

SECTION 1. Identification of the substance/mixture and of the company/enterprise

1.1. Product identifier

Product name : MIX ACID TM
Product code: refer to sales department

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

Specific Treatment
Sectors of use:
Manufacture of food products[SU4]
Product category:
Additive for enological use

Not recommended uses
Do not use for purposes other than those listed

1.3. Details of the supplier of the safety data sheet

AEB SpA - Via Vittorio Arici 104 S.Polo - 25134 Brescia (BS) Italy
Tel. +39.030.2307.1 Fax +39.030.2307281
E-mail: info@aeb-group.com - Internet: www.aeb-group.com
E-mail tecnico competente/technical dept.: sds@aeb-group.com

AEB USA
111 N Cluff Avenue
Lodi CA 95240 (USA)
Tel: +1 2096258139 Fax: +1 2092248953
Email: info@aebusa.com - Internet: www.aeb-group.com

AEB AFRICA (PTY) LTD
18 Track Crescent, Cor. Station Road
Montague Gardens 7441
Cape Town (South Africa)
Tel.: +27 215512700 - Fax: +27 (0) 215511919
Email: info@aeb.co.za - Internet: www.aeb-group.com

AEB OCEANIA PTY LTD
178A Wakaden Street
Griffith NSW 2680
T: 1300 704 971
Email: aebocceania@aeb-group.com - Internet: www.aeb-group.com

Produced by
AEB SpA
Via Vittorio Arici 104 S. Polo
25134 Brescia

1.4. Emergency telephone number

AEB SpA

Centralino/Switchboard: +39.030.2307.1 - (h 8.30-12.00 13.30-18.00 GMT +1; Lingua/Language: Italiano, English)

AEB USA

Switchboard: +1 2096258139 (GMT -8; Language: English)

AEB AFRICA (PTY) LTD

Switchboard: +27 215512700 (GMT +1; Language: English, Afrikaans)

AEB OCEANIA PTY LTD

Switchboard: +61 1300 704 971 (GMT +9; Language: English)

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008:

Pictograms:

GHS05

Hazard Class and Category Code(s):

Skin Corr. 1B, Eye Dam. 1

Hazard statement Code(s):

H314 - Causes severe skin burns and eye damage.

H318 - Causes serious eye damage.

Corrosive product: causes severe skin burns and eye damage.

If brought into contact with eyes, the product causes serious damages to eyes, such as an opaque cornea or injury to iris.

2.1.2 Additional information:

For full text of Hazard- and EU Hazard-statements: see SECTION 16.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008:

Pictogram, Signal Word Code(s):

GHS05 - Danger

Hazard statement Code(s):

H314 - Causes severe skin burns and eye damage.

Supplemental Hazard statement Code(s):

not applicable

Precautionary statements:



Prevention

- P264 - Wash hands thoroughly after handling.
- P280 - Wear protective gloves/clothing and eye/face protection

Response

- P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
- P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Contains:

L-(+)-tartaric acid, L-Malic acid

Ingredients: L(+) tartaric acid 33,6%, L-malic acid 11,9%, water q.s. to 100.
Food use, oenological use. Not intended for the final consumer. In accordance with current regulations on the specific matter. Only for industrial use.

2.3. Other hazards

Based on the available data, no PBT or vPvB substances are present in accordance with Regulation (EC) 1907/2006, annex XIII

Based on available data, there are no substances that interfere with the Endocrine System in accordance with Regulation (EU) 2017/2100

The use of this chemical agent implies the obligation of the "risk assessment" by the employer according to the provisions of Legislative Decree April 9, 2008 no. 81 and subsequent amendments. If the results of the risk assessment demonstrate that, in relation to the type, quantity, methods and frequency of exposure, there is only a low risk for the safety and irrelevant for the health of the workers and that the measures referred to in paragraph 1 of Legislative Decree April 9, 2008 no. 81 are sufficient to reduce the risk, the provisions of articles 225, 226, 229, 230 of the same Legislative Decree do not apply
Do not ingest. Keep out of reach of children.

SECTION 3. Composition/information on ingredients

3.1 Substances

Irrilevant

3.2 Mixtures

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACH
L-(+)-tartaric acid	>= 25 < 50%	Eye Dam. 1, H318		87-69-4	201-766-0	01-2119537 204-47-xxxx
L-Malic acid	>= 10 < 25%	Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335		97-67-6	202-601-5	

SECTION 4. First aid measures

4.1. Description of first aid measures

Inhalation

Ventilate the room. Immediately remove the patient from the contaminated environment and keep him at rest in a well-ventilated area. In case of malaise consult a doctor.

