



SAFETY DATA SHEET

ADIX Liquid

Issued on 05/20/2026 - Rel. # 11 on 05/20/2026

1 / 16

In conformity to Regulation (EU) 2020/878

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

1.1. Product identifier

Product name : ADIX Liquid
Product code: refer to sales department

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

Additive for alkaline detergents

Sectors of use:

Industrial Manufacturing[SU3], Manufacture of food products[SU4]

Product category:

Washing and Cleaning Products (including solvent based products)

Process categories:

Use in batch and other process (syn- thesis) where opportunity for exposure arises[PROC4], Transfer of substance or mixture (charging and discharging) at dedicated facilities[PROC8B], Treatment of articles by dipping and pouring [PROC13]

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

111 N Cluff Avenue

Lodi CA 95240 (USA)

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

Fax: +12092248953

Email: info@aebusa.com - Internet: www.aeb-group.com

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):

Skin Irrit. 2, Eye Dam. 1, Aquatic Chronic 3

Hazard statement Code(s):

H315 - Causes skin irritation.

H318 - Causes serious eye damage.

H412 - Harmful to aquatic life with long lasting effects.

If brought into contact with the skin, the product causes significant inflammation with erythema, scabs, or edema.
If brought into contact with eyes, the product causes serious damages to eyes, such as an opaque cornea or injury to iris.

The product is dangerous to the environment as it is harmful to aquatic life with long lasting effects

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):



H315 - Causes skin irritation.
H318 - Causes serious eye damage.
H412 - Harmful to aquatic life with long lasting effects.

Supplemental Hazard statement Code(s):
not applicable

Precautionary statements:

Prevention

P280 - Wear protective gloves and eye/face protection.

Response

P302+P352 - IF ON SKIN: Wash with plenty of water.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P332+P313 - If skin irritation occurs: Get medical advice/attention.

Disposal

P501 - Dispose of contents/container to local/regional/national/international regulations

Contains:

Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl) bis(hydroxyethyl) methyl, ethoxylated,(salts) methyl sulfate; Phosphonic polymer; Alkyl polyglucoside C8 - 10.

Contains (Reg.EC 648/2004):

>= 15% < 30% non-ionic surfactants, < 5% cationic surfactants, phosphonates

2.3. Other hazards

Based on the available data, the product does not contain any PBT, vPvB, PMT, or vPvM substances as defined in Regulation (EC) No. 1907/2006, Annex XIII, et seq.

The product does not contain substances identified as endocrine disruptors for human health and the environment in accordance with the criteria established by Regulation (EC) No. 1272/2008, et seq.

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
Amine Alkoxylate (polymer)	>= 10 < 25%	Skin Irrit. 2, H315				Polymer

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACH
Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl) bis(hydroxyethyl) methyl, ethoxylated,(salts) methyl sulfate	>= 3 < 5%	Eye Dam. 1, H318; Aquatic Chronic 2, H411 Acute toxicity M-factor = 1 Chronic toxicity M-factor = 1		103332-02-1		Polymer
Phosphonic polymer	>= 1 < 2,5%	Met. Corr. 1, H290; Eye Dam. 1, H318		68130-98-3		Polymer
Alkyl polyglucoside C8 - 10	>= 1 < 2,5%	Eye Dam. 1, H318		68515-73-1	500-220-1	01-2119488 530-36-XXX X

SECTION 4. First aid measures

4.1. Description of first aid measures

Inhalation:

Ventilate the area. Remove the patient from the contaminated area immediately and keep them at rest in a well-ventilated area.

If you feel unwell, seek medical advice.

Direct skin contact (with the undiluted product):

Remove contaminated clothing immediately.

Wash the areas of the body that have come into contact with the product immediately with plenty of running water and, if necessary, soap, even if contact is only suspected.

In case of skin contact, wash immediately and thoroughly with water.

Direct eye contact (with the undiluted product):

Rinse immediately and thoroughly with running water, keeping the eyelids open, for at least 10 minutes; then protect the eyes with dry sterile gauze. Seek medical attention immediately. Do not use eye drops or ointments of any kind before consulting an ophthalmologist.

