

Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and
GHS

Printing date 07.06.2013

Revision: 07.06.2013

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

- **1.1 Product identifier**
- **Trade name:** SafeCorr 100C Synonyms: AquapHix
- **Article number:** GRS ApH
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the preparation** Water treatment
- **1.3 Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
TransChem, Inc.
GFI F&E (sA) | oÜäÄ Suite 1G
Carlsbad, CA 920FF
Phone: 800-783-2436
- **Further information obtainable from:** Product Safety Department
- **1.4 Emergency telephone number:**
ChemTel Inc.
(800)255-3924, +1 (813)248-0585

2 Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS05 corrosion

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



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



C; Corrosive

R34: Causes burns.



Xn; Harmful

R21/22: Harmful in contact with skin and if swallowed.

- **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

- **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

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- **Additional information:**

Concentrated product is corrosive as shown in this document. When diluted at least 1:1 (50% or less solution) with water, product is non-hazardous.

- **2.2 Label elements**

- **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

- **Hazard pictograms**



GHS05

- **Signal word** Danger

- **Hazard statements**

H314 Causes severe skin burns and eye damage.

- **Precautionary statements**

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P280 Wear protective gloves / eye protection.

P264 Wash thoroughly after handling.

P260 Do not breathe mist/vapours/spray.

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

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

- **Hazard description:**

- **WHMIS-symbols:**

D1B - Toxic material causing immediate and serious toxic effects

E - Corrosive material



- **NFPA ratings (scale 0 - 4)**



Health = 2

Fire = 0

Reactivity = 1

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- **HMIS-ratings (scale 0 - 4)**

HEALTH	2	Health = 2
FIRE	0	Fire = 0
REACTIVITY	1	Reactivity = 1

- **HMIS Long Term Health Hazard Substances**

None of the ingredients is listed.









- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **3.2 Mixtures**

- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 7664-38-2 EINECS: 231-633-2 Index number: 015-011-00-6	phosphoric acid  C R34  Skin Corr. 1B, H314	< 10%
CAS: 144-62-7 EINECS: 205-634-3 Index number: 607-006-00-8	oxalic acid  Xn R21/22  Acute Tox. 4, H302; Acute Tox. 4, H312	< 10%
CAS: 7647-01-0 EINECS: 231-595-7 Index number: 017-002-00-2	hydrochloric acid  C R34;  Xi R37  Skin Corr. 1B, H314  STOT SE 3, H335	< 10%

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

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.

Take affected persons out into the fresh air.

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.

- **After skin contact:**

Immediately remove any clothing soiled by the product.

Immediately rinse with water.

If skin irritation continues, consult a doctor.

- **After eye contact:**

Protect unharmed eye.

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Rinse opened eye for several minutes under running water.
Remove contact lenses if worn.
Rinse opened eye for several minutes under running water. Then consult a doctor.

- **After swallowing:**

Rinse out mouth and then drink plenty of water.
Do not induce vomiting; call for medical help immediately.

- **4.2 Most important symptoms and effects, both acute and delayed**

Coughing
Breathing difficulty
Dizziness
Gastric or intestinal disorders

- **Hazards**

Danger of gastric perforation.
Danger of impaired breathing.

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

Medical supervision for at least 48 hours.
Monitor circulation, possible shock treatment.
If necessary oxygen respiration treatment.
Later observation for pneumonia and pulmonary oedema.

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.

- **For safety reasons unsuitable extinguishing agents:** Limestone powder

- **5.2 Special hazards arising from the substance or mixture**

In case of fire, the following can be released:

Hydrogen chloride (HCl)

Carbon monoxide (CO)

Under certain fire conditions, traces of other toxic gases cannot be excluded.

- **5.3 Advice for firefighters**

- **Protective equipment:**

Wear self-contained respiratory protective device.

Wear fully protective suit.

- **Additional information** Cool endangered receptacles with water spray.

6 Accidental release measures

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

Use respiratory protective device against the effects of fumes/dust/aerosol.

