Safety Data Sheet EVO TABS

Safety Data Sheet dated 24/4/2018, version 2
This version cancels and substitutes any previous version

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

1.1. Product identifier
Mixture identification:
Trade name: EVO TABS
1.2. Relevant identified uses of the substance or mixture and uses advised against
Recommended use:
Purifying cleaner for evaporators in tablet
1.1. Details of the supplier of the safety data sheet
Company:
Cool Air Products
5850 Waterloo Rd Suite 140
Columbia, MD 21045
443-506-8560
info@coolairproducts
.net
1.2. Emergency telephone number
CHEMTREC (24 HOURS): US & Canada 800-424-9300 Call collect outside continental US & Canada: 703-527-3887

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
EC regulation criteria 1272/2008 (CLP)


Warning, Skin Irrit. 2, Causes skin irritation.


Warning, Eye Irrit. 2, Causes serious eye irritation.

Adverse physicochemical, human health and environmental effects:
No other hazards
2.2. Label elements
Hazard pictograms:

Warning
Hazard statements:
H315 Causes skin irritation.
H319 Causes serious eye irritation.
Precautionary statements:
P264 Wash skin thoroughly after handling.
P280 Wear protective gloves and eye/face protection.
P302+P352 IF ON SKIN: Wash with plenty of water.
P332+P313 If skin irritation occurs: Get medical advice/attention.
Special Provisions:
None
Special provisions according to Annex XVII of REACH and subsequent amendments:
None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Number	Classification
>= 40% - < 50%	sodium carbonate	Index number: 011-005-00-2 CAS: 497-19-8 EC: 207-838-8	3.3/2 Eye Irrit. 2 H319
>= 25% - < 30%	citric acid monohydrate	CAS: 5949-29-1 EC: 201-069-1	3.3/2 Eye Irrit. 2 H319
>= 5% - < 7%	sulphamidic acid; sulphamic acid; sulfamic acid	Index number: 016-026-00-0 CAS: 5329-14-6 EC: 226-218-8	3.3/2 Eye Irrit. 2 H319 3.2/2 Skin Irrit. 2 H315 4.1/C3 Aquatic Chronic 3 H412
>= 2.5% - < 5%	long chain alcohol, alkoxylated	CAS: 166736-08-9	3.2/2 Skin Irrit. 2 H315 3.3/2 Eye Irrit. 2 H319
>= 1% - < 2.5%	Sulfuric acid, mono-C12-14-alkyl esters, sodium salts	CAS: 85586-07-8 EC: 287-809-4	3.1/4/Oral Acute Tox. 4 H302 3.2/2 Skin Irrit. 2 H315 3.3/1 Eye Dam. 1 H318

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

For symptoms and effects caused by substances, see section 11.

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

No information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO2).
Extinguishing media which must not be used for safety reasons:
None in particular.

5.2. Special hazards arising from the substance or mixture
Do not inhale explosion and combustion gases.
Burning produces heavy smoke.

5.3. Advice for firefighters
Use suitable breathing apparatus.
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
See protective measures under point 7 and 8.

6.2. Environmental precautions
Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
Retain contaminated washing water and dispose it.
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up
Wash with plenty of water.

6.4. Reference to other sections
See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling
See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities
Keep away from food, drink and feed.
Store containers away from any incompatible materials, checking section 10.
Instructions as regards storage premises:
Adequately ventilated premises.

7.3. Specific end use(s)
Information not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
citric acid monohydrate - CAS: 5949-29-1
TLV - TWA(8h): 10 mg/m3

DNEL Exposure Limit Values
sodium carbonate - CAS: 497-19-8
Consumer: 10 mg/m³ - Exposure: Human Inhalation - Frequency: Short Term (acute)
Worker Professional: 10 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, local effects
Sulfuric acid, mono-C12-14-alkyl esters, sodium salts - CAS: 85586-07-8
Consumer: 24 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects
Worker Professional: 285 mg/m³ - Consumer: 85 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Worker Professional: 4060 mg/kg - Consumer: 2440 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

PNEC Exposure Limit Values
citric acid monohydrate - CAS: 5949-29-1

Target: Fresh Water - Value: 0.44 mg/l
Target: Marine water - Value: 0.04 mg/l
Target: Freshwater sediments - Value: 34.6 mg/kg
Target: Marine water sediments - Value: 3.46 mg/kg
Target: Soil (agricultural) - Value: 33.1 mg/kg
Target: Microorganisms in sewage treatments - Value: 1000 mg/l

Sulfuric acid, mono-C12-14-alkyl esters, sodium salts - CAS: 85586-07-8
Target: Fresh Water - Value: 0.102 mg/l
Target: Marine water - Value: 0.01 mg/l
Target: Freshwater sediments - Value: 3.58 mg/kg
Target: Marine water sediments - Value: 0.358 mg/kg

8.2. Exposure controls

Eye protection:
Protective airtight goggles (ref. Standard EN 166).