Ingestion:

Not hazardous. Activated charcoal may be administered in water or medicinal mineral vaseline oil.

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

Contact with eyes causes severe irritation, including redness and tearing.

Contact with skin causes irritation and redness.

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

If skin irritation occurs: Get medical advice/attention.

Call a POISON CENTER or doctor immediately.

SECTION 5. Firefighting measures

5.1. Extinguishing media

Recommended extinguishing media:

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

Avoid extinguishing media:

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

5.2. Special hazards arising from the substance or mixture

No data available.

5.3. Advice for firefighters

Use respiratory protection. Wear a safety helmet and full protective clothing.

Water mist can be used to protect those involved in extinguishing the fire.

Self-contained breathing apparatus is also recommended, especially if working in enclosed, poorly ventilated areas.

Cool containers 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 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)

Industrial Manufacturing:
Handle with extreme caution.
Store in a well ventilated place away from heat sources. (7-30°C)

Manufacture of food products:
Handle with care.
Store in a clean, dry, ventilated area away from heat and direct sunlight.
Keep container tightly closed. (7-30°C)

See the annex exposure scenario.

SECTION 8. Exposure controls/personal protection**8.1. Control parameters**

- Substance: Alkyl polyglucoside C8 - 10
DNEL
Systemic effects Long term Workers inhalation = 420 (mg/m³)
Systemic effects Long term Workers dermal = 595000 (mg/kg bw/day)
Systemic effects Long term Consumers inhalation = 124 (mg/m³)
Systemic effects Long term Consumers dermal = 357000 (mg/kg bw/day)
Systemic effects Long term Consumers oral = 35,7 (mg/kg bw/day)
PNEC
Sweet water = 0,176 (mg/l)
sediment Sweet water = 1,516 (mg/kg/sediment)
Sea water = 0,018 (mg/l)
sediment Sea water = 0,152 (mg/kg/sediment)
STP = 560 (mg/l)
ground = 0,654 (mg/kg ground)

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

Wear protective goggles (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

During working operation wear protective clothing (generic workwear / antacid, safety shoes or other protective equipment) according to the instructions of the employer

(c) Respiratory protection

Not needed for normal use

In case of insufficient ventilation or emergency, use mask with gas filters type ABECK (EN 405) unless otherwise provided by the employer and / or assessments of environmental investigations hygienistic.

None required if airborne concentrations are maintained below the exposure limit listed in Exposure Limit Information.

Use certified respiratory protection equipment meeting EU requirements (89/656/EEC, 245/2016 UE), or equivalent, when respiratory risks cannot be avoided or sufficiently limited by technical means of collective protection or by measures, methods or procedures of work organization.

(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	Clear liquid	
Colour	amber	
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	
Melting point/freezing point	not determined as considered not relevant for the characterization of the product	
Boiling point or initial boiling point and boiling range	not determined as considered not relevant for the characterization of the product	
Flammability	not determined as considered not relevant for the characterization of the product	
Lower and upper explosion limit	not determined as considered not relevant for the characterization of the product	

In conformity to Regulation (EU) 2020/878

Physical and chemical properties	Value	Determination method
Flash point	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	
pH	5,0 ± 0,5 (20°C; sol. 100%); 5,5 ± 0,5 (20°C; sol. 6%)	
Kinematic viscosity	not determined as considered not relevant for the characterization of the product	
Solubility	in water	
Water solubility	miscible in all proportions	
Partition coefficient n-octanol/water (log value)	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	
Density and/or relative density	1,05 ± 0,05 (20°C)	
Relative vapour density	not determined as 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

No risk of reactivity

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

Heat or direct sunlight

10.5. Incompatible materials

May generate flammable gases when in contact with elemental metals, nitrides, inorganic sulfides, and strong reducing agents. May generate toxic gases when in contact with inorganic sulfides and strong reducing agents.

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: Amine Alkoxylate (polymer): Experimental/calculated data:
LD50 rat (oral): > 5,000 mg/kg

Rat LD50 (dermal): not determined

Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl) bis(hydroxyethyl) methyl, ethoxylated,(salts) methyl sulfate: Ingestion - LD50 rat (mg/kg/24h bw): >2000

Skin contact - LD50 rabbit (mg/kg/24h bw): n.a.

