Endocrine disrupting properties

None of the ingredients is listed.

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SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic toxicity: No further relevant information available.

· 12.2 Persistence and degradability No further relevant information available.

· 12.3 Bioaccumulative potential No further relevant information available.

· 12.4 Mobility in soil No further relevant information available.

· 12.5 Results of PBT and vPvB assessment

· PBT: Not applicable.

· vPvB: Not applicable.

· 12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

· 12.7 Other adverse effects

· Additional ecological information:

· General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

· Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· Uncleaned packaging:

· Recommendation: Disposal must be made according to official regulations.

· Recommended cleansing agents: Water, if necessary together with cleansing agents.

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SECTION 14: Transport information

· 14.1 UN number or ID number

· ADR, IMDG, IATA

UN3265

· 14.2 UN proper shipping name

· ADR

3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
(NITRIC ACID, PHOSPHORIC ACID, SOLUTION)

· IMDG, IATA

CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
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· 14.3 Transport hazard class(es)

· ADR



· Class

8 (C3) Corrosive substances.

· Label

8

· IMDG, IATA



· Class

8 Corrosive substances.

· Label

8

· 14.4 Packing group

· ADR, IMDG, IATA

III

· 14.5 Environmental hazards:

· Marine pollutant:

No

· 14.6 Special precautions for user

· Hazard identification number (Kemler code):

Warning: Corrosive substances.

80

· EMS Number:

F-A,S-B

· Segregation groups

(SGG1) Acids

· Stowage Category

A

· Stowage Code

SW2 Clear of living quarters.

· 14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

· Transport/Additional information:

· ADR

· Limited quantities (LQ)

5L

· Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

· Transport category

3

· Tunnel restriction code

E

· IMDG

· Limited quantities (LQ)

5L

· Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

· UN "Model Regulation":

UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (NITRIC ACID, PHOSPHORIC ACID, SOLUTION), 8, III

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SECTION 15: Regulatory information

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

· Poisons Act

· Regulated explosives precursors

7664-38-2	phosphoric acid	30%
7697-37-2	nitric acid	3%

· Regulated poisons

None of the ingredients is listed.

· Reportable explosives precursors

None of the ingredients is listed.

· Reportable poisons

None of the ingredients is listed.

· Directive 2012/18/EU

· **Named dangerous substances - ANNEX I** None of the ingredients is listed.

· National regulations:

· **Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

H226 Flammable liquid and vapour.
 H272 May intensify fire; oxidiser.
 H290 May be corrosive to metals.
 H302 Harmful if swallowed.
 H314 Causes severe skin burns and eye damage.
 H315 Causes skin irritation.
 H318 Causes serious eye damage.
 H319 Causes serious eye irritation.
 EUH071 Corrosive to the respiratory tract.

· **Department issuing SDS:** EH&S Department· **Contact:** fds.technic@technic.fr

· Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative
 Flam. Liq. 3: Flammable liquids – Category 3
 Ox. Liq. 2: Oxidizing liquids – Category 2
 Met. Corr.1: Corrosive to metals – Category 1
 Acute Tox. 4: Acute toxicity – Category 4
 Skin Corr. 1A: Skin corrosion/irritation – Category 1A
 Skin Corr. 1B: Skin corrosion/irritation – Category 1B

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Eye Dam. 1: Serious eye damage/eye irritation – Category 1

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· * **Data compared to the previous version altered.**

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