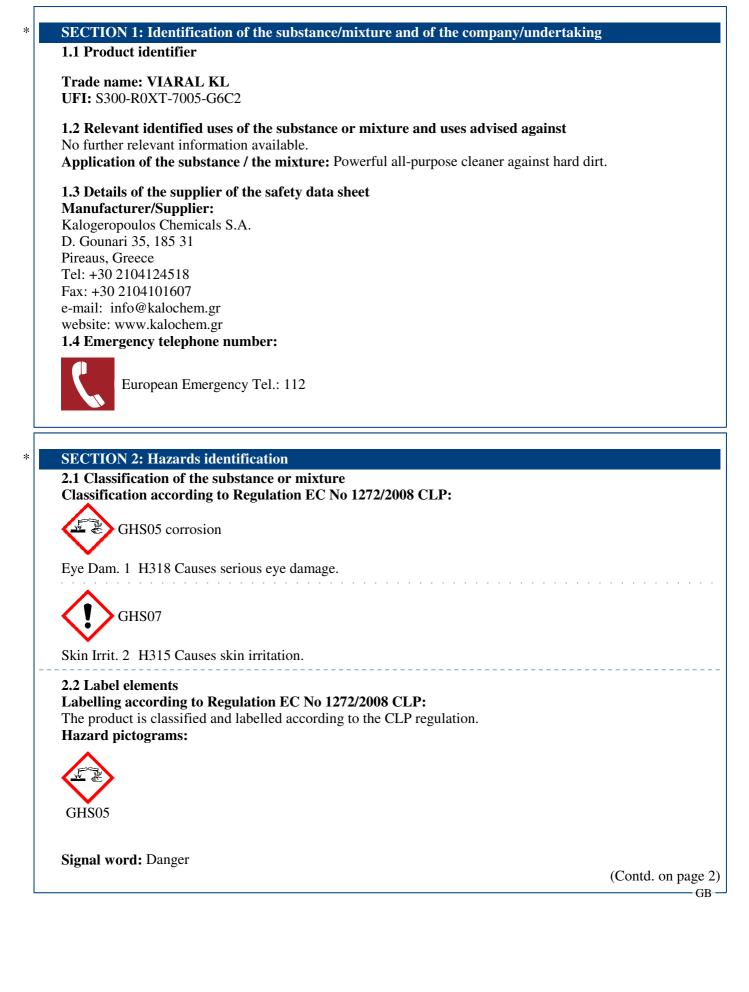
Kalo

Safety data sheet complying with Regulation 1907/2006/EC (REACH Regulation), EU 2020/878 and Regulation No 1272/2008/EC (CLP)

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<b>Frade name: VIA</b>	RAL KL		
			(Contd. of page
Hazard-deter	mining components	of labelling:	
	-16, ethoxylated	5	
	nylenediaminetetraac	etate	
Hazard staten	nents:		
H315 Causes s	kin irritation.		
H318 Causes s	erious eye damage.		
Precautionary	statements		
P102	Keep out of reac	n of children.	
P264	Wash thoroughly		
P280		gloves/protective clothing/eye protection/face p	rotection/hearing
	protection.		-
P302+P352		ash with plenty of water and soap.	
P310		a POISON CENTER/doctor.	
P305+P351+P		se cautiously with water for several minutes. Re	emove contact lenses, if
	· ·	to do. Continue rinsing.	
8	· · · · · · · · · · · · · · · · · · ·	letergents / Labelling for contents	
non-ionic surfa			≥5 - <15
phosphates, EI	DTA and salts thereof		<5%
2.3 Other haza Results of PB' PBT: Not appl vPvB: Not app	<b>F and vPvB assessm</b> licable.	ent	
SECTION 3: 3.2 Mixtures	Composition/inform	ation on ingredients	
	Aixture: consisting of	the following components.	
Ingredients ac	cording Regulation	(EU) 2020/878:	
CAS: 111-76-2		2-butoxyethanol	≥5-≤8
EINECS: 203-		Acute Tox. 4, H302; Acute Tox. 4, H332; \$	Skin Irrit. 2,
Index number:	603-014-00-0	H315; Eye Irrit. 2, H319	
Reg.nr.: 01-21	19475108-36-XXXX		

CAS: 68002-97-1	Alcohols, C10-16, ethoxylated	≥5-≤8%
NLP: 500-182-6	Eye Dam. 1, H318; () Acute Tox. 4, H302; Aquatic Chronic 3, H412	
CAS: 10101-89-0	Phosphoric acid, trisodium salt, dodecahydrate	≥2.5-<5%
EINECS: 231-509-8	🚯 Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	
Reg.nr.: 01-2119489800-32-XXXX		
C		
CAS: 64-02-8	tetrasodium ethylenediaminetetraacetate	≥1-<2%
EINECS: 200-573-9	♦ STOT RE 2, H373; ♦ Eye Dam. 1, H318; ♦ Acute Tox.	
Index number: 607-428-00-2	4, H302; Acute Tox. 4, H332	
Reg.nr.: 01-2119486762-27-XXXX		
100/02 27 MMM		

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## **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.

Seek immediate medical advice.

#### 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.

Seek medical treatment in case of complaints.

## After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

Remove contaminated clothing.

Wash contaminated clothing before use.