Inhalation - LD50 rat (mg/l/4h): n.a.

Phosphonic polymer: Ingestion - LD50 rat (mg / kg / 24h bw):> 2000

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

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

Alkyl polyglucoside C8 - 10: LD50 value rat Oral : >2000 mg/kg

LC50 value rat/rabbit Dermal : >2000

(b) skin corrosion/irritation: If brought into contact with the skin, the product causes significant inflammation with erythema, scabs, or edema.

Amine Alkoxylate (polymer): Non-corrosive

Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl) bis(hydroxyethyl) methyl, ethoxylated,(salts) methyl sulfate: Test: Irritating to skin - Route: Skin - Species: Rabbit Negative - Duration: 4h

Phosphonic polymer: Causes serious skin and eye damage (Rabbit OECD 404)

Alkyl polyglucoside C8 - 10: Non-corrosive (OECD Guideline 404)

Amine Alkoxylate (polymer): Irritating

Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl) bis(hydroxyethyl) methyl, ethoxylated,(salts) methyl sulfate: Test: Irritating to skin - Route: Skin - Species: Rabbit Negative - Duration: 4h

Phosphonic polymer: Causes serious skin and eye damage (Rabbit OECD 404)

Alkyl polyglucoside C8 - 10: Non-irritating (OECD Guideline 404)

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

Amine Alkoxylate (polymer): Non-corrosive

Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl) bis(hydroxyethyl) methyl, ethoxylated,(salts) methyl sulfate: Test: Irritating to eyes - Route: Eyes - Species: Rabbit Positive

Phosphonic polymer: Causes serious eye damage (rabbit OECD 405)

Alkyl polyglucoside C8 - 10: Corrosive (OECD Guideline 405)

Amine Alkoxylate (polymer): Non-irritating

Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl) bis(hydroxyethyl) methyl, ethoxylated,(salts)

methyl sulfate: Test: Irritating to skin - Route: Skin - Species: Rabbit Negative - Duration: 4h

Phosphonic polymer: Causes serious eye damage (rabbit OECD 405)

Alkyl polyglucoside C8 - 10: Irritant (OECD Guideline 405)

(d) respiratory/skin sensitization: Amine Alkoxyate (polymer): Not available

Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl) bis(hydroxyethyl) methyl, ethoxylated, (salts)

methyl sulfate: Test: Skin Sensitization - Route: Skin Negative

Phosphonic polymer: Sensitization (Guinea pig OECD 406): Based on available data, the classification criteria are not met.

Alkyl polyglucoside C8 - 10: Based on available data, the classification criteria are not met.

(e) germ cell mutagenicity: Amine Alkoxyate (polymer): Non-mutagenic

Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl) bis(hydroxyethyl) methyl, ethoxylated, (salts)

methyl sulfate: No data available

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

Alkyl polyglucoside C8 - 10: Based on available data, the classification criteria are not met.

The bacterial mutagenicity of alcoholic polyglycosides (APGs) was examined with hexyl-D-glucoside, branched and linear C9-11-alkyl glycosides, and C10-16-alkyl glycosides using different strains of *S. typhimurium* or *E. coli*. All tests were conducted in accordance with or similar to OECD Guideline 471 in the presence and absence of metabolic activation. The results revealed that APGs can be considered non-mutagenic.

(f) carcinogenicity: Amine Alkoxyate (polymer): Non-carcinogenic

Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl) bis(hydroxyethyl) methyl, ethoxylated, (salts)

methyl sulfate: No data available

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

Alkyl polyglucoside C8 - 10: Based on available data, the classification criteria are not met.

Several studies examining the genetic toxicity of alkyl polyglycosides (APGs) in vitro and in vivo have demonstrated that APGs are not genotoxic. Furthermore, repeated-dose toxicity testing conducted with C10-16 alkyl glycosides revealed no substance-related adverse effects indicative of carcinogenicity, such as preneoplastic changes (e.g., hyperplasia or metaplasia). Furthermore, APGs are metabolized into naturally occurring metabolites (fatty acids and glucose), which behave chemically similarly to their natural counterparts. The systemic toxicity of compounds in this category is expected to be very low, based on the known properties of the predicted metabolites. Based on these facts, the carcinogenic potential of APGs does not need to be considered.