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

- **6.2 Environmental precautions:** Dilute with plenty of water.

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

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

Dispose contaminated material as waste according to item 13.

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Clean the affected area carefully; suitable cleaners are:

Warm water

· **6.4 Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

· **7.1 Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Open and handle receptacle with care.

· **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:**

Store in a cool location.

Store only in the original receptacle.

Unsuitable material for receptacle: steel.

Unsuitable material for receptacle: aluminium.

· **Information about storage in one common storage facility:**

Store away from foodstuffs.

Do not store together with alkalis (caustic solutions).

Store away from oxidizing agents.

· **Further information about storage conditions:**

Store in cool, dry conditions in well sealed receptacles.

Store receptacle in a well ventilated area.

Store in a cool place.

· **7.3 Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.

· **8.1 Control parameters**

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

7647-01-0 hydrochloric acid

IOELV (EU)	Short-term value: 15 mg/m ³ , 10 ppm Long-term value: 8 mg/m ³ , 5 ppm
PEL (USA)	Short-term value: C 7 mg/m ³ , C 5 ppm
REL (USA)	Short-term value: C 7 mg/m ³ , C 5 ppm
TLV (USA)	Short-term value: C 2,98 mg/m ³ , C 2 ppm
EL (Canada)	Short-term value: C 2 ppm

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7664-38-2 phosphoric acid

IOELV (EU)	Short-term value: 2 mg/m ³ Long-term value: 1 mg/m ³
PEL (USA)	1 mg/m ³
REL (USA)	Short-term value: 3 mg/m ³ Long-term value: 1 mg/m ³
TLV (USA)	Short-term value: 3 mg/m ³ Long-term value: 1 mg/m ³
EL (Canada)	Short-term value: 3 mg/m ³ Long-term value: 1 mg/m ³
EV (Canada)	Short-term value: 3 mg/m ³ Long-term value: 1 mg/m ³

144-62-7 oxalic acid

IOELV (EU)	1 mg/m ³
PEL (USA)	1 mg/m ³
REL (USA)	Short-term value: 2 mg/m ³ Long-term value: 1 mg/m ³
TLV (USA)	Short-term value: 2 mg/m ³ Long-term value: 1 mg/m ³
EL (Canada)	Short-term value: 2 mg/m ³ Long-term value: 1 mg/m ³
EV (Canada)	Short-term value: 2 mg/m ³ Long-term value: 1 mg/m ³

- **DNELs** No further relevant information available.
- **PNECs** No further relevant information available.
- **Additional information:** The lists valid during the making were used as basis.

- **8.2 Exposure controls**

- **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.
- Do not inhale gases / fumes / aerosols.

- **Respiratory protection:**

- Use suitable respiratory protective device in case of insufficient ventilation.
- Use suitable respiratory protective device when aerosol or mist is formed.

- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

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Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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

- **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 through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **For the permanent contact gloves made of the following materials are suitable:**

Fluorocarbon rubber (Viton)

Butyl rubber, BR

Nitrile rubber, NBR

- **Not suitable are gloves made of the following materials: PVA gloves**

- **Eye protection:**

Contact lenses should not be worn.



Safety glasses

Goggles recommended during refilling

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

- **Limitation and supervision of exposure into the environment** No special requirements.

- **Risk management measures** See Section 7 for additional information.

9 Physical and chemical properties

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

- **General Information**

- **Appearance:**

Form: Liquid

Colour: Clear

- **Odour:** Acrid

- **Odour threshold:** Not determined.

- **pH-value at 20 °C:** < 2,0 (acidic) (Estimate)

- **Change in condition**

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 100 °C (212 °F) (Approx.)

- **Flash point:** Not applicable - does not support sustained combustion.

- **Flammability (solid, gaseous):** Not applicable.

