

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

**1.1. Product identifier**

Product name : MIX ACID LM  
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**

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## 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, GHS07

Hazard Class and Category Code(s):  
Skin Corr. 1, Eye Dam. 1, STOT SE 3

Hazard statement Code(s):  
H314 - Causes severe skin burns and eye damage.  
H318 - Causes serious eye damage.  
H335 - May cause respiratory irritation.

Corrosive product: causes severe skin burns and eye damage.  
If inhaled, the product causes irritations to the respiratory tract.  
If brought into contact with eyes, the product causes serious damages to eyes, such as an opaque cornea or injury to iris.

### 2.2. Label elements

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

Pictogram, Signal Word Code(s):  
GHS05, GHS07 - Danger

Hazard statement Code(s):  
H314 - Causes severe skin burns and eye damage.  
H335 - May cause respiratory irritation.

Supplemental Hazard statement Code(s):  
EUH071 - Corrosive to the respiratory tract.

Precautionary statements:  
Prevention  
P260 - Do not breathe vapours/spray.



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.  
 P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 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-Malic acid, L-Lactic acid

Ingredients: L-Malic acid 36%, L-Lactic acid 25,6%, 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

The substance / mixture does NOT contain substances PBT/vPvB according to Regulation (EC) No 1907/2006, Annex XIII

## SECTION 3. Composition/information on ingredients

### 3.1 Substances

Irrilevant

### 3.2 Mixtures

Refer to paragraph 16 for full text of hazard statements

Substance	Concentration[ w/w]	Classification	Index	CAS	EINECS	REACH
L-Malic acid	>= 25 < 50%	Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335		97-67-6	202-601-5	
L-lactic acid	>= 25 < 50%	EUH071; Skin Corr. 1C, H314; Eye Dam. 1, H318	607-743-00-5	79-33-4	201-196-2	01-2119474 164-39-XXX X

## SECTION 4. First aid measures

### 4.1. Description of first aid measures

Inhalation:

Ventilate the area. Move immediately the contaminated patient from the area and keep him at rest in a well ventilated room. CALL A PHYSICIAN.

Direct contact with skin (of the pure product):

Take off immediately contaminated clothing.  
 In case of contact with skin, wash immediately with water.  
 Immediately consult a physician.

Direct contact with eyes (of the pure product):

Wash immediately and thoroughly with running water, keeping eyelids open for at least 10 minutes, then protect your eyes with a dry sterile gauze. Seek medical advice immediately

Do not use eye drops or ointments of any kind before the examination or advice from an oculist.

Ingestion:

Rinse mouth immediately.

Absolutely do not induce vomiting or emesis. Seek medical advice immediately.

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

Ingestion may cause chemical burns in the mouth and throat. In contact with the skin can cause burns. In contact with eyes it causes very strong irritation, including redness and tearing.

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

Immediately call a POISON CENTER or a doctor.

Call a POISON CENTER or a doctor if you feel unwell.

### **SECTION 5. Firefighting measures**

#### **5.1. Extinguishing media**

Suggested extinguishing media:

Water spray, CO<sub>2</sub>, 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.

Handle the product after consulting all other sections of this safety data sheet.

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 the closed packaging, in a clean, dry and odorless place. Product sensitive to crystallization, keep at a temperature above 15°C.

# **SECTION 8. Exposure controls/personal protection**

## **8.1. Control parameters**

No data available.

## 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 a mask with filters for organic gases and vapors - Brown, class 3, A or AX (UNI EN 405) unless otherwise specified by the employer and / or by evaluations of environmental hygiene investigations

(d) Thermal hazards

No hazard to report

### 8.2.3. Environmental exposure controls:

Use according to good working practices, avoiding to disperse the product 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
Appearance	clear liquid	
Colour	Colorless	
Odour	not determined as considered not relevant for the characterization of the product	
Odour threshold	not determined as considered not relevant for the characterization of the product	
pH	<2 (tc)	
Melting point/freezing point	not determined as considered not relevant for the characterization of the product	
Initial boiling point and boiling range	not determined as considered not relevant for the characterization of the product	
Flash point	not determined as considered not relevant for the characterization of the product	ASTM D92

Physical and chemical properties	Value	Determination method
Evaporation rate	not determined as considered not relevant for the characterization of the product	
Flammability (solid, gas)	not determined as considered not relevant for the characterization of the product	
Upper/lower flammability or explosive limits	not determined as considered not relevant for the characterization of the product	
Vapour pressure	not determined as considered not relevant for the characterization of the product	
Vapour density	not determined as considered not relevant for the characterization of the product	
Relative density	1,22 ± 0,05 (20 °C)	
Solubility	in water	
Water solubility	miscible in all proportions	
Partition coefficient: n-octanol/water	not determined as considered not relevant for the characterization of the product	
Auto-ignition temperature	not determined as considered not relevant for the characterization of the product	
Decomposition temperature	not determined as considered not relevant for the characterization of the product	
Viscosity	not determined as considered not relevant for the characterization of the product	
Explosive properties	not determined as considered not relevant for the characterization of the product	
Oxidising properties	irrelevant	

## 9.2. Other information

No data available.

