



Safety Data Sheet

acc. to OSHA HCS

Page 1/10

Printing date 05/23/2018

Reviewed and Updated on: 06/08/2017

1 Identification

Product identifier

Trade name: HC-36 CONCENTRATE

Product Code: 141605

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)

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

Surfactant Polymer

EDTA Tetrasodium

Alcohol Ethoxylate

Hydrotrope

Hazard statements

Causes skin irritation.

(Contd. on page 2)

US



Safety Data Sheet

acc. to OSHA HCS

Page 2/10

Printing date 05/23/2018

Reviewed and Updated on: 06/08/2017

Trade name: HC-36 CONCENTRATE

(Contd. of page 1)

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.

[In case of inadequate ventilation] wear respiratory protection.

Wear protective gloves / eye protection / face protection.

Wash thoroughly after handling.

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

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 experiencing respiratory symptoms: Call a POISON CENTER/doctor.

Wash contaminated clothing before reuse.

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

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

Get medical advice/attention if you feel unwell.

IF ON SKIN: Wash with plenty of water.

Take off contaminated clothing and wash it before reuse.

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

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

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%
	EDTA Tetrasodium	≤ 2.5%

4 First-aid measures

Description of first aid measures

General information:

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.

(Contd. on page 3)



Safety Data Sheet

acc. to OSHA HCS

Page 3/10

Printing date 05/23/2018

Reviewed and Updated on: 06/08/2017

Trade name: HC-36 CONCENTRATE

(Contd. of page 2)

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.

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.

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.

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.

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.

8 Exposure controls/personal protection

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

(Contd. on page 4)

US

**Safety Data Sheet**
acc. to OSHA HCS

Printing date 05/23/2018

Reviewed and Updated on: 06/08/2017

Trade name: HC-36 CONCENTRATE

(Contd. of page 3)

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/m ³ , 50 ppm Skin
REL	Long-term value: 24 mg/m ³ , 5 ppm Skin
TLV	Long-term value: 97 mg/m ³ , 20 ppm BEI

67-63-0 Isopropyl alcohol

PEL	Long-term value: 980 mg/m ³ , 400 ppm
REL	Short-term value: 1225 mg/m ³ , 500 ppm Long-term value: 980 mg/m ³ , 400 ppm
TLV	Short-term value: 984 mg/m ³ , 400 ppm Long-term value: 492 mg/m ³ , 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
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67-63-0 Isopropyl alcohol

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

(Contd. on page 5)



Safety Data Sheet

acc. to OSHA HCS

Page 5/10

Printing date 05/23/2018

Reviewed and Updated on: 06/08/2017

Trade name: HC-36 CONCENTRATE

Protection of hands:

(Contd. of page 4)



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:

Apron Chemical Resistant; Rubber.

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.

Ignition temperature:

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.

(Contd. on page 6)

US



Safety Data Sheet

acc. to OSHA HCS

Page 6/10

Printing date 05/23/2018

Reviewed and Updated on: 06/08/2017

Trade name: HC-36 CONCENTRATE

(Contd. of page 5)

Upper:	Not determined.
Vapor pressure at 20 °C (68 °F): 23 hPa (17 mm Hg)	
Density:	Not determined.
Relative density	Not determined.
Vapor density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with Water:	Fully miscible.
Solvent content:	
Organic solvents:	6.6 %
VOC content:	6.6 %
Other information	No further relevant information available.

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.

11 Toxicological information

Information on toxicological effects

Acute toxicity:

LD/LC50 values that are relevant for classification:

6834-92-0 Disodium Trioxosilicate

Oral	LD50	1280 mg/kg (rat)
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68439-46-3 Alcohol Ethoxylate

Oral	LD50	>2000 mg/kg (rat)
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Dermal	LD50	3300 mg/kg (rat)
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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

(Contd. on page 7)

US



Printing date 05/23/2018

Reviewed and Updated on: 06/08/2017

Trade name: HC-36 CONCENTRATE

(Contd. of page 6)

Carcinogenic categories

IARC (International Agency for Research on Cancer)

111-76-2	2-butoxyethanol	3
67-63-0	Isopropyl alcohol	3

NTP (National Toxicology Program)

None of the ingredients is listed.

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

(Contd. on page 8)

US



Safety Data Sheet

acc. to OSHA HCS

Page 8/10

Printing date 05/23/2018

Reviewed and Updated on: 06/08/2017

Trade name: HC-36 CONCENTRATE

(Contd. of page 7)

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":	Not applicable

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

(Contd. on page 9)

US



Safety Data Sheet

acc. to OSHA HCS

Page 9/10

Printing date 05/23/2018

Reviewed and Updated on: 06/08/2017

Trade name: HC-36 CONCENTRATE

(Contd. of page 8)

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

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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:

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Surfactant Polymer

EDTA Tetrasodium

Alcohol Ethoxylate

Hydrotrope

Hazard statements

Causes skin irritation.

Causes serious eye damage.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

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

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

Get medical advice/attention if you feel unwell.

IF ON SKIN: Wash with plenty of water.

Take off contaminated clothing and wash it 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.

16 Other information

(Contd. on page 10)

US

**Safety Data Sheet**
acc. to OSHA HCS

Printing date 05/23/2018

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Trade name: HC-36 CONCENTRATE

(Contd. of page 9)

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** 05/23/2018 / 8*** Data compared to the previous version altered.**

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