(g) reproductive toxicity: Amine Alkoxyate (polymer): Non-toxic for reproduction

Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl) bis(hydroxyethyl) methyl, ethoxylated, (salts)

methyl sulfate: No data available

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

Alkyl polyglucoside C8 - 10: Based on available data, the classification criteria are not met.

NOAEL: 1000 mg/kg/day.

(h) specific target organ toxicity (STOT) single exposure: Amine Alkoxyate (polymer): Not available

Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl) bis(hydroxyethyl) methyl, ethoxylated, (salts)

methyl sulfate: No data available

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

Alkyl polyglucoside C8 - 10: Based on available data, the classification criteria are not met.

(i) specific target organ toxicity (STOT) repeated exposure: Amine Alkoxyate (polymer): Not available

Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl) bis(hydroxyethyl) methyl, ethoxylated, (salts)

methyl sulfate: No data available

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

Alkyl polyglucoside C8 - 10: Based on available data, the classification criteria are not met.

Oral NOAEL: 1000 mg/kg/day.

(j) aspiration hazard: Amine Alkoxyate (polymer): Not available

Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl) bis(hydroxyethyl) methyl, ethoxylated, (salts)

methyl sulfate: No data available

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

Alkyl polyglucoside C8 - 10: Based on available data, the classification criteria are not met.

11.2. Information on other hazards

No data available.

11.2.1. Endocrine disrupting properties

The product does not contain substances identified as endocrine disruptors for human health according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

The product does not contain substances identified as endocrine disruptors for the environment according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

SECTION 12. Ecological information**12.1. Toxicity**

=====

Related to contained substances:

Amine Alkoxylate (polymer):

Ittiotossicità:

CL50 (48 h) 2,000 mg/l, *Leuciscus idus*

Aquatic invertebrates:

LC50 (48 h), *Daphnia*

not determined

Aquatic plants:

EC50 (72 h), algae

not determined

Microorganisms/effects on activated sludge:

CE10 > 5,000 mg/l, activated sludge (DEV-L2)

Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl) bis(hydroxyethyl) methyl, ethoxylated,(salts) methyl sulfate:

Acute toxicity - fish LC50 (mg/l/96h): na

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

Acute toxicity algae ErC50 (mg/l/72-96h): na

Chronic toxicity - fish NOEC (mg/l): < 0.01

Chronic toxicity - crustaceans NOEC (mg/l): < 0.01

Chronic toxicity algae NOEC (mg/l): < 0.01

Acute toxicity - microorganisms EC50 (mg/l/3h): nd

Acute toxicity M-factor = 1

Chronic toxicity M-factor = 1

Phosphonic polymer:

Acute toxicity - LC50 fish (mg / l / 96h): n.d

Acute toxicity - crustaceans EC50 (mg / l / 48h): >100 (*Daphnia*)

Acute toxicity algae ErC50 (mg / l / 72-96h): nd

Chronic toxicity - NOEC fish (mg / l): nd

Chronic toxicity - crustaceans NOEC (mg / l): n.d.

Chronic toxicity NOEC algal (mg / l): nd

Acute toxicity M-factor = 1

Chronic toxicity M-factor = 1

Alkyl polyglucoside C8 - 10:

Acute toxicity - fish LC50 (mg/l/96h): 100.81 *Danio rerio* (ISO 7346/1-3); 96.64 *Scophthalmus maximus* (OSPARCOM 1995)

Acute toxicity - crustaceans EC50 (mg/l/48h): > 100 *Daphnia magna* (OECD 202); 31.62 *Acartia tonsa* (ISO/PARCOM 1990/92)



SAFETY DATA SHEET

ADIX Liquid

Issued on 05/20/2026 - Rel. # 11 on 05/20/2026

12 / 16

In conformity to Regulation (EU) 2020/878

Acute toxicity - algae ErC50 (mg/l/72-96h):27.22; Acute toxicity algae ELC50 (mg/l/72h) 7.03 r Skeletonema costatum (ISO 10253)

