

SAFETY DATA SHEET

Citric acid 10-50 %

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

1.1. Product identifier

Trade name

Citric acid 10-50 %

Product no.

345, 406, 414, 1045, 1048

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

Relevant identified uses of the substance or mixture

Chemical/technical use

Restricted to professional and industrial use.

Uses advised against

None known.

1.3. Details of the supplier of the safety data sheet

▼ Company and address

Acinor AS

Titangaten 13

1630 Gamle Fredrikstad

Norway

+ 47 69 38 40 82

Contact person

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E-mail

post@acinor.no

Revision

16/03/2026

SDS Version

1.0

Date of previous version

02/03/2026 (1.0)

1.4. Emergency telephone number

In urgent situations: Call 113 and request the poison information centre. (24h service)

Poison Center at Tel.: + 47 22 59 13 00

See section 4 on 'First Aid Measures'

SECTION 2: Hazards identification

Classified according to Regulation (EC) No. 1272/2008 (CLP).

2.1. Classification of the substance or mixture

Eye Irrit. 2; H319, Causes serious eye irritation.

STOT SE 3; H335, May cause respiratory irritation.

2.2. Label elements

Hazard pictogram(s)



Signal word

Warning

Hazard statement(s)

Causes serious eye irritation. (H319)

May cause respiratory irritation. (H335)

Precautionary statement(s)

General

Not applicable.

Prevention

Wash hands thoroughly after handling. (P264)

Avoid breathing mist/vapour. (P261)

Wear protective gloves/protective clothing/eye protection/face protection. (P280)

Response

IF INHALED: Remove person to fresh air and keep comfortable for breathing. (P304+P340)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing. (P305+P351+P338)

If eye irritation persists: Get medical advice/attention. (P337+P313)

Storage

Not applicable.

Disposal

Not applicable.

Hazardous substances

Citric acid

Additional labelling

2.3. Other hazards

Additional warnings

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2023/707.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable. This product is a mixture.

3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Citric acid	CAS No.: 77-92-9 EC No.: 201-069-1 REACH: 01-2119457026-42-xxxx Index No.: 607-750-00-3	10 - 50 %	Eye Irrit. 2, H319 STOT SE 3, H335	

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

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SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Emergency telephone: see section 1.4.

Inhalation

Fresh air, peace and warmth. Seek medical attention if you feel unwell.

Skin contact

Wash skin with soap and water. Remove contaminated clothing. Consult a doctor if symptoms occur.

Eye contact

Rinse immediately with large amounts of water (temperature 20-30°C) for at least 15 minutes. Remove contact lenses, if present, and open the eye wide. Consult a doctor if all discomfort persists.

Ingestion

Rinse mouth thoroughly with water. Drink plenty of water. Do not induce vomiting. Consult a doctor if all discomfort persists.

Burns

Not applicable.

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

Causes irritation upon eye-contact and may cause watering, burning and redness.

Can cause irritation of the respiratory tract and cause coughing and shortness of breath.

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

Symptomatic treatment.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Powder, carbon dioxide (CO₂), water mist, foam.

Unsuitable extinguishing media: Do not use full water jet.

5.2. Special hazards arising from the substance or mixture

The chemical is not classified as flammable.

Hazardous combustion products may include, but are not limited to: Carbon monoxide (CO). Carbon dioxide (CO₂).

5.3. Advice for firefighters

Firefighters should wear appropriate protective equipment and self-contained breathing apparatus with a full face mask.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Avoid inhalation of vapours and contact with skin and eyes. Wear specified protective equipment, see section 8.

6.2. Environmental precautions

Prevent discharge into sewers, waterways or soil.

6.3. Methods and material for containment and cleaning up

Absorb in vermiculite, dry sand or earth and place in containers. Collect in suitable containers and dispose of as hazardous waste according to section 13.

6.4. Reference to other sections

See also sections 7, 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Ensure adequate ventilation. Avoid inhalation of vapours and contact with skin and eyes. Wear specified protective equipment, see section 8.

7.2. Conditions for safe storage, including any incompatibilities

Avoid direct sunlight.

Recommended storage material

Always store in containers of the same material as the original container.

