



Printing date 05/05/2021

Safety Data Sheet

acc. to OSHA HCS

Reviewed and Updated on: 05/05/2021

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1 Identification

Product identifier

Trade name: HC-36 CONCENTRATE

Product Code: 141609

Manufacturer/Supplier:

Hydro-Chem Systems, Inc.
6605 Broadmoor Ave, SE
Caledonia, MI 49316, 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)

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2 Hazard(s) identification

Classification of the substance or mixture



GHS08 Health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS05 Corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

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 GHS08

Signal word Danger

Hazard-determining components of labeling:

Disodium Trioxosilicate
Proprietary Surfactant Blend
EDTA Tetrasodium

Hazard statements

Causes skin irritation.
Causes serious eye damage.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
May cause damage to organs through prolonged or repeated exposure.

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Precautionary statements

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash thoroughly after handling.

Contaminated work clothing must not be allowed out of the workplace.

Wear protective gloves / eye protection / face protection.

[In case of inadequate ventilation] wear respiratory protection.

If on skin: Wash with plenty of water.

If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.

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).

Get medical advice/attention if you feel unwell.

Take off contaminated clothing and wash it before reuse.

If skin irritation or rash occurs: Get medical advice/attention.

If experiencing respiratory symptoms: Call a poison center/doctor.

Wash contaminated clothing before reuse.

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

Classification system:**NFPA 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%
6834-92-0	Disodium Trioxosilicate	2.5-10%
111-76-2	2-butoxyethanol	2.5-10%
67-63-0	Isopropyl alcohol	2.5-10%
64-02-8	EDTA Tetrasodium	≤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.

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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: If symptoms persist consult 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: Use fire fighting measures that suit the environment.

Special hazards arising from the substance or mixture During heating or in case of fire poisonous gases are produced.

Advice for firefighters

Protective equipment: Mouth respiratory protective device.

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6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Mount respiratory protective device.

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.

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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: Keep respiratory protective device available.

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.

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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 following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

At this time, the other constituents have no known exposure limits.

111-76-2 2-butoxyethanol

PEL Long-term value: 240 mg/m³, 50 ppm
Skin

REL Long-term value: 24 mg/m³, 5 ppm
Skin

TLV Long-term value: 97 mg/m³, 20 ppm
BEI

67-63-0 Isopropyl alcohol

PEL Long-term value: 980 mg/m³, 400 ppm

REL Short-term value: 1225 mg/m³, 500 ppm
Long-term value: 980 mg/m³, 400 ppm

TLV Short-term value: 984 mg/m³, 400 ppm
Long-term value: 492 mg/m³, 200 ppm
BEI

Ingredients with biological limit values:

111-76-2 2-butoxyethanol

BEI 200 mg/g creatinine
Medium: urine
Time: end of shift
Parameter: Butoxyacetic acid with hydrolysis

67-63-0 Isopropyl alcohol

BEI 40 mg/L
Medium: urine
Time: end of shift at end of workweek
Parameter: Acetone (background, nonspecific)

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.
Store protective clothing separately.
Avoid contact with the skin.
Avoid contact with the eyes and skin.

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.

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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:	Green
Odor:	Alcohol-like

pH-value at 20 °C (68 °F): >11.5

Change in condition

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

Flash point: Not Determined.

Flammability (solid, gaseous): Not applicable.

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.
Upper:	Not determined.

Vapor pressure at 20 °C (68 °F): 23 hPa (17.3 mm Hg)

Density: Not determined.

Relative density Not determined.

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Vapor density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with Water:	Fully miscible.
Solvent content:	
Organic solvents:	6.6 %
VOC content:	6.61 %
Other information	No further relevant information available.

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10 Stability and reactivity

Reactivity No further relevant information available.**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:****LD/LC50 values that are relevant for classification:****6834-92-0 Disodium Trioxosilicate**

Oral LD50 1,280 mg/kg (rat)

68439-46-3 Alcohol Ethoxylate

Oral LD50 >2,000 mg/kg (rat)

Dermal LD50 3,300 mg/kg (rat)

Primary irritant effect:**on the skin:** Irritant to skin and mucous membranes.**on the eye:** Strong irritant with the danger of severe eye injury.**Sensitization:**

Sensitization possible through inhalation.

Sensitization possible through skin contact.

Additional toxicological information:

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

Harmful

Irritant

Carcinogenic categories**IARC (International Agency for Research on Cancer)**

111-76-2 2-butoxyethanol

3

67-63-0 Isopropyl alcohol

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NTP (National Toxicology Program)

None of the ingredients is listed.

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OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

* **12 Ecological information****Toxicity****Aquatic toxicity:****68439-46-3 Alcohol Ethoxylate**

EC50 5.3 mg/kg (daphnia)

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.

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

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.* **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

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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":** Not applicable

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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):

None of the ingredients is listed.

Section 313 (Specific toxic chemical listings):

67-63-0 Isopropyl alcohol

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)**

111-76-2 2-butoxyethanol CBD

TLV (Threshold Limit Value established by ACGIH)

111-76-2 2-butoxyethanol A3

67-63-0 Isopropyl alcohol A4

NIOSH-Ca (National Institute for Occupational Safety and Health)

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 GHS08

Signal word Danger

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Hazard-determining components of labeling:

Disodium Trioxosilicate
 Proprietary Surfactant Blend
 EDTA Tetrasodium

Hazard statements

Causes skin irritation.
 Causes serious eye damage.
 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 May cause an allergic skin reaction.
 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

Do not breathe dust/fume/gas/mist/vapors/spray.
 Wash thoroughly after handling.
 Contaminated work clothing must not be allowed out of the workplace.
 Wear protective gloves / eye protection / face protection.
 [In case of inadequate ventilation] wear respiratory protection.
 If on skin: Wash with plenty of water.
 If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.
 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).
 Get medical advice/attention if you feel unwell.
 Take off contaminated clothing and wash it before reuse.
 If skin irritation or rash occurs: Get medical advice/attention.
 If experiencing respiratory symptoms: Call a poison center/doctor.
 Wash contaminated clothing before reuse.
 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.

Date of preparation / last revision 05/05/2021 / 26

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

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