Chronic toxicity - fish NOEC (mg/l):NOEC (28d) = 1.8 mg/L Danio rerio (OECD 204, read across)

Chronic toxicity - crustaceans EC10(21d) = 1.76 mg/L Daphnia magna (OECD 202, part II, read across)

Chronic toxicity algae NOEC (mg/l): Acute toxicity algae EC10 (mg/l/72) 6.25 Scenedesmus subspicatus (DIN 38412, part 9)

Toxicity to microorganisms: EC50(6h) > 560 mg/L for cell multiplication inhibition of Pseudomonas putida

Acute toxicity M-factor = 1

Chronic toxicity M-factor = 1

The product is dangerous for the environment as it is toxic for aquatic organisms following acute exposure.

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

12.2. Persistence and degradability

=====

Related to contained substances:

Amine Alkoxylate (polymer):

Readily biodegradable

Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl) bis(hydroxyethyl) methyl, ethoxylated,(salts) methyl sulfate:

Readily biodegradable

Phosphonic polymer:

50% (OECD 302 B) COD (Std. Method 5220 D): 480 mg / g

Alkyl polyglucoside C8 - 10:

Readily biodegradable (according to OECD criteria)

12.3. Bioaccumulative potential

=====

Related to contained substances:

Amine Alkoxylate (polymer):

Not bioaccumulative

Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl) bis(hydroxyethyl) methyl, ethoxylated,(salts) methyl sulfate:

No data available

Phosphonic polymer:

Not available

Alkyl polyglucoside C8 - 10:

Bioaccumulation is not expected: log Kow is < 1.77.

12.4. Mobility in soil

=====

Related to contained substances:

Amine Alkoxylate (polymer):

Evaluation transport between environmental compartments:

Volatility: the substance does not evaporate into the atmosphere from the surface of the water.

Adsorption in soil: A soil absorption to the solid phase is possible

Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl) bis(hydroxyethyl) methyl, ethoxylated,(salts) methyl sulfate:

No data available

Phosphonic polymer:

Not available

Alkyl polyglucoside C8 - 10:

It is not expected to adsorb to suspended solids and sediments based on a log K_{oc} of 1.7. When exposed to water, it does not evaporate into the atmosphere from the water surface due to its Henry constant of 1.15E-008 - 1.86E-016 Pa m³/mol, remaining in the aqueous phase. However, due to its ready biodegradability, the substance does not persist.

12.5. Results of PBT and vPvB assessment

The product does not contain substances identified as PBT according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

The product does not contain substances identified as vPvB according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

12.6. Endocrine disrupting properties

The product does not contain substances identified as endocrine disruptors for human health according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

The product does not contain substances identified as endocrine disruptors for the environment according to the criteria established by Regulation (EC) No. 1272/2008, as amended by Regulation (EU) 2023/707.

12.7. Other adverse effects

No adverse effects

Regulation (EC) No 2006/907 - 2004/648

The (l) surfactant (s) content (s) in this preparation complies (comply) with (i) the biodegradability criteria as laid down in Regulation CE/648/2004 on detergents. All data are held at the disposal of the competent authorities of Member States and will be provided, at their direct request or at the request of a detergent manufacturer, to those authorities.

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. Send to authorized discharge plants or for incineration under controlled conditions. Operate according to local and National rules in force

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 shrink-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. (Polimero fosfonico acido)

ADR/RID/IMDG: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Polymeric phosphonic acid)

ICAO-IATA: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Polymeric phosphonic acid)

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 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 \geq a 0.1 %.

Regulation (EC) 648/04: see point 2.2

Regulation (EU) 528/2012: see point 2.2

REGULATION (EU) No 1357/2014 - waste:
HP4 - Irritant — skin irritation and eye damage

15.2. Chemical safety assessment

A chemical safety assessment has been carried out for the following substances:

Quaternary ammonium compounds, (C16-18 and C18-unsaturated alkyl) bis(hydroxyethyl) methyl ethoxylate, (salts) methyl sulphate.
C8-10 alkyl polyglucoside

SECTION 16. Other information

16.1. Other information

Points modified compared to previous release: 2.1 Classification of mixtures, 3.2 Mixtures, 14.1 ADR classification

Description of hazard statements set out in paragraph 3

- H315 = Causes skin irritation.
- H318 = Causes serious eye damage.
- H411 = Toxic to aquatic life with long lasting effects.
- H290 = May be corrosive to metals.

