Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 14.10.2026 Version number 12 (replaces version 11) Revision: 14.10.2026

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

1.1 Product identifier

Trade name: THALATTA PASSIVATION & RUST REMOVER GEL
UFI:
AV3Q-Y157-200X-GJ48
The product does not contain any nanomaterials.

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

Acidic formula in a gel form, ideal to remove rust stains, corrosion and oxidation around stainless steel fittings, waterpipes and exhaust areas. It effectively dissolves surface rust caused by rain, humidity and sea salt. It protects against further corrosion. The product does not drip and adheres to vertical surfaces.
Life cycle stages
PW Widespread use by professional workers
IS Use at industrial Sites
Sector of Use
SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
Product category PC35 Washing and cleaning products (including solvent based products)
Technical function Corrosion inhibitor
Application of the substance / the mixture Rust remover/ rust-removing agent
Uses advised against Use on acid-resistant surfaces only. Should be handled with care, because it may be corrosive to metals.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:
VIORYL S.A.
28th km Athens - Lamia Nat. Road
Afidnes, 190 14
Greece
+30 22950 45100
regulatory@vioryl.gr

Further information obtainable from: Regulatory Affairs Department

1.4 Emergency telephone number:

Poison centre
(+30) 210 7793777

* SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008


GHS05 corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.
Additional information: The full text of the classification and labelling elements mentioned is given in Section 16.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 The product is classified and labelled according to the CLP regulation.

(Contd. on page 2)

Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 14.10.2026 Version number 12 (replaces version 11) Revision: 14.10.2026

Trade name: THALATTA PASSIVATION & RUST REMOVER GEL

(Contd. of page 1)

Hazard pictograms



GHS05

Signal word Danger

Hazard-determining components of labelling:
phosphoric acid
Ethoxylated cocoamines
Ethoxylated Alcohol
Hazard statements
H314 Causes severe skin burns and eye damage.
Precautionary statements
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P103 Read carefully and follow all instructions.
P260 Do not breathe dusts or mists.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor.
P321 Specific treatment (see on this label).
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
2.3 Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable
vPvB: Not applicable

*
SECTION 3: Composition/information on ingredients

3.2 Mixtures
Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 7664-38-2 phosphoric acid >25–≤50%
EINECS: 231-633-2 Met. Corr.1, H290; Skin Corr. 1B, H314
Specific concentration limits: Skin Corr. 1B; H314: C ≥ 25 %
Skin Irrit. 2; H315: 10 % ≤ C < 25 %
Eye Irrit. 2; H319: 10 % ≤ C < 25 %

CAS: 111-76-2 2-butoxyethanol >2.5–<10%
EINECS: 203-905-0 Acute Tox. 3, H331; Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319
ATE: LD50 oral: 1200 mg/kg
LC50/4 h inhalative: 3 mg/l

CAS: 61791-14-8 Ethoxylated cocoamines ≥3–≤10%
Eye Dam. 1, H318; Acute Tox. 4, H302; Aquatic Chronic 3, H412

CAS: 160901-19-9 Ethoxylated Alcohol ≥3–≤10%
Eye Dam. 1, H318; Acute Tox. 4, H302; Aquatic Chronic 3, H412

(Contd. on page 3)

Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 14.10.2026 Version number 12 (replaces version 11) Revision: 14.10.2026

Trade name: THALATTA PASSIVATION & RUST REMOVER GEL

(Contd. of page 2)

Additional information: For the wording of the listed hazard phrases refer to section 16.

*

SECTION 4: First aid measures

4.1 Description of first aid measures
General information:
Immediately remove any clothing soiled by the product.
Take affected persons out into the fresh air.
After inhalation:
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
After skin contact:
Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
After swallowing:
Drink plenty of water and provide fresh air. Call for a doctor immediately.
If symptoms persist consult doctor.
A person vomiting while laying on their back should be turned onto their side.
Seek immediate medical advice.
4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
4.3 Indication of any immediate medical attention and special treatment needed No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing agents:
CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Use fire extinguishing methods suitable to surrounding conditions.
5.2 Special hazards arising from the substance or mixture During heating or in case of fire poisonous gases are produced.
5.3 Advice for firefighters
Protective equipment: Mouth respiratory protective device.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Keep away from ignition sources.
Wear protective clothing.
6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
6.3 Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralising agent.
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
6.4 Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

(Contd. on page 4)

Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 14.10.2026 Version number 12 (replaces version 11) Revision: 14.10.2026

Trade name: THALATTA PASSIVATION & RUST REMOVER GEL

(Contd. of page 3)

* SECTION 7: Handling and storage

7.1 Precautions for safe handling
Keep receptacles tightly sealed.
Store in cool, dry place in tightly closed receptacles.
Keep away from heat and direct sunlight.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
Information about fire - and explosion protection: Keep respiratory protective device available.