Protection for skin:
Safety shoes.
Overall.

Protection for hands:
work gloves resistant to penetration (ref. standard EN 374).
Suitable material:
CR (polychloroprene, chloroprene rubber).
FKM (fluoro rubber).
NBR (nitrile rubber).
NR (natural rubber, natural latex).
Material thickness: minimum 0.12 mm.
Break through time : > 480 min
Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

Respiratory protection:
Not needed for normal use.

Thermal Hazards:
None

Environmental exposure controls:
None

Appropriate engineering controls:
None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance and colour:	solid white - blue
Odour:	characteristic
Odour threshold:	N.A.
pH:	9
Melting point / freezing point:	N.A.
Initial boiling point and boiling range:	N.A.
Solid/gas flammability:	N.A.
Upper/lower flammability or explosive limits:	N.A.
Vapour density:	N.A.
Flash point:	N.A.
Evaporation rate:	N.A.
Vapour pressure:	N.A.
Relative density:	2.038 g/mL (20°C)
Solubility in water:	soluble
Solubility in oil:	N.A.
Partition coefficient (n-octanol/water):	N.A.
Auto-ignition temperature:	N.A.

Decomposition temperature:	N.A.
Viscosity:	N.A.
Explosive properties:	N.A.
Oxidizing properties:	N.A.

9.2. Other information

Miscibility:	N.A.
Fat Solubility:	N.A.
Conductivity:	N.A.
Substance Groups relevant properties	N.A.
V.O.C. (w/w):	N.A.

SECTION 10: Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.
sulfamic acid: decomposes at 205 °C / 401 °F.

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

Under normal use and storage conditions, no hazardous reactions are expected.
sulfamic acid: risk of explosion on contact with chlorine. It reacts dangerously with metal salts of nitrates and nitrites.

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

sulfamic acid: chlorine, nitric acid, nitrates and nitrites of sodium and potassium.

10.6. Hazardous decomposition products

sulfamic acid: sulfur oxides and nitrogen oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the product:

EVO TABS

a) acute toxicity

Classification:	Not classified
Considerations:	Based on available data, the classification criteria are not met

b) skin corrosion/irritation

Classification:	The product is classified: Skin Irrit. 2 H315

c) serious eye damage/irritation

Classification:	The product is classified: Eye Irrit. 2 H319

d) respiratory or skin sensitisation

Classification:	Not classified
Considerations:	Based on available data, the classification criteria are not met

e) germ cell mutagenicity

Classification:	Not classified
Considerations:	Based on available data, the classification criteria are not met

f) carcinogenicity

Classification:	Not classified
Considerations:	Based on available data, the classification criteria are not met

g) reproductive toxicity

Classification:	Not classified

Considerations: Based on available data, the classification criteria are not met

h) STOT-single exposure
Classification: Not classified
Considerations: Based on available data, the classification criteria are not met

i) STOT-repeated exposure
Classification: Not classified
Considerations: Based on available data, the classification criteria are not met

j) aspiration hazard
Classification: Not classified
Considerations: Based on available data, the classification criteria are not met

Adverse health effects

In the absence of experimental toxicological data on the product itself, the potential risks of the product to health were evaluated based on the properties of substances, according to the criteria laid down by the relevant regulations for the classification. Consider, therefore, the concentration of each substance dangerous possibly mentioned in section 3, to assess the toxicological effects resulting from exposure to the product.

Acute effects: contact with eyes causes irritation; symptoms may include: redness, edema, pain and tearing. Ingestion may cause health disorders, including abdominal pains with sting, nausea and vomiting.

Acute effects: contact with skin may cause irritation with erythema, edema, dryness and chapped skin. Ingestion may cause health disorders, including abdominal pains with sting, nausea and vomiting.

Acute effects: contact with skin may cause irritation, erythema, edema, dryness and chapped skin. Ingestion may cause health disorders, including stomach pain and sting, nausea and vomiting.