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· Ignition temperature:	Not determined.
· Decomposition temperature:	Not determined.
· Self-igniting:	Product is not self-igniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapour pressure:	Not determined.
· Density at 20 °C:	1,0 ± 0,1 g/cm ³ (Estimate)
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with water:	Fully miscible.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· 9.2 Other information	No further relevant information available.

10 Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **10.3 Possibility of hazardous reactions**
Reacts with alkali (lyes).
Develops corrosive gases/fumes.
Develops toxic gases/fumes.
Reacts with metals forming hydrogen.
Corrosive action on metals.
Reacts with amines.
- **10.4 Conditions to avoid** Store away from oxidizing agents.
- **10.5 Incompatible materials:**
Warning! Do not use together with other products. May release dangerous gases (chlorine).
- **10.6 Hazardous decomposition products:**
Phosphoric acids
Phosphorus compounds
Carbon monoxide and carbon dioxide

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Hydrogen chloride (HCl)

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11 Toxicological information

11.1 Information on toxicological effects

Acute toxicity:

LD/LC50 values relevant for classification:

7647-01-0 hydrochloric acid

Oral | LD50 | 900 mg/kg (rabbit)

144-62-7 oxalic acid

Oral | LD50 | 375 mg/kg (rat)

Primary irritant effect:

- on the skin: Caustic effect on skin and mucous membranes.

- on the eye: Strong caustic effect.

- Sensitization: No sensitizing effects known.

Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Harmful

Corrosive

Irritant

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

12 Ecological information

12.1 Toxicity

- Aquatic toxicity:** The product contains materials that are harmful to the environment.

- 12.2 Persistence and degradability** The organic portion of the product is biodegradable.

- 12.3 Bioaccumulative potential** Does not accumulate in organisms

- 12.4 Mobility in soil** No further relevant information available.

Additional ecological information:

General notes:

At present there are no ecotoxicological assessments.

This statement was deduced from the properties of the single components.

Due to available data on eliminability/decomposition and bioaccumulation potential a prolonged damage of the environment is unlikely.

Water Hazard Class (Self-classification) in the concentrate.

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

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

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.

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- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

13 Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.
Can be disposed of with household garbage with prior chemical-physical or biological treatment following consultation with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.
Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water only.

14 Transport information

- | | |
|---|-----------------|
| · 14.1 UN-Number | |
| · DOT, ADR, ADN, IMDG, IATA | N/A |
| · 14.2 UN proper shipping name | |
| · DOT, ADR, ADN, IMDG, IATA | N/A |
| · 14.3 Transport hazard class(es) | |
| · DOT, ADR, ADN, IMDG, IATA | |
| · Class | N/A |
| · 14.4 Packing group | |
| · DOT, ADR, IMDG, IATA | N/A |
| · 14.5 Environmental hazards: | |
| · Marine pollutant: | No |
| · 14.6 Special precautions for user | Not applicable. |
| · 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| · UN "Model Regulation": | - |

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15 Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **United States (USA)**
- **SARA**

- **Section 355 (extremely hazardous substances):**

7647-01-0	hydrochloric acid
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- **Section 313 (Specific toxic chemical listings):**

7647-01-0	hydrochloric acid
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7664-38-2	phosphoric acid
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- **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

- **Proposition 65 (California):**

- **Chemicals known to cause cancer:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

- **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

- **Carcinogenic Categories**

- **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

- **IARC (International Agency for Research on Cancer)**

7647-01-0	hydrochloric acid	3
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- **TLV (Threshold Limit Value established by ACGIH)**

7647-01-0	hydrochloric acid	A4
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- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

- **Canada**

- **Canadian Domestic Substances List (DSL)**

All ingredients are listed.

- **Canadian Ingredient Disclosure list (limit 0.1%)**

144-62-7	oxalic acid
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- **Canadian Ingredient Disclosure list (limit 1%)**

7647-01-0	hydrochloric acid
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7664-38-2 | phosphoric acid

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

R21/22 Harmful in contact with skin and if swallowed.

R34 Causes burns.

R37 Irritating to respiratory system.

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

· Sources

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