7.2 Conditions for safe storage, including any incompatibilities
Storage:
Requirements to be met by storerooms and receptacles: Store in a cool location.
Information about storage in one common storage facility: Store away from foodstuffs.
Further information about storage conditions:
Keep container tightly sealed.
Store receptacle in a well ventilated area.
7.3 Specific end use(s) No further relevant information available.

* SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Ingredients with limit values that require monitoring at the workplace:

CAS: 7664-38-2 phosphoric acid

TWA (Greece) Short-term value: 3 mg/m³
Long-term value: 1 mg/m³

CAS: 111-76-2 2-butoxyethanol

TWA (Greece) Long-term value: 120 mg/m³, 25 ppm
Δ

Ingredients with biological limit values:

CAS: 111-76-2 2-butoxyethanol

BEI (Greece) 200 mg/g κρεατινίνης
ούρα
Τέλος βάρδιας
Βουτοξυοξικό οξύ (BAA)

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls
Appropriate engineering controls No further data; see section 7.
Individual protection measures, such as personal protective equipment
General protective and hygienic measures:
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.
Respiratory protection:
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

(Contd. on page 5)

Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 14.10.2026 Version number 12 (replaces version 11) Revision: 14.10.2026

Trade name: THALATTA PASSIVATION & RUST REMOVER GEL

(Contd. of page 4)

Hand protection



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye/face protection



Tightly sealed goggles

*

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information	
Physical state	Liquid
Colour:	colourless to pale yellow
Odour:	Characteristic
Odour threshold:	Not determined
Melting point/freezing point:	Undetermined
Boiling point or initial boiling point and boiling range	100 °C (CAS: 7732-18-5 water, distilled, conductivity or of similar purity)
Flammability	Not applicable
Lower and upper explosion limit	
Lower:	Not determined
Upper:	Not determined
Flash point:	>100 °C
Auto-ignition temperature:	240 °C (CAS: 111-76-2 2-butoxyethanol)
Decomposition temperature:	Not determined
pH at 20 °C	<1
Viscosity:	
Kinematic viscosity	Not determined
Dynamic:	Not determined
Solubility	
water:	Not miscible or difficult to mix.
Partition coefficient n-octanol/water (log value)	Not determined
Vapour pressure at 20 °C:	23 hPa (CAS: 7732-18-5 water, distilled, conductivity or of similar purity)
Density and/or relative density	
Density at 20°C	Not determined

(Contd. on page 6)

Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 14.10.2026 Version number 12 (replaces version 11) Revision: 14.10.2026

Trade name: THALATTA PASSIVATION & RUST REMOVER GEL

(Contd. of page 5)

Density at 25°C	Not determined
Relative density	Not determined
Vapour density	Not determined

9.2 Other information

Appearance:	
Form:	Viscous
Important information on protection of health and environment, and on safety.	
Ignition temperature:	Product is not selfigniting.
Explosive properties:	Product does not present an explosion hazard.
Solvent content:	
Organic solvents:	5.0 %
Water:	58.5 %
VOC (EC)	5.00 %
VOCV (CH)	5.00 %
Solids content:	30.5 %
Refractive index	1.369 - 1.379
Change in condition	
Evaporation rate	Not determined

Information with regard to physical hazard classes

Explosives	Void
Flammable gases	Void
Aerosols	Void
Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	Void
Flammable solids	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit flammable gases in contact with water	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void
Corrosive to metals	Void
Desensitised explosives	Void

SECTION 10: Stability and reactivity

10.1 Reactivity No further relevant information available.
10.2 Chemical stability
Thermal decomposition / conditions to be avoided: No decomposition if used and stored according to specifications.
10.3 Possibility of hazardous reactions No dangerous reactions known.
10.4 Conditions to avoid No further relevant information available.
10.5 Incompatible materials: No further relevant information available.
10.6 Hazardous decomposition products: No dangerous decomposition products known.

(Contd. on page 7)

Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 14.10.2026 Version number 12 (replaces version 11) Revision: 14.10.2026

Trade name: THALATTA PASSIVATION & RUST REMOVER GEL

(Contd. of page 6)

* SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
Acute toxicity Based on available data, the classification criteria are not met.
LD/LC50 values relevant for classification:

ATE (Acute Toxicity Estimates)

Oral LD50 9836 mg/kg

Inhalative LC50/4 h 60 mg/l (ATE)

CAS: 111-76-2 2-butoxyethanol

Oral LD50 1200 mg/kg (ATE)
1480 mg/kg (rat)

Dermal LD50 400 mg/kg (rab)

Inhalative LC50/4 h 3 mg/l (ATE)

CAS: 160901-19-9 Ethoxylated Alcohol

Oral LD50 13627–14865 mg/kg (rat)

Primary irritant effect:
Skin corrosion/irritation Causes severe skin burns and eye damage.
Serious eye damage/irritation Causes serious eye damage.
Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
Germ cell mutagenicity Based on available data, the classification criteria are not met.
Carcinogenicity Based on available data, the classification criteria are not met.
Reproductive toxicity Based on available data, the classification criteria are not met.
STOT-single exposure Based on available data, the classification criteria are not met.
STOT-repeated exposure Based on available data, the classification criteria are not met.
Aspiration hazard Based on available data, the classification criteria are not met.
11.2 Information on other hazards
Endocrine disrupting properties

None of the ingredients is listed.