Toxicological information of the main substances found in the product:

sodium carbonate - CAS: 497-19-8

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat 4090 mg/kg Test: LD50 - Route: Skin - Species: Mouse 117 mg/kg
Test: LD50 - Route: Inhalation - Species: Rat 2.3 mg/l - Duration: 2 h

citric acid monohydrate - CAS: 5949-29-1

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Mouse = 5400 mg/kg - Source: OCSE 401
Test: LD50 - Route: Oral - Species: Rat = 11700 mg/kg - Source: OCSE 401
Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg - Source: OCSE 402
Test: NOAEL - Route: Oral - Species: Rat 4 mg/kg - Notes: bw/day

e) germ cell mutagenicity:

Test: Mutagenesis Negative - Source: OECD 471 - Notes: Ames Test (in vitro)
Test: Mutagenesis Negative - Source: OECD 475 - Notes: chromosomal aberration test (in vivo)

g) reproductive toxicity:

Test: NOAEL - Species: Rat > 295 mg/kg - Notes: bw/day; effective dose (fetal development)

sulphamidic acid; sulphamic acid; sulfamic acid - CAS: 5329-14-6

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat 1450 mg/kg
long chain alcohol, alkoxylated - CAS: 166736-08-9
a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg
Sulfuric acid, mono-C12-14-alkyl esters, sodium salts - CAS: 85586-07-8
a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat 2000 mg/kg

SECTION 12: Ecological information

12.1. Toxicity
Adopt good working practices, so that the product is not released into the environment.
EVO TABS
Classification: Not classified for environmental hazards
Considerations: Based on available data, the classification criteria are not met
Data:
citric acid monohydrate - CAS: 5949-29-1
a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish = 440 mg/l - Duration h: 48 - Notes: Leuciscus idus melanotus
Endpoint: LC50 - Species: Daphnia = 1535 mg/l - Duration h: 24 - Notes: Daphnia magna
Endpoint: LC50 - Species: Algae = 425 mg/l - Duration h: 168 - Notes: Scenedesmus quadricauda
c) Bacteria toxicity:
Endpoint: LC50 > 10000 mg/l - Duration h: 16 - Notes: Pseudomonas putida
long chain alcohol, alkoxylated - CAS: 166736-08-9
a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish 100 mg/l - Duration h: 96
Endpoint: EC50 - Species: Daphnia 100 mg/l - Duration h: 48
Endpoint: EC50 - Species: Algae 100 mg/l - Duration h: 72
Sulfuric acid, mono-C12-14-alkyl esters, sodium salts - CAS: 85586-07-8
a) Aquatic acute toxicity:
Endpoint: EC50 - Species: Algae 20 mg/l - Duration h: 72
12.2. Persistence and degradability
N.A.
12.3. Bioaccumulative potential
N.A.
12.4. Mobility in soil
N.A.
12.5. Results of PBT and vPvB assessment
vPvB Substances: None - PBT Substances: None
12.6. Other adverse effects
None

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Recover if possible. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

14.1. UN number

Not classified as dangerous in the meaning of transport regulations.

14.2. UN proper shipping name

N.A.

14.3. Transport hazard class(es)

N.A.

14.4. Packing group

N.A.

14.5. Environmental hazards

ADR-Enviromental Pollutant: No

IMDG-Marine pollutant: No

14.6. Special precautions for user

N.A.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

N.A.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Dir. 98/24/EC (Risks related to chemical agents at work)
Dir. 2000/39/EC (Occupational exposure limit values)
Regulation (EC) n. 1907/2006 (REACH)
Regulation (EC) n. 1272/2008 (CLP)
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
Regulation (EU) 2015/830
Regulation (EU) n. 286/2011 (ATP 2 CLP)
Regulation (EU) n. 618/2012 (ATP 3 CLP)
Regulation (EU) n. 487/2013 (ATP 4 CLP)
Regulation (EU) n. 944/2013 (ATP 5 CLP)
Regulation (EU) n. 605/2014 (ATP 6 CLP)
Regulation (EU) n. 2015/1221 (ATP 7 CLP)
Regulation (EU) n. 2016/918 (ATP 8 CLP)
Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

No restriction.

Restrictions related to the substances contained:

No restriction.

Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)
Regulation (EC) nr 648/2004 (detergents).
Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

None

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Full text of phrases referred to in Section 3:

H319 Causes serious eye irritation.
H315 Causes skin irritation.
H412 Harmful to aquatic life with long lasting effects.
H302 Harmful if swallowed.

H318 Causes serious eye damage.

Hazard class and hazard category	Code	Description
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
Aquatic Chronic 3	4.1/C3	Chronic (long term) aquatic hazard, category 3

Paragraphs modified from the previous revision:

SECTION 2: Hazards identification
SECTION 3: Composition/information on ingredients
SECTION 4: First aid measures
SECTION 6: Accidental release measures
SECTION 7: Handling and storage
SECTION 8: Exposure controls/personal protection
SECTION 9: Physical and chemical properties
SECTION 10: Stability and reactivity
SECTION 11: Toxicological information
SECTION 12: Ecological information
SECTION 15: Regulatory information
SECTION 16: Other information

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method

This document was prepared by a competent person who has received appropriate training.
Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.
It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.
This MSDS cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.

IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.