Direct contact with the skin (of the pure product)

Take off contaminated clothing immediately. In case of contact with skin, wash immediately and abundantly with water. Consult a doctor immediately.

Direct contact with the eyes (of the pure product)

Wash immediately and abundantly with running water, with eyelids open, for at least 10 minutes; then protect the eyes with dry sterile gauze. Seek immediate medical attention. Do not use eye drops or ointments of any kind before the visit or advice of the ophthalmologist.

Ingestion

Rinse mouth immediately. Do not under any circumstances induce vomiting or emesis. Seek immediate medical attention.

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

Contact with eyes causes very strong irritation, including redness and tearing. When in contact with the skin it causes irritation and redness

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

In case of accidental contact or feeling unwell, immediately go to a doctor or the emergency room and show this safety data sheet.

Symptomatic treatment

SECTION 5. Firefighting measures

5.1. Extinguishing media

Suggested extinguishing media:

Water spray, CO₂, foam, dry chemical, depending on the materials involved in the fire.

Extinguishing media to avoid:

Water jets. Use water jets only to cool the surfaces of the containers exposed to fire.

5.2. Special hazards arising from the substance or mixture

No data available.

5.3. Advice for firefighters

Use protection for the breathing apparatus

Safety helmet and full protective clothing.

The water spray can be used to protect the people involved in the extinction.

You may also use self-contained breathing apparatus, especially when working in confined and poorly ventilated areas.

Keep containers cool with water spray

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel:

Leave the area surrounding the spill or release. Do not smoke

Wear mask, gloves and protective clothing.

6.1.2 For emergency responders:

Eliminate all unguarded flames and possible sources of ignition. No smoking.

Provide a sufficient ventilation.

Evacuate the danger area and, in case, consult an expert.

6.2. Environmental precautions

Contain spills with earth or sand.

If the product has entered a watercourse, sewers or has contaminated soil or vegetation, notify the authorities.

Dispose of the waste material in compliance with the regulations

6.3. Methods and material for containment and cleaning up

6.3.1 Containment:

Rapidly recover the product, wear a mask and protective clothing (for specifications refer to section 8.2. SDS)

Recover the product for reuse, if possible, or for removal. Possibly absorb it with inert material or suck it.

Prevent it from entering the sewer system.

6.3.2 Cleaning up:

After wiping up, wash with water the area and materials involved

6.3.3 Other information:

None in particular.

6.4. Reference to other sections

Refer to paragraphs 8 and 13 for more information

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Avoid contact and inhalation of vapors

Wear protective gloves/clothing and eye/face protection

At work do not eat or drink.

See also paragraph 8 below.

7.2. Conditions for safe storage, including any incompatibilities

Keep in original container closed tightly. Do not store in open or unlabelled containers.

Keep containers upright and safe by avoiding the possibility of falls or collisions.

Store in a cool and dry place, away from heat sources and direct exposure to sunlight.

7.3. Specific end use(s)

Manufacture of food products:
Handle with care.
Store in a clean, dry, ventilated area away from heat and direct sunlight.
Keep container tightly closed.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

=====
Related to contained substances:
L-(+)-tartaric acid:

Limit value - Eight hours
(ppm)/(mg/m³)
Germany (AGS): x/2(1)
Germany (DFG): x/2(1)
Switzerland: x/2(1)

Limit value - Short term
(ppm)/(mg/m³)

Germany (AGS): x/4(1)(2)
Germany (DFG): x/4(1)(2)
Switzerland: x/4(1)(2)

Remarks

Germany (AGS): (1) Inhalable fraction (2) 15 minutes average value
Germany (DFG): 1) Inhalable fraction (2) 15 minutes average value
Switzerland: 1) Inhalable fraction (2) 15 minutes average value

- Substance: L-(+)-tartaric acid
DNEL
Systemic effects Long term Workers inhalation = 5,2 (mg/m³)
Systemic effects Long term Workers dermal = 2,9 (mg/kg bw/day)
Systemic effects Long term Consumers inhalation = 1,3 (mg/m³)
Systemic effects Long term Consumers dermal = 1,5 (mg/kg bw/day)
Systemic effects Long term Consumers oral = 8,1 (mg/kg bw/day)

8.2. Exposure controls



Appropriate engineering controls:
Manufacture of food products:
No specific monitoring foreseen (act according to good practice and specific rules for the type of risk associated)

8.2.2 Individual protection measures:

(a) Eye / face protection
When handling the pure product use safety glasses (EN 166).