* SECTION 12: Ecological information

12.1 Toxicity
Aquatic toxicity: No further relevant information available.
12.2 Persistence and degradability No further relevant information available.
Method
Analysing method

THALATTA PASSIVATION & RUST REMOVER GEL OECD 301 F
Other information: The product is 70.3% biodegradable (regulatory threshold ≥60%). OECD Method 301F
12.3 Bioaccumulative potential No further relevant information available.
12.4 Mobility in soil No further relevant information available.
12.5 Results of PBT and vPvB assessment
PBT: Not applicable
vPvB: Not applicable
12.6 Endocrine disrupting properties The product does not contain substances with endocrine disrupting properties.

(Contd. on page 8)

Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 14.10.2026 Version number 12 (replaces version 11) Revision: 14.10.2026

Trade name: THALATTA PASSIVATION & RUST REMOVER GEL

(Contd. of page 7)

12.7 Other adverse effects
Additional ecological information:
General notes:
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Must not reach sewage water or drainage ditch undiluted or unneutralised.
Danger to drinking water if even small quantities leak into the ground.
Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

* SECTION 13: Disposal considerations

13.1 Waste treatment methods
Recommendation Must not be disposed together with household garbage. Do not allow product to reach sewage system.
European waste catalogue

HP8 Corrosive

Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.

* SECTION 14: Transport information

14.1 UN number or ID number

ADR, IMDG, IATA	UN1805

14.2 UN proper shipping name

ADR	1805 PHOSPHORIC ACID, SOLUTION
IMDG	PHOSPHORIC ACID, SOLUTION
IATA	Phosphoric acid, solution

14.3 Transport hazard class(es)

ADR, IMDG, IATA



Class	8 Corrosive substances.
Label	8

14.4 Packing group

ADR, IMDG, IATA	III
14.5 Environmental hazards:	Not applicable
14.6 Special precautions for user	Warning: Corrosive substances.
Hazard identification number (Kemler code):	80
EMS Number:	F-A,S-B
Segregation groups	(SGG1) Acids
Stowage Category	A
Segregation Code	SG36 Stow "separated from" SGG18-alkalis. SG49 Stow "separated from" SGG6-cyanides
14.7 Maritime transport in bulk according to IMO instruments	Not applicable

(Contd. on page 9)

Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 14.10.2026 Version number 12 (replaces version 11) Revision: 14.10.2026

Trade name: THALATTA PASSIVATION & RUST REMOVER GEL

(Contd. of page 8)

Transport/Additional information:

ADR	
Limited quantities (LQ)	5L
Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
Transport category	3
Tunnel restriction code	E
IMDG	
Limited quantities (LQ)	5L
Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
UN "Model Regulation":	UN 1805 PHOSPHORIC ACID, SOLUTION, 8, III

*
SECTION 15: Regulatory information

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

Directive 2012/18/EU
Named dangerous substances - ANNEX I None of the ingredients is listed.
REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.
REGULATION (EU) 2019/1148
Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.
Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.
Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.
Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.
15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.
This Safety Data Sheets is in compliance with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

Relevant phrases
H290 May be corrosive to metals.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H318 Causes serious eye damage.

(Contd. on page 10)

Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 14.10.2026 Version number 12 (replaces version 11) Revision: 14.10.2026

Trade name: THALATTA PASSIVATION & RUST REMOVER GEL

(Contd. of page 9)

H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H412 Harmful to aquatic life with long lasting effects.

Department issuing SDS: Regulatory Affairs department
Contact:
Regulatory Affairs department
regulatory@vioryl.gr
Date of previous version: 13.10.2026
Version number of previous version: 11
Abbreviations and acronyms:
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOCV: Lenkungsabgabe auf flüchtigen organischen Verbindungen, Schweiz (Swiss Ordinance on volatile organic compounds)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
ATE: Acute toxicity estimate values
Met. Corr.1: Corrosive to metals – Category 1
Acute Tox. 4: Acute toxicity – Category 4
Acute Tox. 3: Acute toxicity – Category 3
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3
*** Data compared to the previous version altered.**