Final Charge Mild-Acid Heavy Duty Cooling System Cleaner

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date: 03/20/2023

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

1.1. Product identifier

Product form : Mixture

Product name : Final Charge Mild-Acid Heavy Duty Cooling System Cleaner

SDS ID : 515018

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Cooling System Cleaner

1.3. Details of the supplier of the safety data sheet

Old World Industries, LLC
3100 Sanders Road
Northbrook, IL 60062 - USA
T (847) 559-2000
www.oldworldind.com

1.4. Emergency telephone number

Emergency number : 800 424 9300 (United States); 00 1 703 527 3887 (International)
Chemtrec

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Skin corrosion/irritation, Category 2	H315	Causes skin irritation.
Serious eye damage/eye irritation, Category 1	H318	Causes serious eye damage.

Full text of H-statements: see section 16

2.2. Label elements

GHS US labelling

Hazard pictograms (GHS US) :

GHS05

Signal word (GHS US) : Danger

Hazard statements (GHS US) : Causes skin irritation.
Causes serious eye damage.

Precautionary statements (GHS US) : Wash hands, forearms and face thoroughly after handling.
Wear eye protection, protective clothing, protective gloves.
If on skin: Wash with plenty of soap and water.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a doctor/physician or poison center
If skin irritation occurs: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.

2.3. Other hazards

Other hazards which do not result in classification : No additional information available.

2.4. Unknown acute toxicity (GHS US)

3.7% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)
27.23% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)

28.61% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	% by wt	GHS-US classification
citric acid	(CAS-No.) 77-92-9	10 – 30	Eye Irrit. 2, H319
undecan-1-ol, ethoxylated	(CAS-No.) 34398-01-1	5 – 10	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Acute 2, H401
trisodium hydroxyethylenediaminediacetate	(CAS-No.) 139-89-9	1 – 5	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318
sodium dihydrogen citrate	(CAS-No.) 18996-35-5	1 – 5	Acute Tox. 4 (Oral), H302
alcohols, C6-C10 ethoxylated propoxylated	(CAS-No.) 68987-81-5	1 – 5	Skin Irrit. 2, H315 Eye Dam. 1, H318

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 : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Allow affected person to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact : Wash with water and soap. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after skin contact : Causes skin irritation.

Symptoms/effects after eye contact : Causes serious eye damage.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : In case of fire: Toxic fumes may be released.

Reactivity : No dangerous reactions known under normal conditions of use.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Clean up any spills as soon as possible, using an absorbent material to collect it.

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.

Hygiene measures : Wash hands, forearms and face thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Direct sunlight.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

citric acid (77-92-9)
Not applicable

trisodium hydroxyethylenediaminediacetate (139-89-9)
Not applicable

sodium dihydrogen citrate (18996-35-5)
Not applicable

undecan-1-ol, ethoxylated (34398-01-1)
Not applicable

alcohols, C6-C10 ethoxylated propoxylated (68987-81-5)
Not applicable

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

Personal protective equipment:

Avoid all unnecessary exposure.

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

If exposed to levels above exposure limits
wear appropriate respiratory protection.

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Color	:	Colorless
Odor	:	characteristic
Odor threshold	:	No data available
pH	:	2.25 – 3.25 @ 10%
Relative evaporation rate (butylacetate=1)	:	No data available
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability	:	No data available
Vapor pressure	:	No data available
Relative vapor density at 20 °C	:	No data available
Specific Gravity	:	No data available
Density	:	1.12
Solubility	:	Water: Complete
Partition coefficient n-octanol/water (Log Pow)	:	No data available
Partition coefficient n-octanol/water (Log Kow)	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive limits	:	No data available
Explosive properties	:	No data available
Oxidizing properties	:	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Stable under normal conditions of use.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

citric acid (77-92-9)	
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))

trisodium hydroxyethylenediaminediacetate (139-89-9)	
LD50 oral rat	1913 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male, Experimental value, Oral)
ATE US (oral)	1913 mg/kg bodyweight

sodium dihydrogen citrate (18996-35-5)	
LD50 oral rat	1700 mg/kg
ATE US (oral)	1700 mg/kg bodyweight

undecan-1-ol, ethoxylated (34398-01-1)	
ATE US (oral)	500 mg/kg bodyweight

alcohols, C6-C10 ethoxylated propoxylated (68987-81-5)	
LD50 oral rat	2380 – 2745 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
ATE US (oral)	2380 mg/kg bodyweight

Skin corrosion/irritation : Causes skin irritation.
pH: 2.25 – 3.25 @ 10%

Serious eye damage/irritation : Causes serious eye damage.
pH: 2.25 – 3.25 @ 10%

Respiratory or skin sensitisation : 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

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

Symptoms/effects after skin contact : Causes skin irritation.