Storage conditions

No specific requirements.

Incompatible materials

Strong oxidizing agents

Bases

Food and animal feed

7.3. Specific end use(s)

See section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Contains no substances listed in regulations on action and limit values.

Reference: FOR-2011-12-06-1358 Forskrift om tiltaks- og grenseverdier. Sist endret gjennom FOR-2025-12-18-2660.

DNEL

No data available.

PNEC

Citric acid

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		0,44 mg/L
Freshwater sediment		34,6 mg/L
Marine water		0,044 mg/L
Marine water sediment		3,46 mg/L
Sewage treatment plant		1000 mg/L
Soil		33,1 mg/L

8.2. Exposure controls

Ensure adequate ventilation. Personal protective equipment should be CE marked and should be selected in cooperation with the supplier of such equipment. The recommended protective equipment and the standards specified are indicative. Standards should be of the latest version. Risk assessment of the relevant workplace/operation (actual risk) may require other protective measures. The suitability and durability of the protective equipment will depend on the area of application.

General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios

There are no exposure scenarios implemented for this product.

Exposure limits

Occupational exposure limits have not been defined for the substances in this product.

Appropriate technical measures

Apply standard precautions during use of the product. Avoid inhalation of vapours.

Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Pay special attention to hands, forearms and face.

Measures to avoid environmental exposure

No specific requirements.

Individual protection measures, such as personal protective equipment

Generally

Use only CE marked protective equipment.

Respiratory Equipment

Type	Class	Colour	Standards
In case of insufficient ventilation or if there is a risk of inhalation of vapors, suitable respiratory protection with a combination filter (type A2/P2) must be used.	A2/P2	-	NS-EN 14387, NS-EN 140, NS-EN 136

Skin protection

Recommended	Type/Category	Standards
Wear appropriate protective clothing to protect against skin contact.		-
Emergency shower should be available at the workplace. bør		-

Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
Nitrile rubber. Neoprene rubber. Natural rubber (latex). Viton rubber (fluorine rubber). Butyl rubber.	-	-	NS-EN 374, NS-EN 420
Replace gloves at any sign of wear. Protective gloves must always be worn on clean, dry hands.	-	-	

Eye protection

Type	Standards
Safety glasses with side shields.	EN ISO 16321-1
An eyewash station should be available at the workplace. Either a fixed eyewash station connected to drinking water (tempered water preferred) or a portable disposable unit (eyewash bottle).	-



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Liquid

Colour

No data available

Odour / Odour threshold

None

pH

No data available

Density (g/cm³)

1,243

Kinematic viscosity

No data available

Particle characteristics

Not applicable - product is a liquid

Phase changes

Melting point/Freezing point (°C)

No data available

Softening point/range (°C)

Does not apply to liquids.

Boiling point (°C)

No data available

Vapour pressure

No data available

Relative vapour density

No data available

Decomposition temperature (°C)

No data available.

Data on fire and explosion hazards

Flash point (°C)

No data available

Flammability (°C)

No data available

Auto-ignition temperature (°C)

No data available

Lower and upper explosion limit (% v/v)

No data available

Solubility

Solubility in water

Soluble

n-octanol/water coefficient (LogKow)

No data available.

Solubility in fat (g/L)

No data available.

9.2. Other information

Evaporation rate (n-butylacetate = 100)

Not applicable

Other physical and chemical parameters

No data available.

Oxidizing properties

No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under recommended storage conditions.

10.2. Chemical stability

Stable when stored and handled properly.

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Avoid direct sunlight.

Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Strong oxidizing agents

Bases

10.6. Hazardous decomposition products

None under normal conditions. See also section 5.2.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Based on available data, the classification criteria are not met.

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory sensitisation

Based on available data, the classification criteria are not met.

Skin sensitisation

Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

Based on available data, the classification criteria are not met.

STOT-single exposure

May cause respiratory irritation.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Symptoms related to the physical, chemical and toxicological characteristics

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs.

Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

11.2. Information on other hazards

Endocrine disrupting properties

This mixture/product does not contain any substances known to have hormone-disrupting properties in relation to health.

Other information

None known.