(b) Skin protection

(i) Hand protection

When handling the pure product use chemical resistant protective gloves (EN 374-1/EN374-2/EN374-3)

(ii) Other

When handling the pure product, wear full protective clothing (generic workwear / antacid, safety shoes S3-EN ISO 20345) or other protective equipment, according to the instructions of the RSPP

(c) Respiratory protection

During manual operations in case of insufficient ventilation, use mask with filters for gases and vapors Organic - Brown, class 3, A or AX (UNI EN 405) unless otherwise specified by the employer and/or by assessments of environmental hygiene investigations

(d) Thermal hazards

No hazard to report

Environmental exposure controls:

Use according to good working practices, avoiding dispersal in the environment.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical and chemical properties	Value	Determination method
Physical state	Clear liquid	
Colour	colorless	
Odour	not determined as it is considered not relevant for the characterization of the product	
Odour threshold	not determined as it is considered not relevant for the characterization of the product	
Melting point/freezing point	not determined as it is considered not relevant for the characterization of the product	
Boiling point or initial boiling point and boiling range	not determined as it is considered not relevant for the characterization of the product	
Flammability	not determined as it is considered not relevant for the characterization of the product	
Lower and upper explosion limit	not determined as it is considered not relevant for the characterization of the product	
Flash point	not determined as it is considered not relevant for the characterization of the product	ASTM D92
Auto-ignition temperature	not determined as it is considered not relevant for the characterization of the product	
Decomposition temperature	not determined as it is considered not relevant for the characterization of the product	
pH	<2 (t.q.)	
Kinematic viscosity	not determined as it is considered not relevant for the characterization of the product	
Solubility	in water	
Water solubility	miscible in all proportions	

Physical and chemical properties	Value	Determination method
Partition coefficient n-octanol/water (log value)	not determined as it is considered not relevant for the characterization of the product	
Vapour pressure	not determined as it is considered not relevant for the characterization of the product	
Density and/or relative density	1,22 ± 0,05 (20°C)	
Relative vapour density	not determined as it is considered not relevant for the characterization of the product	
Particle characteristics	not determined as considered not relevant for the characterization of the product	

9.2. Other information

9.2.1 Information with regard to physical hazard classes

Irrilevant

9.2.2 Other safety characteristics

Irrilevant

SECTION 10. Stability and reactivity

10.1. Reactivity

Acid

10.2. Chemical stability

No hazardous reaction when handled and stored according to provisions.

10.3. Possibility of hazardous reactions

There are no hazardous reactions

10.4. Conditions to avoid

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Related to contained substances:

L-(+)-tartaric acid:

None

L-Malic acid:

Avoid exposing the product to high temperatures. Avoid moisture.

10.5. Incompatible materials

Strong bases, oxidizing and reducing agents, alkali metals.

10.6. Hazardous decomposition products

Does not decompose when used for intended uses.

SECTION 11. Toxicological information

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

(a) acute toxicity: L-(+)-tartaric acid: Ingestion - LD50 rat (mg / kg / 24h bw):> 2000

Skin contact - LC50 rat / rabbit (mg / kg / 24h bw):> 2000

Inhalation - LD50 rat (mg / l / 4h): nd

L-Malic acid: Ingestion - LD50 rat (mg / kg / 24h bw): not available

Skin contact - LC50 rat / rabbit (mg / kg / 24h bw): not available

Inhalation - LD50 rat (mg / l / 4h): not available

(b) skin corrosion/irritation: Corrosive product: causes severe skin burns and eye damage.

L-(+)-tartaric acid: Not corrosive

L-(+)-tartaric acid: Not Irritant in vivo test OECD 404: acute skin irritation / corrosion. The study can be classified as Klimisch code 1: unrestricted reliability. The results showed that no toxic effects were found and two other in vitro studies also support this finding. Hence the irritative effect of tartaric acid can be concluded as non-irritating.

(c) serious eye damage/irritation: Corrosive product: causes severe skin burns and eye damage. - If brought into contact with eyes, the product causes serious damages to eyes, such as an opaque cornea or injury to iris.

L-(+)-tartaric acid: Corrosive in vitro test OECD 437: This study is considered a key study as it can be classified as Klimisch code 1: unrestricted reliability. Therefore the test result showed that tartaric acid is highly irritating.

