

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

**1.1. Product identifier**

Product name : ACID + DEMI  
Product code: refer to sales department

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

Acid regenerating  
Sectors of use:  
Industrial Manufacturing[SU3], Manufacture of food products[SU4]  
Product category:  
Other products: wine and beverage preparation

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: aeboceania@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, GHS07

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

Hazard statement Code(s):  
H290 - May be corrosive to metals.  
H314 - Causes severe skin burns and eye damage.  
H335 - May cause respiratory irritation.

The product can be corrosive to metals  
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):  
H290 - May be corrosive to metals.  
H314 - Causes severe skin burns and eye damage.  
H335 - May cause respiratory irritation.

Supplemental Hazard statement Code(s):  
not applicable

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:  
Hydrochloric acid

Only for industrial use. In accordance with current regulations on the specific matter.

### 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

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

## 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
Hydrogen ChlorideB	>= 25 < 50%	Met. Corr. 1, H290; Skin Corr. 1B, H314; STOT SE 3, H335 Limits: C >= 25%: Skin Corr. 1B H314 10% <= C < 25%: Skin Irrit. 2 H315 10% <= C < 25%: Eye Irrit. 2 H319 C >= 10%: STOT SE 3 H335	017-002-01-X	7647-01-0	231-595-7	01-2119484 862-27-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**

No data available.

#### **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)

Industrial Manufacturing:

Handle with extreme caution.

Store in a well ventilated place away from heat sources.

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:

Hydrogen Chloride:  
Limit value – Eight hours  
(ppm)/(mg/m<sup>3</sup>)  
Australia: x/x  
Canada – Ontario: x/x  
Czech Republic: x/8  
Finland: x/x  
Germany (AGS): 2/3  
Ireland: 5/8  
Italy 5/8  
Latvia: 5/8  
People's Republic of China: x/x  
Portugal: 5/8  
Singapore: x/x  
South Korea: 1/1,5  
The Netherlands: x/8  
Turkey: 5/8  
USA – NIOSH: x/x

Limit value – Short-term  
(ppm)/(mg/m<sup>3</sup>)  
Australia: 5(1)/7,5(1)  
Canada – Ontario: 2(1)/x  
Czech Republic: x/15  
Finland: 5(1)/7,6(1)  
Germany (AGS): 4(1)/6(1)  
Ireland: 10(1)/15(1)  
Italy: 10/15  
Latvia: 10(1)/15(1)  
People's Republic of China: x/7,5(1)  
Portugal: 10/15  
Singapore: 5/7,5  
South Korea: 2/3  
The Netherlands: x/15  
Turkey: 10(1)/15(1)  
USA – NIOSH: 5(1)/7(1)

Remarks  
Australia (1) Ceiling limit value  
Canada – Ontario (1) Ceiling limit value  
Finland (1) 15 minutes average value  
Germany (AGS) (1) 15 minutes average value  
Latvia (1) 15 minutes average value  
People's Republic of China (1) Ceiling limit value  
Turkey (1) 15 minutes average value  
USA – NIOSH (1) Ceiling limit value

- Substance: Hydrogen Chloride  
DNEL  
Local effects Long term Workers inhalation = 8 (mg/m<sup>3</sup>)  
Local effects Short term Workers inhalation = 15 (mg/m<sup>3</sup>)  
PNEC  
Sweet water = 0,036 (mg/l)  
Sea water = 0,036 (mg/l)

intermittent emissions = 0,045 (mg/l)  
STP = 0,036 (mg/l)

## 8.2. Exposure controls



Appropriate engineering controls:

Industrial Manufacturing:

No specific monitoring foreseen (act according to good practice and specific rules for the type of risk associated)

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 inorganic gases and vapors - Gray, class 3, B (UNI EN 405) unless otherwise specified by the employer and / or by evaluations of environmental hygiene investigations

(d) Thermal hazards

No hazard to report

Environmental exposure controls:

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

Physical and chemical properties	Value	Determination method
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	<2.0 (20°C)	
Kinematic viscosity	not determined as it is considered not relevant for the characterization of the product	
Solubility	not determined as it is considered not relevant for the characterization of the product	
Water solubility	not determined as it is considered not relevant for the characterization of the product	
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	1,15 ± 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

No data available.

