

Trade name. Gebo Liquid Clean

Print date: 04 June 2018

revised on: 27 April 2018

Section 1. Identification of the substance/mixture and of the undertaking**1.1 Product identifier**

Trade name: Gebo Liquid Clean, heating cleaner
Citric acid solution, molybdenum, sodium salt

CAS no. : 5949-29-1
EC no. : 201-069-1

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

Use of the substance:
/the mixture At the current time, no information on the identified uses is available to us yet. When the data become available, they will be included in the safety data sheet.

Uses : At this time, no uses have been identified that are advised against that are advised against.

1.3. Details of the supplier of the safety data sheet

Manufacturer/supplier: GEBO Armaturen GmbH
Am Damm 4
D-58332 Schwelm
Phone: +49(0)2336-9285-0
Telefax: +49(0)2336-928570
Email: info@gebo.de
Person responsible/
Issuer Technology/ safety

1.4. Emergency telephone number

Emergency telephone number: +49 (0) 2336-928537

Section 2. Hazards identification**2.1 Classification according to directive (EU) 1272/2008**

The product is not dangerous according to regulation (EC) no. 1272/2008.

Eye Irrit. 2 H319 Causes serious eye irritation.

2.2. Label elements**Label according to directive (EU) 1272/2008**

The product is marked as not dangerous according to regulation (EC) no. 1272/2008.

Hazard statements: H319 Causes serious eye irritation.

Precautionary statements: P262 Do not get in eyes, on skin, or on clothing.

2.3. Other hazards

Results of the PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

Trade name. Gebo Liquid Clean

3. Composition/information on ingredients

3.2 Chemical characterisation

Aqueous solution of the substances listed below with harmless additions.

Hazardous contents

Citric acid monohydrate Concentration: < 10.00 %

CAS no.: 5949-29-1

EC.: 201-069-1

Registration:01-2119457026-42-xxxx

The wording of the hazard notes listed can be taken from section 16.

4. First aid measures

4.1 Description of first aid measures

After inhalation: Fresh air supply, seek medical advice in case of complaints.
After skin contact: Wash with water and soap at once and rinse well.
After eye contact: Rinse eyes for several minutes under running water with the lid held open and seek medical advice.
After swallowing: Have the person drink water (up to 2 drinking glasses).

4.2 Most important acute and delayed symptoms and effects
No further relevant information available.

4.3 Notes concerning immediate medical help or special treatment
No further relevant information available.

5. Firefighting measures

5.1 Extinguishing media
Suitable extinguishing media CO₂, extinguishing powder or water spray jet Fight larger fires with water spray jet or alcohol-resistant foam

5.2 Special hazards arising from the substance or mixture: Carbon oxides (CO, CO₂)

5.3 Advice for firefighters: Special protection equipment: Wear breathing apparatus independent of the ambience air.
Further information: Fire residues and contaminated extinguishing water must be disposed of according to the authority provisions.
Precipitate escaping steams with water.

6. Accidental release measure

6.1 Personal precautions, protective equipment and emergency procedures: avoid substance contact.

6.2 Environmental precautions: Do not let the substance enter the sewers/surface water/ground water.

6.3 Methods and material for containment and cleaning up
Take up with liquid-binding material (sand, kieselguhr, acid binder, universal binder, saw dust). Ensure sufficient ventilation. After-cleaning.

Trade name. Gebo Liquid Clean

6.4 Reference to other sections

Information on safe handling, see section 7.

Information on personal protection equipment, see section 8.

Information on disposal, see section 13.

7. Handling and storage

7.1 Precautions for safe handling

Ensure good ventilation/extraction at the workplace.

Avoid aerosol formation.

Notes on fire and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities:

Requirements to storage rooms and containers: No special requirements.

Notes on combined storage: Not required.

Further information on the storage conditions: Keep the container tightly closed.

The container must only be opened with local extraction.

Recommended storage temperature: +15 - +25 °C

Storage class: 12

Classification according to the operating safety regulation (Betriebssicherheitsverordnung; BetrSichV)

7.3 Specific end uses No further relevant information available.

8. Exposure controls/personal protection

Protective equipment

Additional notes on design of technical systems: No further information, see section 7.

8.1 Control parameters

Components with workplace-related limits to be monitored:

The product contains no relevant quantities of substances with limits to be monitored workplace-specifically.

PNEC values

5949-29-1 Citric acid - monohydrate

Aquatic compartment – freshwater 440 mg/L

Aquatic compartment - sediment in freshwater 7.52 mg/kg

Aquatic compartment - sediment in marine water 0.752 mg/kg

Terrestrial compartment - soil 29.2 mg/kg

Sewage treatment plant

Additional notes: Based on the lists valid at compilation.

Components with workplace-related limits to be monitored

8.2 Exposure controls

Personal protective equipment:

General protection and hygiene measures:

Keep away from food, beverages and feedstuffs.

Take off contaminated, soaked clothing at once.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

Breathing protection:

Use a breathing filter unit at short or low exposure, use a breathing apparatus independent of the ambient air at intense or longer exposure.

Filter ABEK

Hand protection:

The glove material must be impermeable and resistant to the product/substance/preparation.

Selection of the glove material under observation of the penetration times, permeation rates and degradation.

Trade name. Gebo Liquid Clean

Glove material:

Selection of a suitable glove not only depends on the material but also on other quality features and differs from manufacturer to manufacturer. Since the product is a preparation of several substances, the resistance of glove materials cannot be determined in advance and therefore must be reviewed before use.