L-(+)-tartaric acid: Irritant in vitro test OECD 437: This study is considered a key study as it can be classified as Klimisch Code 1: Unrestricted Reliability Therefore the test result showed that tartaric acid is highly irritating.

(d) respiratory or skin sensitisation: L-(+)-tartaric acid: Not sensitizing

(e) germ cell mutagenicity: L-(+)-tartaric acid: Not mutagenic

(f) carcinogenicity: L-(+)-tartaric acid: Not available

(g) reproductive toxicity: L-(+)-tartaric acid: Non toxic

(h) specific target organ toxicity (STOT) single exposure: L-(+)-tartaric acid: Non toxic

(i) specific target organ toxicity (STOT) repeated exposure: L-(+)-tartaric acid: Non toxic

(j) aspiration hazard: L-(+)-tartaric acid: Non toxic

11.2. Information on other hazards

No data available.

11.2.1. Endocrine disrupting properties

Based on available data, there are no substances that interfere with the Endocrine System in accordance with Regulation (EU) 2017/2100

SECTION 12. Ecological information

12.1. Toxicity

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Related to contained substances:
L-(+)-tartaric acid:
Acute toxicity - fish LC50 (mg/l/96h): >100
Acute toxicity - crustaceans EC50 (mg/l/48h): 93.3
Acute toxicity algae ErC50 (mg/l/72-96h): 51.4
Chronic toxicity - fish NOEC (mg/l): na
Chronic toxicity - crustaceans NOEC (mg/l): na
Chronic algae NOEC (mg/l): 3.125
Acute toxicity M-factor = 1
Chronic toxicity M-factor = 1

L-Malic acid:
Acute toxicity - fish LC50 (mg / l / 96h): not available
Acute toxicity - crustaceans EC50 (mg / l / 48h): not available
Acute toxicity algae ErC50 (mg / l / 72-96h): not available
Chronic toxicity - fish NOEC (mg / l): not available
Chronic toxicity - shellfish NOEC (mg / l): not available
Chronic toxicity algae NOEC (mg / l): not available
Chronic toxicity M-factor = 1

Use according to good working practices and avoid to disperse the product into the environment.

12.2. Persistence and degradability

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Related to contained substances:
L-(+)-tartaric acid:
rapidly biodegradable

L-Malic acid:
Unavailable

12.3. Bioaccumulative potential

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Related to contained substances:
L-(+)-tartaric acid:
Tartaric acid is an organic acid naturally present in numerous plants and particularly in grapes, abundant both in its free form and in the form of salt. No bioaccumulation data are available on relevant aquatic species. However, with a measured octanol/water partition coefficient value $\log K_{ow} < 3$, the substance is not expected to bioaccumulate.

L-Malic acid:
Not bioaccumulative

12.4. Mobility in soil

=====
Related to contained substances:
L-(+)-tartaric acid:

Not determined as rapidly biodegradable

L-Malic acid:
Unavailable

12.5. Results of PBT and vPvB assessment

Based on the available data, no PBT or vPvB substances are present in accordance with Regulation (EC) 1907/2006, annex XIII

12.6. Endocrine disrupting properties

Based on available data, there are no substances that interfere with the Endocrine System in accordance with Regulation (EU) 2017/2100

12.7. Other adverse effects

No adverse effects

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Do not reuse empty containers. Dispose of them in accordance with the regulations in force. Any remaining product should be disposed of according to applicable regulations by addressing to authorized companies.
Recover if possible. Operate according to local or national regulations

SECTION 14. Transport information

14.1. UN number or ID number

ADR/RID/IMDG/ICAO-IATA: 3265

If subject to the following characteristics is ADR exempt:

Combination packagings: per inner packaging 1 L per package 30 kg

Inner packaging placed in skrink-wrapped or stretch-wrapped trays: per inner packaging 1 L per package 20 kg



14.2. UN proper shipping name

ADR/RID/IMDG: LIQUIDO ORGANICO CORROSIVO, ACIDO, N.A.S. (Acido Tartarico e Acido Malico in miscela)

ADR/RID/IMDG: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Tartaric Acid and Malic Acid in mixture)

ICAO-IATA: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Tartaric Acid and Malic Acid in mixture)