### 9.2.2 Other safety characteristics

No data available.

## SECTION 10. Stability and reactivity

### 10.1. Reactivity

No reactivity hazards

### 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

Nothing to report

### 10.5. Incompatible materials

It can generate flammable gases in contact with dithiocarbamates, mercaptans and other organic sulphides, elemental metals, strong reducing agents. It can generate toxic gases in contact with inorganic fluorides, halogenated organic substances, sulphides, nitrides, nitriles, organophosphates, phosphothioates, strong oxidizing agents. It can ignite in contact with dithiocarbamates, elementary metals, nitrides.

### 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: Hydrogen Chloride: Ingestion-rat LD50 (mg/kg/bw 24h): n.a.

Skin contact-LC50 rat/coniglio (mg/kg/bw 24h): n.a.

Inhalation-rat LD50 (mg/l/4h): 39.5-58.8

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

Hydrogen Chloride: Corrosive

Hydrogen Chloride: 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.

Hydrogen Chloride: Corrosive

Hydrogen Chloride: irritating

(d) respiratory or skin sensitisation: Hydrogen Chloride: Non-sensitizing

(e) germ cell mutagenicity: Hydrogen Chloride: Non-mutagenic

(f) carcinogenicity: Hydrogen Chloride: Non-carcinogenic

(g) reproductive toxicity: Hydrogen Chloride: Non-toxic for reproduction

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

Hydrogen Chloride: Not available

(i) specific target organ toxicity (STOT) repeated exposure: Hydrogen Chloride: Toxic by repeated exposure to the respiratory tract and lungs with route of exposure inhalation (gas phase)

(j) aspiration hazard: Hydrogen Chloride: Not available

---

**11.2. Information on other hazards**

No data available.

**SECTION 12. Ecological information**

**12.1. Toxicity**

=====

Related to contained substances:

Hydrogen Chloride:

Acute toxicity-fish LC50 (mg/l/83d): 3.25-3.50

Acute algae toxicity ErC50 (mg/l/72-69): 4.82

Acute toxicity-crustacea EC50 (mg/l/48 h):

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

**12.2. Persistence and degradability**

=====

Related to contained substances:

Hydrogen Chloride:

No data available.

**12.3. Bioaccumulative potential**

=====

Related to contained substances:

Hydrogen Chloride:

No data available.

**12.4. Mobility in soil**

=====

Related to contained substances:

Hydrogen Chloride:

No data available.

**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**

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: 3264

If subject to the following characteristics is ADR exempt:

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

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



### 14.2. UN proper shipping name

ADR/RID/IMDG: LIQUIDO INORGANICO CORROSIVO, ACIDO, N.A.S. (Acido cloridrico in miscela)

ADR/RID/IMDG: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Hydrogen Chloride in mixture)

ICAO-IATA: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Hydrogen Chloride 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) 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 the mixture, 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Description of hazard statements set out in paragraph 3

H290 = May be corrosive to metals.  
H314 = Causes severe skin burns and eye damage.  
H335 = May cause respiratory irritation.

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

H290 - May be corrosive to metals. Classification procedure: On basis of test data  
H314 - Causes severe skin burns and eye damage. Classification procedure: Calculation method, substantially similar mixture  
H335 - May cause respiratory irritation. Classification procedure: Calculation method

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 Estimat

BFC: BioconCentration Factor

BOD: Biochemical Oxigen 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: Enviroment 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>

This msds was made in good faith by technical Office on the basis of the information available at the date of the last revision. The person in charge must regularly inform the employees about the specific risks they encounter when using this substance/product. The information contained here relate only to the substance/the preparation indicated and may not apply if the product is used improperly or in combination with others. Nothing contained herein shall be construed as a guarantee, either express or implied. It is the responsibility of the user to ensure the opportunities and completeness of the information contained herein for their own particular use.

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

Changes to the previous edition: variations on classification dossier