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

- H315 - Causes skin irritation. Classification procedure: Calculation method
- H318 - Causes serious eye damage. Classification procedure: Calculation method
- H412 - Harmful to aquatic life with long lasting effects. 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 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



SAFETY DATA SHEET

ADIX Liquid

Issued on 05/20/2026 - Rel. # 11 on 05/20/2026

16 / 16

In conformity to Regulation (EU) 2020/878

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://chem.echa.europa.eu/>
- 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: domain update due to a change in mixture classification.

SUMI**Safe Use of Mixtures Information****AISE_SUMI_IS_4_1***Version 1.1, August 2018****Industrial uses; Automated task; Semi-automated task; Dedicated equipment***

This document is intended to communicate the conditions of safe use for the product and should always be read in combination with the product's Safety Data Sheet and labels.

General description of the process covered

The SUMI applies to industrial uses where products are used in closed process where opportunity for exposure arises. This Safe Use Information is based on the **AISE_SWED_IS_4_1**.



Operational Conditions

Maximum duration	480 minutes per day.
Range of application / Process conditions	Indoor Use. Process carried out at room temperature. In case of dilution, tap water at a maximum temperature of 45°C is used.
Air exchange rate	Provide a basic standard of general ventilation (1 to 3 air changes per hour). No LEV required.

Risk Management Measures

Measures related to personal protective equipment (PPE), hygiene and health evaluation	See section 8 of the SDS of this product for specifications.
	Training of workers in relation to proper use and maintenance of PPEs must be ensured.
Environmental measures	Prevent that undiluted product reaches surface waters.
	If appropriate AISE SPERC 8a.1.a.v2 may apply: wide dispersive use resulting in release to municipal sewage treatment plant.

Additional good practice advice

<p>Don't eat or drink. Don't smoke. Don't use in proximity of open flame.</p>	
<p>Wash hands after use. Avoid contact with damaged skin. Do not mix with other products.</p>	
<p>Spillage instructions</p>	<p>Dilute with fresh water and mop up.</p>
<p>Hygiene practices</p>	<p>Follow the product instructions as specified on the label or in the product information sheet and use good occupational hygiene practices as specified in Section 7 of the product SDS.</p>

Additional information depending on product composition

The label and (when required) the Safety Data Sheet contain additional, product specific information crucial for working safely with mixtures. Please refer to the product label and SDS for information including, but not limited to: product hazard classification, potentially allergenic fragrances, notable ingredients and threshold limit values (when available).

Disclaimer

This is a document for communicating generic conditions of safe use of a product. It is the responsibility of the formulator to link this SUMI to the SDS of a specific product that he is selling.

If a SUMI (or associated SWED) code is mentioned in the SDS of a product, the formulator of that product declares that all substances in the mixture are present in such concentration, that the use of the product within the conditions of the SUMI is safe. When available, this safe use is ensured by evaluating the results of the chemical safety assessments as performed by the raw material suppliers. When no chemical safety assessment has been carried out by the supplier for an ingredient that contributes to the classification of the mixture, the formulator has performed a safety assessment himself.

Following Occupational Health legislation, the employer of workers that use products that are assessed as safe following SUMI conditions remains responsible for communicating relevant use information to employees. When developing workplace instructions for employees, SUMI Sheets should always be considered in combination with the SDS and the label of the product.

This document is provided by A.I.S.E. for general information purposes only. The formulator uses the content of this document at its sole risk.

A.I.S.E. disclaims any liability to any person or entity for any loss, damage no matter of what kind (actual, consequential, punitive or otherwise), injury, claim, liability or other cause of any kind or character based upon or resulting from the use (even partly) of the content of this document.