14.3. Transport hazard class(es)

ADR/RID/IMDG/ICAO-IATA: Class : 8

ADR/RID/IMDG/ICAO-IATA: Label : 8

ADR: Tunnel restriction code : E

ADR/RID/IMDG/ICAO-IATA: Limited quantities : 1 L

IMDG - EmS : F-A, S-B

14.4. Packing group

ADR/RID/IMDG/ICAO-IATA: II

14.5. Environmental hazards

ADR/RID/ICAO-IATA: Product is not environmentally hazardous

IMDG: Marine polluting agent : No

14.6. Special precautions for user

The transport must be carried out by authorized vehicles for the transport of dangerous goods in accordance with the requirements of the applicable Edition of the agreement A.D.R. and national provisions. The transport must be carried out in the original packaging and in packages that are made from materials resistant to content and not likely to generate with this dangerous reactions. The process of loading and unloading of dangerous goods have received adequate training on the risks presented by prepared and on possible procedures to be taken in the event of emergency situations

14.7. Maritime transport in bulk according to IMO instruments

Transport in bulk is not foreseen

SECTION 15. Regulatory information

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

Restrictions relating to the product or the substances contained (Annex XVII EC Reg. 1907/2006): not applicable
Substances in Candidate list (art. 59 EC Reg. 1907/2006): the product does not contain SVHC in percentage = a 0.1 %.

Regulation (EU) 1169/2011: see point 2.2

Regulation (EU) 1308/2013; see point 2.2

Regulation (EC) 1333/2008; see point 2.2

REGULATION (EU) No 1357/2014 - waste: HP8 - Corrosive

Seveso III class (Dir 2012/18/EU): n.a.

15.2. Chemical safety assessment

No chemical safety assessment was carried out by the supplier

SECTION 16. Other information

16.1. Other information

Points modified compared to previous release: 2.1. Classification of the substance or mixture, 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Description of hazard statements set out in paragraph 3

- H318 = Causes serious eye damage.
- H315 = Causes skin irritation.
- H319 = Causes serious eye irritation.
- H335 = May cause respiratory irritation.

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

- H314 - Causes severe skin burns and eye damage. Classification procedure: similar mixture - experimental data
- H318 - Causes serious eye damage. Classification procedure: similar mixture - experimental data

Main normative references:

- Reg. (CE) n. 1907 del 18/12/06 REACH (Registration, Evaluation and Authorisation of Chemicals) et seq.
- Reg. (CE) 1272/2008 CLP (Classification Labelling and Packaging) et seq.
- Directive 2012/18/EU (on the control of major-accident hazards involving dangerous substances) et seq.

Training required: This document must be submitted to the employer to determine the possible need for appropriate training for workers to ensure protection of human health and the environment.

n.a.: not applicable

n.d.: not available

ADR: Accord européen relative au transport International des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

ATE: Acute Toxicity Estimati

BFC: Bioconcentration Factor

BOD: Biochemical Oxygen Demand

CAS: Chemical Abstract Service number

CAP: Centre AntiPoison

CE/EC number EINECS (European Inventory of existing Commercial Substances) e ELINCS (European List of notified Chemical Substances)

CL50/LC50: Lethal Concentration 50

DL50/LD50: Lethal Dose 50

COD: Chemical Oxygen Demand

DNEL: Derived No Effect Level

EC50: half maximal Effective Concentration

ERC: Environment Release Classes

EU/UE: European Union

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

IMDG: International Maritime Dangerous Goods code

Kow: Octanol water partition coefficient

NOEC: No Observed Effect Concentration

OEL: Occupational Exposure Limit

PBT: Persistent Bioaccumulative and Toxic

PC: Product Categories

PNEC: Predicted No Effect Concentration

PROC: Process Categories

RID: Règlement concernant le transport International ferroviaire des marchandises dangereuses (Regulations concerning International rail transport of dangerous goods)

STOT: Target Organ Systemic Toxicity

STOT (RE): Repeated Exposure

STOT (SE): Single Exposure

STP: Sewage Treatment Plants

SU: Sector of Use

SVCH: Substance of Very High Concern
TLV: Threshold Limit Value
vPvB: Very Persistent Very Bioaccumulative

References and Sources:

- ECHA Registered Substances:
<https://echa.europa.eu/web/guest/information-on-chemicals/registered-substances>
- SDS raw material supplier
- GESTIS International Limit Value: <http://limitvalue.ifa.dguv.de>

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*** this tab annuls and replaces any previous edition. (IIXX)

Changes to the previous edition: sec 2
