



1 Identification

Product identifier

Trade name: #1 CITRIC PRE-SOAK CONCENTRATE

Product Code: 111509

Manufacturer/Supplier:

Hydro-Chem Systems, Inc.
 5550 Clay Avenue S.W.
 Grand Rapids, MI 49548, U.S.A.
 Tel: 1-800-666-1992 / Fax: 616-531-8692
 www.hydrochemsystems.com

Information department: Chemical Department

Emergency telephone number:

PERS: 1-800-633-8253 #9120 (Emergency Contact for Hazardous Materials Accidents, Spills, or Leaks Only)

2 Hazard(s) identification

Classification of the substance or mixture



GHS05 Corrosion

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



GHS07

Skin Sens. 1 H317 May cause an allergic skin reaction.

GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms



GHS05 GHS07

Signal word Danger

Hazard-determining components of labeling:

Non-ionic Surfactant
 Ammonium Bifluoride

Hazard statements

Causes severe skin burns and eye damage.
 May cause an allergic skin reaction.

Precautionary statements

If medical advice is needed, have product container or label at hand.
 Keep out of reach of children.
 Read label before use.
 Do not breathe dust/fume/gas/mist/vapours/spray.
 Avoid breathing dust/fume/gas/mist/vapours/spray.
 Wear protective gloves/protective clothing/eye protection/face protection.
 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 Immediately call a POISON CENTER/doctor/...
 Specific treatment (see on this label).

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IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification system:**NEPA ratings (scale 0 - 4)**

Health = 3

Fire = 0

Reactivity = 0

HMIS-ratings (scale 0 - 4)

Health = 3

Fire = 0

Reactivity = 0

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

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3 Composition/information on ingredients
Chemical characterization: Mixtures**Description:** Mixture of the substances listed below with nonhazardous additions.**Dangerous components:**

| | | |
|-----------|------------------------------|---------|
| | Proprietary Surfactant Blend | 2.5-10% |
| 77-92-9 | Citric Acid | 2.5-10% |
| 1341-49-7 | Ammonium Bifluoride | ≤ 2.5% |

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4 First-aid measures
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 and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

After skin contact: Immediately wash with water and soap and rinse thoroughly.**After eye contact:**

Rinse opened eye for several minutes under running water. Then consult a doctor.

Maintain an ANSI approved eye wash station and safety shower in the immediate vicinity capable of delivering tepid water (60-100 degrees F) for 15 minutes.

After swallowing:

Immediately call a doctor.

Drink copious amounts of water and provide fresh air. Immediately call a doctor.

Information for doctor:**Most important symptoms and effects, both acute and delayed** No further relevant information available.**Indication of any immediate medical attention and special treatment needed** No further relevant information available.

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5 Fire-fighting measures

Extinguishing media

Suitable extinguishing agents:

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

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

Advice for firefighters

Protective equipment: No special measures required.

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6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective equipment (safety goggles, rubber gloves). Keep unprotected persons away.

Environmental precautions: Dilute with plenty of water.

Methods and material for containment and cleaning up:

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

Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

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

Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Information about protection against explosions and fires: No special measures required.

Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: Keep receptacle tightly sealed.

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

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8 Exposure controls/personal protection

Additional information about design of technical systems: No further data; see item 7.

Control parameters

Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: The lists that were valid during the creation were used as basis.

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.

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Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Protection of hands:

Protective gloves

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

Chemical Resistant, neoprene, nitrile, butyl rubber

Eye protection:

Tightly sealed goggles

Body protection:

Boots Chemical Resistant, Rubber

Apron Chemical Resistant; Rubber.

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9 Physical and chemical properties
Information on basic physical and chemical properties**General Information****Appearance:**

| | |
|---------------|--------|
| Form: | Liquid |
| Color: | Orange |
| Odor: | Citrus |

pH-value at 20 °C (68 °F): 2.7

Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: Undetermined.

Flash point: Not Determined.

Flammability (solid, gaseous): Not applicable.

Ignition temperature: 1010 °C (1850 °F)

Decomposition temperature: Not determined.

Auto igniting: Product is not selfigniting.