SUMI**Safe Use of Mixtures Information****AISE_SUMI_IS_8b_1***Version 1.1, August 2018****Transfer and dilution of concentrated product by using dedicated dosing system***

This document is intended to communicate the conditions of safe use for the product and should always be read in combination with the product's Safety Data Sheet and labels.


General description of the process covered

This SUMI applies to industrial uses where products are transferred to or diluted in a dedicated dosing system. This Safe Use Information is based on the **AISE_SWED_IS_8b_1_L** and **AISE_SWED_IS_8b_1_S**

Operational Conditions

Maximum duration	60 minutes per day.
Range of application / Process conditions	Indoor Use.
	Process carried out at room temperature.
	In case of dilution, tap water at a maximum temperature of 45°C is used.
Air exchange rate	Provide a basic standard of general ventilation (1 to 3 air changes per hour). No LEV required.

Risk Management Measures

Measures related to personal protective equipment (PPE), hygiene and health evaluation	Wear suitable gloves. See section 8 of the SDS of this product for specifications.
	 Training of workers in relation to proper use and maintenance of PPEs must be ensured.
Environmental measures	Prevent that undiluted product reaches surface waters.
	If appropriate AISE SPERC 8a.1.a.v2 may apply: wide dispersive use resulting in release to municipal sewage treatment plant.

Additional good practice advice

<p>Don't eat or drink. Don't smoke. Don't use in proximity of open flame.</p>	
<p>Wash hands after use. Avoid contact with damaged skin. Do not mix with other products.</p>	
<p>Spillage instructions</p>	<p>Dilute with fresh water and mop up.</p>
<p>Hygiene practices</p>	<p>Follow the product instructions as specified on the label or in the product information sheet and use good occupational hygiene practices as specified in Section 7 of the product SDS.</p>

Additional information depending on product composition

The label and (when required) the Safety Data Sheet contain additional, product specific information crucial for working safely with mixtures. Please refer to the product label and SDS for information including, but not limited to: product hazard classification, potentially allergenic fragrances, notable ingredients and threshold limit values (when available).

Disclaimer

This is a document for communicating generic conditions of safe use of a product. It is the responsibility of the formulator to link this SUMI to the SDS of a specific product that he is selling.

If a SUMI (or associated SWED) code is mentioned in the SDS of a product, the formulator of that product declares that all substances in the mixture are present in such concentration, that the use of the product within the conditions of the SUMI is safe. When available, this safe use is ensured by evaluating the results of the chemical safety assessments as performed by the raw material suppliers. When no chemical safety assessment has been carried out by the supplier for an ingredient that contributes to the classification of the mixture, the formulator has performed a safety assessment himself.

Following Occupational Health legislation, the employer of workers that use products that are assessed as safe following SUMI conditions remains responsible for communicating relevant use information to employees. When developing workplace instructions for employees, SUMI Sheets should always be considered in combination with the SDS and the label of the product.

This document is provided by A.I.S.E. for general information purposes only. The formulator uses the content of this document at its sole risk.

A.I.S.E. disclaims any liability to any person or entity for any loss, damage no matter of what kind (actual, consequential, punitive or otherwise), injury, claim, liability or other cause of any kind or character based upon or resulting from the use (even partly) of the content of this document.

SUMI**Safe Use of Mixtures Information****AISE_SUMI_IS_13_4***Version 1.1, August 2018****Industrial uses; Treatment of articles by dipping or pouring***

This document is intended to communicate the conditions of safe use for the product and should always be read in combination with the product's Safety Data Sheet and labels.

General description of the process covered

This SUMI applies to industrial uses where articles are treated by dipping or pouring. This Safe Use Information is based on the **AISE_SWED_IS_13_4**.

Operational Conditions

Maximum duration	480 minutes per day.
Range of application / Process conditions	Indoor Use. Process carried out at room temperature. In case of dilution, tap water at a maximum temperature of 45°C is used.
Air exchange rate	Provide a basic standard of general ventilation (1 to 3 air changes per hour). No LEV required.