Symptoms/effects after eye contact : Causes serious eye damage.

SECTION 12: Ecological information

12.1. Toxicity

citric acid (77-92-9)	
LC50 - Fish [1]	440.00 – 760.00 mg/l (Equivalent or similar to OECD 203, 48 h, Leuciscus idus, Static system, Fresh water, Experimental value, Nominal concentration)

trisodium hydroxyethylenediaminediacetate (139-89-9)	
LC50 - Fish [1]	372.00 mg/l (96 h, Pimephales promelas, Static system, Fresh water, Experimental value, Nominal concentration)

sodium dihydrogen citrate (18996-35-5)	
LC50 - Fish [1]	1,516.00 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)

12.2. Persistence and degradability

citric acid (77-92-9)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.

citric acid (77-92-9)	
Biochemical oxygen demand (BOD)	0.42 g O_2/g substance
Chemical oxygen demand (COD)	0.73 g O_2/g substance
ThOD	0.69 g O_2/g substance

trisodium hydroxyethylenediaminediacetate (139-89-9)	
Persistence and degradability	Inherently biodegradable.

sodium dihydrogen citrate (18996-35-5)	
Persistence and degradability	Readily biodegradable in water.

Undecan-1-ol, ethoxylated (34398-01-1)	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

citric acid (77-92-9)	
Partition coefficient n-octanol/water (Log Pow)	-1.80 – -1.55 (Experimental value)
Bioaccumulative potential	Not bioaccumulative.

trisodium hydroxyethylenediaminediacetate (139-89-9)	
BCF - Fish [1]	1.10 – 1.80 (28 day(s), Lepomis macrochirus, Flow-through system, Fresh water, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	-11.36 (Calculated, KOWWIN)
Bioaccumulative potential	Not bioaccumulative.

sodium dihydrogen citrate (18996-35-5)	
BCF - Fish [1]	3.20 l/kg (Estimated value)
Partition coefficient n-octanol/water (Log Pow)	-1.80 (Read-across)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

Undecan-1-ol, ethoxylated (34398-01-1)	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

citric acid (77-92-9)	
Surface tension	No data available in the literature
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.00 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Highly mobile in soil.

trisodium hydroxyethylenediaminediacetate (139-89-9)	
Ecology - soil	Highly mobile in soil.

sodium dihydrogen citrate (18996-35-5)	
Ecology - soil	No (test)data on mobility of the substance available.

12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated

Refer to current TDG Canada for further Canadian regulations

Transport by sea

In accordance with IMDG / IMO

Not regulated

Air transport

In accordance with IATA / ICAO

Not regulated

SECTION 15: Regulatory information

15.1. US Federal regulations

citric acid (77-92-9)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

trisodium hydroxyethylenediaminediacetate (139-89-9)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

citric acid (77-92-9)
Listed on the Canadian DSL (Domestic Substances List)

trisodium hydroxyethylenediaminediacetate (139-89-9)
Listed on the Canadian DSL (Domestic Substances List)

15.3. US State regulations

California Proposition 65 - This product does not contain any substance(s) known to the state of California to cause cancer, developmental toxicity and/or reproductive toxicity

SECTION 16: Other information

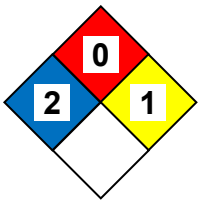
Revision date : 03/20/2023

Other information : None.

Full text of H-statements:

H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H401	Toxic to aquatic life

NFPA health hazard	:	2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.
NFPA fire hazard	:	0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.
NFPA reactivity	:	1 - Materials that in themselves are normally stable but can become unstable at elevated temperatures and pressures.



SDS GHS US (GHS HazCom 2012) OWI

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