SECTION 12: Ecological information

12.1. Toxicity

The chemical is not classified as environmentally harmful.

12.2. Persistence and degradability

Product/substance Citric acid
 Duration: 28 days
 Result: 97 %
 Conclusion: -
 Test: OECD 301 B

12.3. Bioaccumulative potential

Product/substance Citric acid
 LogKow: -1,55
 Conclusion: -

12.4. Mobility in soil

The product is soluble in water.

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

12.6. Endocrine disrupting properties

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

12.7. Other adverse effects

Prevent discharge into sewers, waterways or soil.

SECTION 13: Disposal considerations

13.1. ▼ Waste treatment methods

Delivered as hazardous waste to an approved treatment or collector. The hazardous waste code (EAL code) is a guideline. The user must specify the correct EWC code if the area of use deviates. The product must not be poured down the drain.

EWC code

16 05 08* Discarded organic chemicals consisting of or containing dangerous substances

National waste number and description

7134 Organic acids

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
ADR/A DN/RID	-	-	-	-	-	-
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-

Additional information

Not dangerous goods according to ADR/ADN/RID, IATA and IMDG.

14.6. Special precautions for user

Not applicable.

14.7. Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15: Regulatory information

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

▼ Restrictions for application

Restricted to professional users.

Demands for specific education

No specific requirements.

SEVESO - Categories / dangerous substances

Not applicable.

Product registration number

608695

Declaration of chemicals

If the product is imported or produced in more than 100 kg/year it is subject to registration in the Product Register because it is classified as hazardous.

Additional information

Not applicable.

Sources

Regulation on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH Regulation) of 30 May 2008 with subsequent amendments.

Regulations on classification, labelling and packaging of substances and mixtures (CLP) of 16.06.2012 with subsequent amendments.

FOR-2004-06-01-930: Regulations on the recycling and treatment of waste (the Waste Regulations), with subsequent amendments.

FOR 2009-04-01 no. 384: Regulations on the land transport of dangerous goods with subsequent amendments, Directorate for Civil Protection and Emergency Preparedness.

FOR-2015-05-19-541: Regulations on the declaration of chemicals to the product register (declaration regulations) of 01.06.2015 with subsequent amendments.

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

H319, Causes serious eye irritation.

H335, May cause respiratory irritation.

▼ Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

CE = Conformité Européenne (European conformity)

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

CSA = Chemical Safety Assessment

CSR = Chemical Safety Report

DMEL = Derived Minimal Effect Level

DNEL = Derived No Effect Level

EC = Effective concentration

ED = Effective dose

EINECS = European Inventory of Existing Commercial chemical Substances

EL = Effective Loading

ErC = Concentration associated with x% growth rate response
ES = Exposure Scenario
EUH statement = CLP-specific Hazard statement
EuPCS = European Product Categorisation System
EWC = European Waste Catalogue
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
GWP = Global warming potential
HP = Hazardous Property code
IARC = International Agency for Research on Cancer (IARC)
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IC = X maximum inhibitory concentration
IMDG = International Maritime Dangerous Goods
LC = Lethal concentration
LCLo = Value is the lowest concentration of a material in air reported to have caused the death of animals or humans
LD = Lethal dose
LOAEC = Lowest Observed Adverse Effect Concentration
LOAEL = Lowest Observed Adverse Effect Level
LOEC = Lowest Observed Effect Concentration
LogKow = logarithm of the n-octanol/water coefficient
LL = Lethal Loading
M = For multiplication factor
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
NOAEC = No Observed Adverse Effect Concentration
NOAEL = No Observed Adverse Effect Level
NOEC = No Observed Effect Concentration
NOELR = No Observable Effect Loading Rate
OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SCL = A specific concentration limit
SVHC = Substances of Very High Concern
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
TWA = Time weighted average
UN = United Nations
UVBC = Unknown or variable composition, complex reaction products or of biological materials
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the mixture in regard of health hazards is in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP).

The safety data sheet is validated by

Kiwa Kompetanse AS / NOB

Other

Dette sikkerhetsdatablad er kvalitetskontrollert av Kiwa Kompetanse AS, som er sertifisert iht. ISO 9001:2015.
Country-language: NO-en