Risk Management Measures

Measures related to personal protective equipment (PPE), hygiene and health evaluation	See section 8 of the SDS of this product for specifications.
	Training of workers in relation to proper use and maintenance of PPEs must be ensured.
Environmental measures	Prevent that undiluted product reaches surface waters.
	If appropriate AISE SPERC 8a.1.a.v2 may apply: wide dispersive use resulting in release to municipal sewage treatment plant.

Additional good practice advice

<p>Don't eat or drink. Don't smoke. Don't use in proximity of open flame.</p>	
<p>Wash hands after use. Avoid contact with damaged skin. Do not mix with other products.</p>	
<p>Spillage instructions</p>	<p>Dilute with fresh water and mop up.</p>
<p>Hygiene practices</p>	<p>Follow the product instructions as specified on the label or in the product information sheet and use good occupational hygiene practices as specified in Section 7 of the product SDS.</p>

Additional information depending on product composition

The label and (when required) the Safety Data Sheet contain additional, product specific information crucial for working safely with mixtures. Please refer to the product label and SDS for information including, but not limited to: product hazard classification, potentially allergenic fragrances, notable ingredients and threshold limit values (when available).

Disclaimer

This is a document for communicating generic conditions of safe use of a product. It is the responsibility of the formulator to link this SUMI to the SDS of a specific product that he is selling.

If a SUMI (or associated SWED) code is mentioned in the SDS of a product, the formulator of that product declares that all substances in the mixture are present in such concentration, that the use of the product within the conditions of the SUMI is safe. When available, this safe use is ensured by evaluating the results of the chemical safety assessments as performed by the raw material suppliers. When no chemical safety assessment has been carried out by the supplier for an ingredient that contributes to the classification of the mixture, the formulator has performed a safety assessment himself.

Following Occupational Health legislation, the employer of workers that use products that are assessed as safe following SUMI conditions remains responsible for communicating relevant use information to employees. When developing workplace instructions for employees, SUMI Sheets should always be considered in combination with the SDS and the label of the product.

This document is provided by A.I.S.E. for general information purposes only. The formulator uses the content of this document at its sole risk.

A.I.S.E. disclaims any liability to any person or entity for any loss, damage no matter of what kind (actual, consequential, punitive or otherwise), injury, claim, liability or other cause of any kind or character based upon or resulting from the use (even partly) of the content of this document.

WORKING ISTRUCTION TABLE



This tab provides instructions for appropriate and safe use of products and proper management of emergency situations for cleaning staff/users.

Attached to MSDS rel#11 05/20/2026

Use description	Transfer of substance or mixture (charging and discharging) at dedicated facilities [PROC8b]; Application with rollers or brushes [PROC10]; Use in batch and other process (syn- thesis) where opportunity for exposure arises [PROC4]; Non industrial spraying [PROC11]
Product name	ADIX Liquid
Classification of the product (100%)	H315 - Causes skin irritation. H318 - Causes serious eye damage. H412 - Harmful to aquatic life with long lasting effects
Classification of the diluted product (maximum use concentration)	At maximux concentration of use (6%) the product is classified: Not dangerous according to Regulation (EC) No 1272/2008
Handling of the product (100%)	Avoid contact and inhalation of vapors Wear protective gloves and eye/face protection. At work do not eat or drink.
Handling of the diluted product	At work do not eat or drink.
DPI required concentrated product (racking, concentrated use, spillage...)	Chemical resistant protective gloves (EN 374-1/EN374-2/EN374-3), safety glasses (EN 166).
Diluted product	No DPI required for intende uses

In case of emergency (accidents involving exposure to the product)	<p>Immediately inform the customer. Immediately inform the employer. Contact Poisons Centres tel. number in 1.4 section of the MSDS</p>
Accidental release large quantities measures: concentrated product	<p>Wear mask, gloves, glasses and protective clothing (for specifications refer to section 8.2. SDS) Possibly absorb it with inert materia or sucked it. After wiping up, wash with water the area and materials involved</p>
Diluted product	<p>Wear gloves, glasses and protective clothing (for specifications refer to section 8.2. SDS). Wash with water the area and materials involved</p>
Storage of the product	<p>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.</p>
In case of accidents, emergency or fire	<p>Immediately inform the customer. Follow company emergency instruction.</p>