



Hydrox Scale Remover

H-601, H-605, H-655

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Revision date: 10/19/2022 Supersedes: 7/15/2019

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Trade name : Hydrox Scale Remover
Product code : H-601, H-605, H-655

1.2. Recommended use and restrictions on use

Recommended use : Scale remover

1.3. Supplier

Distributor

Hydro-Balance Corporation
Lewisville, TX
USA
T 972-394-9422, 800-527-5166 - F 972-394-6755
Info@HydroBalance.com - www.HydroBalance.com

Manufacturer

North American Research Corporation
519 Huffines Blvd., Lewisville, TX 75056
P.O. Box 1318, Lewisville, TX 75067
USA
T 972-492-1800, 800-527-7520 - F 972-394-6755
Info@narcochem.com - www.narcochem.com

1.4. Emergency telephone number

Emergency number : For Chemical Emergency Call Infotrac 24hr/day 7days/week
Within USA and Canada: 1-800-535-5053
Outside USA and Canada: 1-352-323-3500

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Corrosive to metals Category 1	H290	May be corrosive to metals
Skin corrosion/irritation Category 1	H314	Causes severe skin burns and eye damage
Serious eye damage/eye irritation Category 1	H318	Causes serious eye damage

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Danger

Hazard statements (GHS US) : H290 - May be corrosive to metals
H314 - Causes severe skin burns and eye damage
H318 - Causes serious eye damage

Precautionary statements (GHS US) : P234 - Keep only in original container.
P260 - Do not breathe gas, spray.
P264 - Wash face, hands, any exposed skin thoroughly after handling.
P280 - Wear eye protection, face protection, protective clothing, protective gloves.
P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting.
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse

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skin with water/shower.

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.

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, a doctor.

P321 - Specific treatment (see supplemental first aid instruction, section 4 of this SDS on this label).

P363 - Wash contaminated clothing before reuse.

P390 - Absorb spillage to prevent material-damage.

P405 - Store locked up.

P406 - Store in corrosive resistant container with a resistant inner liner.

P501 - Dispose of contents/container in accordance with local, regional, national and international regulations

2.3. Other hazards which do not result in classification

Other hazards which do not result in classification : Mix with water only. Do not mix with other chemicals. On contact with ordinary metals (steel, galvanized, aluminum) corrosion may occur and generate highly flammable hydrogen gas.

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Phosphoric acid	CAS-No.: 7664-38-2	60 – 70

If the specific chemical identity and/or exact percentage of an ingredient is not specified, the information has been withheld as a trade secret.

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Call a physician immediately.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Call a physician immediately.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.

First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Call a physician immediately.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after skin contact : Burns.

Symptoms/effects after eye contact : Serious damage to eyes.

Symptoms/effects after ingestion : Burns.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

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SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Use extinguishing media appropriate for surrounding fire.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapors/spray.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. For commercial and industrial use only by professionals trained in the field of HVACR. Do not spray on electrical connections. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapors/spray. Wear personal protective equipment.
Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep out of reach of children. Keep container tightly closed. Tip: For storage on service truck, place container inside of plastic pail and immobilize pail. Protect container from physical damage. Store in corrosive resistant container with a resistant inner liner. Keep only in original container. Store locked up. Store in a well-ventilated place. Keep cool.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Hydrox Scale Remover	
No additional information available	
Phosphoric acid (7664-38-2)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Phosphoric acid
ACGIH OEL TWA	1 mg/m ³
ACGIH OEL STEL	3 mg/m ³
Remark (ACGIH)	TLV® Basis: URT, eye, & skin irr
Regulatory reference	ACGIH 2021
USA - OSHA - Occupational Exposure Limits	
Local name	Phosphoric acid
OSHA PEL (TWA) [1]	1 mg/m ³
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Eye protection:
Safety glasses
Skin and body protection:
Wear suitable protective clothing
Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment.

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Color : Blue.
Odor : Odorless
Odor threshold : No data available

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pH	: 1
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: ≈ 260 °F
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: 1.4 – 1.5
Solubility	: Water: 100 %
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

VOC content : 0 %

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

On contact with ordinary metals (steel, galvanized, aluminum) corrosion may occur and generate highly flammable hydrogen gas.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Causes severe skin burns. pH: 1

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Phosphoric acid (7664-38-2)

pH	0 – 0.5 (20 °C)
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Serious eye damage/irritation : Causes serious eye damage.
pH: 1

Phosphoric acid (7664-38-2)

pH	0 – 0.5 (20 °C)
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Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Symptoms/effects after skin contact	: Burns.
Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: Burns.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Before neutralization, the product may represent a danger to aquatic organisms.

12.2. Persistence and degradability

Phosphoric acid (7664-38-2)

Persistence and degradability	Biodegradability: not applicable.
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12.3. Bioaccumulative potential

Phosphoric acid (7664-38-2)

Bioaccumulative potential	No test data of component(s) available.
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12.4. Mobility in soil

Phosphoric acid (7664-38-2)

Ecology - soil	Highly mobile in soil.
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12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

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SECTION 14: Transport information

14.1. UN number

DOT NA No : UN1805
UN-No. (IMDG) : 1805
UN-No. (IATA) : 1805

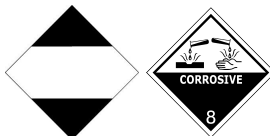
14.2. UN proper shipping name

Proper Shipping Name (DOT) : Phosphoric acid solution, 8, III [Limited Quantity]
Proper Shipping Name (IMDG) : PHOSPHORIC ACID SOLUTION, 8, III [Limited Quantity]
Proper Shipping Name (IATA) : Phosphoric acid, solution, 8, III

14.3. Transport hazard class(es)

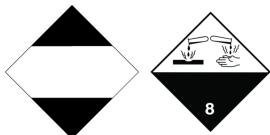
DOT

Transport hazard class(es) (DOT) : LTD QTY (or, 8)
Hazard labels (DOT) : LTD QTY, or, 8



IMDG

Transport hazard class(es) (IMDG) : LTD QTY (or, 8)
Hazard labels (IMDG) : LTD QTY, or, 8



IATA

Transport hazard class(es) (IATA) : 8
Hazard labels (IATA) : 8



14.4. Packing group

Packing group (DOT) : III
Packing group (IMDG) : III
Packing group (IATA) : III

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

DOT

Transport regulations (DOT) : Limited Quantity: For inner packagings not over 5.0L (1.3 gallon) and packages not exceeding 30 kg (66 pounds) gross weight. Fully regulated: For packages over 5.0L (1.3 gallons). Factory package is not suitable for transport by air.
UN-No.(DOT) : UN1805

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DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)

IMDG

Limited quantities (IMDG) : 5 L

IATA

Transport regulations (IATA) : Factory package is not suitable for transport by air

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Phosphoric acid (7664-38-2)

CERCLA RQ

5000 lb

15.2. International regulations

CANADA

Phosphoric acid (7664-38-2)

Listed on the Canadian DSL (Domestic Substances List) inventory.

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

Component	State or local regulations
Phosphoric acid(7664-38-2)	U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities; U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New York City - Right to Know Hazardous Substances List; U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

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Full text of H-phrases	
H290	May be corrosive to metals
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage

Safety Data Sheet (SDS), USA

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