Penetration time of the glove material:

The precise penetration time must be requested from the glove manufacturer and observed.

Gloves of the following materials are suitable for permanent contact:

Nitrile rubber

Recommended material strength: ≤ 0.11 mm

Value for permeation: Level ≤ 480 min

Gloves of the following materials are suitable for splash protection:

Nitrile rubber

Recommended material strength: ≤ 0.11 mm

Value for permeation: Level ≤ 480 min

Eye protection: Tightly closing protective goggles

Body protection: Suitable body protection media must be chosen depending on the hazardous substance concentration and volume specific work the workplace.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

General information

Form:	Liquid
Colour:	Green
Odour:	Odourless
Odour threshold:	Not determined.
pH value:	11.2; 20 °C, (undiluted)
Condition change:	Not determined
Melting point/freezing point:	Not determined
Flash point:	Not applicable
Flammability (solid, gaseous):	Not applicable
Ignition temperature:	Not applicable
Disintegration temperature:	Not determined.
Self-ignition temperature:	The product is not self-inflammatory.
Explosive properties:	The product is not potentially explosive.
Explosion thresholds:	
Lower:	Not determined
Upper:	Not determined
Steam pressure:	Not determined
Density:	1.02 g/cm ³ ; at 20 °C
Water solubility:	Soluble
Steam density:	Not determined
Evaporation speed:	Not determined

10. Stability and reactivity

10.1 Reactivity No further relevant information available.

10.2 Chemical stability:

Thermal disintegration / conditions to be avoided:

No disintegration at intended use

10.3 Possibility of hazardous reactions No hazardous reactions known.

10.4 Conditions to avoid No further relevant information available.

10.5 Incompatible materials: No further relevant information available.

10.6 Hazardous decomposition products: No hazardous decomposition products known

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity The classification criteria are not met based on the available data.

Trade name. Gebo Liquid Clean

LD/LC50-values relevant for classification: Quantitative data on the toxicity of this product area not available to us.

Component	Type	Value	Species
5949-29-1 Citric acid monohydrate	Oral		LD50 5400 mg/kg (mouse)
		Dermal LD50 >2000 mg/kg	(rat)

Primary irritating effect: Caustic/irritating effect on the skin The classification criteria are not met based on the available data.

Severe eye damage/irritation: Causes serious eye irritation.

After inhalation: No irritating effect

Sensitisation of the respiratory system/skin: The classification criteria are not met based on the available data.

CMR effects (carcinogenic, mutagenic and reproduction-toxic effect):

Gem-cell mutagenicity The classification criteria are not met based on the available data.

Carcinogenicity: The classification criteria are not met based on the available data.

Reproduction toxicity: The classification criteria are not met based on the available data.

Specific target organ toxicity at one-time exposure:

The classification criteria are not met based on the available data.

Specific target organ toxicity at repeated exposure:

The classification criteria are not met based on the available data.

Aspiration risk: The classification criteria are not met based on the available data.

12. Ecological information

12.1 Toxicity

Aquatic toxicity: No further relevant information available.

Toxicity towards:

Fish: LC50/48 h 240 mg/l

Bacteria: LC50/24 h 1535 mg/l

12.2 Persistence and degradability No further relevant information available.

12.3 Bioaccumulative potential No further relevant information available.

12.4 Mobility in soil No further relevant information available.

Further ecological notes:

General notes:

Water hazard class 1 (self-classification): weakly water-hazardous

Do not let it enter bodies of water, sewage or the soil.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects No further relevant information available.

13. Disposal considerations

13.1 Waste treatment methods

Recommendation:

Chemicals must be disposed of under observation of the respective national provisions.

Must not be disposed of together with domestic waste. Do not let the material reach the sewers.

Uncleaned packagings:

Recommendation: Disposal according to the authority provisions. Non-cleaning-capable packaging material must be disposed of like the substance.

Recommended cleaning agent: Water, with added cleaning agents if applicable.

14. Transport information

14.1 UN number: ADR, ADN, IMDG, IATA	not applicable
14.2 UN proper shipping name: ADR, ADN, IMDG, IATA	Not applicable
14.3 Transport hazard classes: ADR, ADN, IMDG, IATA class	Not applicable
14.4 Packing group: ADR, IMDG, IATA	Not applicable
14.5 Environmental hazards:	Not applicable.
14.6 Special precautions for user:	Not applicable
14.7 Transport in bulk according to Annex II of the MARPOL convention	

Trade name. Gebo Liquid Clean

and the IBC code:
UN "Model Regulation":Not applicable.
Not applicable

15. Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Directive 2012/18/EU
Hazardous substances listed by name - ANNEX I None of the ingredients is contained.
REGULATION (EC) no. 1907/2006 ANNEX XVII Restriction conditions: 3
National provisions: Water hazard class: WGK 1 (self-classification): weakly water-hazardous.
- 15.2 Chemical safety assessment: A chemical safety assessment was not performed.
-

16. Other information**Relevant phrases:**

H 319 Causes serious eye irritation.

Further information:

The information from this safety data sheet corresponds to our findings at the time of revision to the best of our knowledge. The information is to provide you with an indication for safe handling of storage, processing, transport and disposal.
This safety data sheet contains only safety-relevant information and does not replace any product information or product specifications.

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International) Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Eye Irrit. 2: Severe eye damage/eye irritation – category 2