## 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

High temperatures > 200 ° C

### 10.5. Incompatible materials

Strong bases, oxidizing and reducing agents, alkali metals.

### 10.6. Hazardous decomposition products

Thermal decomposition produces irritating gases and vapors, anhydride and carbon monoxide.

## SECTION 11. Toxicological information

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

ATE(mix) oral = ∞  
ATE(mix) dermal = ∞  
ATE(mix) inhal = ∞

(a) acute toxicity: 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  
L-lactic acid: Ingestion-rat LD50 (mg/kg/24h bw): 3543  
Skin contact-LC50 rat/coniglio (mg/kg/bw 24h bw): > 2000

Inhalation-rat LD50 (mg/l/4h): > 7.94

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

L-lactic acid: Corrosive

L-lactic acid: OECD 404, in vivo, solution Rabbits (88%) Result: irritant

(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-lactic acid: Causes serious eye damage

L-lactic acid: CEET, Ex vivo, solution (88%) Result: severe eye irritation

(d) respiratory or skin sensitisation: L-lactic acid: Non-sensitizing

(e) germ cell mutagenicity: L-lactic acid: Non-mutagenic

(f) carcinogenicity: L-lactic acid: Non-carcinogenic

(g) reproductive toxicity: L-lactic acid: Non-toxic for reproduction

(h) specific target organ toxicity (STOT) single exposure: If inhaled, the product causes irritations to the respiratory tract.

L-lactic acid: Not available

(i) specific target organ toxicity (STOT) repeated exposure: L-lactic acid: Not available

(j) aspiration hazard: L-lactic acid: Not available

### 11.2. Information on other hazards

No data available.

## SECTION 12. Ecological information

**12.1. Toxicity**

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Related to contained substances:

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

L-lactic acid:

Acute toxicity - fish (*Lepomis macrochirus*) LC50 (mg / l / 96h): 130

Acute toxicity - crustaceans (*Daphnia magna*) EC50 (mg / l / 48h): 130

Acute toxicity algae ErC50 (*Pseudokirchnerella subcapitata*) (mg / l / 72 ): ~ 3500

Chronic toxicity algae NOEC (*Pseudokirchnerella subcapitata*) (mg / l / 72): 1900

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-Malic acid:

Unavailable

L-lactic acid:

Easily biodegradable (100%)

**12.3. Bioaccumulative potential**

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Related to contained substances:

L-Malic acid:

Not bioaccumulative

L-lactic acid:

Non bioaccumulative Log Pow: -0.72 - -0.54 (20 ° C)

**12.4. Mobility in soil**

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Related to contained substances:

L-Malic acid:

Unavailable

L-lactic acid:

Weak adsorption

### 12.5. Results of PBT and vPvB assessment

No PBT/vPvB ingredient is present

### 12.6. Endocrine disrupting properties

No data available.

### 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 5 L per package 30 Kg

Inner packaging placed in skrink-wrapped or stretch-wrapped trays: per inner packaging 5 L per package 20 Kg



### 14.2. UN proper shipping name

ADR/RID/IMDG: LIQUIDO ORGANICO CORROSIVO, ACIDO, N.A.S. (acido lattico, acido malico in miscela)

ADR/RID/IMDG: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (lactic acid, malic acid in mixture)

ICAO-IATA: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (lactic acid, 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 : 5 L

IMDG - EmS : F-A, S-B

### 14.4. Packing group

ADR/RID/IMDG/ICAO-IATA: III

#### **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 contained substances (All. XVII Reg. EC 1907/2006): not applicable  
Substances in Candidate List (art. 59 Reg. EC 1907/2006): the product does not contain SVHC in a proportion  $\geq 0.1\%$ .  
Substances subject to authorisation (Ann. XIV Reg. CEC 1907/2006): the product does not contain SVHC in a proportion  $\geq 0.1\%$ .

Reg. EC 648/04: see 2.2

Reg. (EU) n. 1169/2011: see 2.2

Reg (UE) 528/2012: see.to 2.2

REGULATION (EU) No 1357/2014 - waste:

HP5 - Specific Target Organ Toxicity (STOT)/Aspiration Toxicity

HP8 - Corrosive

#### **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, 2.2. Label elements

Description of hazard statements set out in paragraph 3

H315 = Causes skin irritation.

H319 = Causes serious eye irritation.

H335 = May cause respiratory irritation.  
H314 = Causes severe skin burns and eye damage.  
H318 = Causes serious eye damage.

Classification based on data of all mixture components

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.  
Regulation (EC) n. 648 of 31/03/04 (on detergents) et seq.  
Regulation (UE) n. 1169/2011 (on the provision of food information to consumers)  
Directive 2012/18/EU (on the control of major-accident hazards involving dangerous substances) et seq.  
Regulation (UE) 528/2012 (Biocides) et seq.

Procedure used to classify under CLP mixture (Reg. EC 1272/2008):

H314 Skin. Corr. 1A: On the basis of experimental data / Calculation Method  
Other hazards: Calculation Method

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 Estimat

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 supplier
- GESTIS DNEL Database: <http://www.dguv.de/ifa/gestis/gestis-dnel-datenbank/index-2.jsp>
- 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: variation on classification.

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