Danger of explosion: Product does not present an explosion hazard.

Explosion limits:

Lower: Not determined.

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| | |
|------------------------------------------------|--------------------------------------------|
| Upper: | Not determined. |
| Vapor pressure at 20 °C (68 °F): | 23 hPa (17 mm Hg) |
| Density: | Not determined. |
| Relative density | Not determined. |
| Vapour density | Not determined. |
| Evaporation rate | Not determined. |
| Solubility in / Miscibility with Water: | Fully miscible. |
| Solvent content: | |
| Organic solvents: | 0.0 % |
| VOC content: | 19.0 % |
| Other information | No further relevant information available. |

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10 Stability and reactivity

Reactivity

Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Possibility of hazardous reactions No dangerous reactions known.

Conditions to avoid No further relevant information available.

Incompatible materials: No further relevant information available.

Hazardous decomposition products: No dangerous decomposition products known.

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11 Toxicological information

Information on toxicological effects

Acute toxicity:

Primary irritant effect:

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

on the eye: Strong caustic effect.

Sensitization: Sensitization possible through skin contact.

Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

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.

Carcinogenic categories

IARC (International Agency for Research on Cancer)

7647-01-0 Hydrochloric Acid

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NTP (National Toxicology Program)

None of the ingredients is listed.

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12 Ecological information

Toxicity

Aquatic toxicity: No further relevant information available.

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Persistence and degradability No further relevant information available.**Behavior in environmental systems:****Bioaccumulative potential** No further relevant information available.**Mobility in soil** No further relevant information available.**Additional ecological information:****General notes:**

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

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

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

13 Disposal considerations

Waste treatment methods**Recommendation:**

Must not be disposed of together with household garbage. Dispose of in accordance with local and regional regulations.

Uncleaned packagings:**Recommendation:** Disposal must be made according to official regulations.**Recommended cleansing agent:** Water, if necessary with cleansing agents.

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14 Transport information

UN-Number**DOT, ADR, ADN, IMDG, IATA**

Not applicable

UN proper shipping name**DOT, ADR, ADN, IMDG, IATA**

Not applicable

Transport hazard class(es)**DOT, ADR, ADN, IMDG, IATA****Class**

Not applicable

Packing group**DOT, ADR, IMDG, IATA**

Not applicable

Environmental hazards:**Marine pollutant:**

No

Special precautions for user

Not applicable.

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

Safety, health and environmental regulations/legislation specific for the substance or mixture**Sara****Section 355 (extremely hazardous substances):**

7647-01-0 Hydrochloric Acid

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Section 313 (Specific toxic chemical listings):

| | |
|-----------|----------------------|
| | Non-ionic Surfactant |
| 7647-01-0 | Hydrochloric Acid |

TSCA (Toxic Substances Control Act):

All components of this product are listed on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30.

Proposition 65
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.

TLV (Threshold Limit Value established by ACGIH)

| | | |
|-----------|---------------------|----|
| 1341-49-7 | Ammonium Bifluoride | A4 |
| 7647-01-0 | Hydrochloric Acid | A4 |

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.

GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms


GHS05 GHS07

Signal word Danger

Hazard-determining components of labeling:

Non-ionic Surfactant
Ammonium Bifluoride

Hazard statements

Causes severe skin burns and eye damage.
May cause an allergic skin reaction.

Precautionary statements

If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
Do not breathe dust/fume/gas/mist/vapours/spray.
Avoid breathing dust/fume/gas/mist/vapours/spray.
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IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER/doctor/...

Specific treatment (see on this label).

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

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

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16 Other information

DISCLAIMER: IMPORTANT: The information presented herein is believed to be reliable, and relates to the specific material listed and may not be valid for such material combined with other materials outside the scope of intended usage. No warranty of guarantee is made and it remains the user's responsibility to confirm by other investigation as to safe material application. The manufacturer shall not be liable for damage to person or property resulting from the use of this product. It is the customer's responsibility to investigate any potential allergic or health problems of all users.

Department issuing SDS: Chemical Department

Contact: Hydro-Chem Systems, Inc.

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

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