## After eye contact:

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids.

Check for and remove any contact lenses.

Continue to rinse for at least 10 minutes.

Get medical attention if irritation occurs.

Avoid strong water jet-risk of cornea damage, consult a doctor.

#### After swallowing:

Drink plenty of water and provide fresh air. Call for a doctor immediately.

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.
5.2 Special hazards arising from the substance or mixture No further relevant information available.
5.3 Advice for firefighters
Protective equipment:
Self contained breathing apparatus and full protective clothing must be worn in case of fire.
Additional information
Collect contaminated fire fighting water separately. It must not enter the sewage system.

## **SECTION 6: Accidental release measures**

6.1 Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Keep unprotected persons away.

Wear protective clothing.

Ensure adequate ventilation.

Avoid inhalation of vapors.

Avoid contact with skin and eyes.

6.1.1 For non-emergency personnel Avoid contact with dripping or leaking material

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### 6.1.2 For emergency responders

First-aid responders must wear protectice clothing, gloves, goggles and respiratory device with filter type A. **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, silica gel). Use neutralising agent.

Dispose contaminated material as waste according to item 13.

Send for recovery or disposal in suitable receptacles.

#### **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.

# **SECTION 7: Handling and storage**

7.1 Precautions for safe handling

Open and handle receptacle with care.

Keep receptacles tightly sealed.

Ensure good ventilation/exhaustion at the workplace.

Avoid contact with skin, eyes and clothing.

Information about fire - and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

Storage: Keep containers tightly closed in a dry, cool, well-ventilated area.

**Requirements to be met by storerooms and receptacles:** Store in a cool location.

Information about storage in one common storage facility: Not required.

### **Further information about storage conditions:**

Keep container tightly sealed.

Keep away from children

**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: 111-76-2 2-butoxyethanol

	-
WEL (Great Britain)	Short-term value: 246 mg/m <sup>3</sup> , 50 ppm Long-term value: 123 mg/m <sup>3</sup> , 25 ppm
	Long-term value: 123 mg/m <sup>3</sup> , 25 ppm
	Sk, BMGV
IOELV (EU)	Short-term value: 246 mg/m <sup>3</sup> , 50 ppm Long-term value: 98 mg/m <sup>3</sup> , 20 ppm Skin

### DNELs

(CAS: 111-76-2) 2-Butoxyethanol

Workers

Acute systemic effects through the dermal: 89 mg/kg bw/d

Acute systemic effects by inhalation: 1091 mg/ml

Acute local effects by inhalation: 246 mg/ml

Long-term systemic effects through the dermal: 125 mg/kg bw/d

Long-term systemic effects by inhalation: 98 mg/ml

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Consumers		
	hrough the dermal: 89 mg/kg bw/d	
Acute systemic effects	by inhalation: 426 mg/ml	
	by mouth: 26.7 mg/kg bw/d	
Acute local effects by i		
	ects through the dermal: 75 mg/kg bw/d	
	ects by inhalation: 59 mg/ml	
	l effects: 6.3 mg/kg bw/d	
	dium ethylenediaminetetraacetate	
Workers		
	stemic and local effects by inhalation: 2.5 mg/m <sup>3</sup>	
	stemic and local effects, by inhalation: 2.5 mg/m <sup>3</sup>	
Consumers		
	stemic and local effects by inhalation: 1.5 mg/m <sup>3</sup>	
	stemic and local effects by inhalation: 1.5 mg/m <sup>3</sup>	
	stemic and local effects, oral: 25 mg/kg bw/d	
PNECs		
(CAS: 111-76-2) 2-But	oxyethanol	
Fresh water: 8.8 mg/l	4 1	
Intermittent release: 26	•	
Marine water: 0.88 mg/	1	
STP: 463 mg/l		
Fresh water precipitates		
Marine water precipitat		
Soil 2.33: mg / kg (d.w.	)	
Oral: $20 \text{ mg} / \text{kg}$		
	dium ethylenediaminetetraacetate	
Fresh water: 2.2 mg/l	1	
Marine water: 0.22 mg/		
Intermittent releases: 1.	2 mg/i	
Soil: 0.72 mg/kg	42 mall	
Sewage treatment plant	-	
Ingredients with biolo		
CAS: 111-76-2 2-buto		
BMGV (Great Britain)	240 mmol/mol creatinine	
	Medium: urine	
	Sampling time: post shift	
	Parameter: butoxyacetic acid	
8.2 Exposure controls		
Individual protection	measures, such as personal protective equipment	
General protective an		
	uffs, beverages and feed.	
	soiled and contaminated clothing.	
•	iks and at the end of work.	
Do not eat or drink whi		

Do not eat or drink while working.

Avoid contact with the eyes and skin. **Respiratory protection:** Not required.

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## Hand protection



Protective gloves resistant to chemicals (standard EN 374-1)

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 mixture 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.

The determined penetration times according to EN 16523-1:2015 are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended. **Eye/face protection** 



Safety glasses with side-shields (frame goggles) (e.g. EN 166)

## **Body protection:**



Protective work clothing

## **SECTION 9: Physical and chemical properties**

		(0 1	
pH at 20 °C	11		
Decomposition temperature:	Not determined		
Auto-ignition temperature:	Product is not selfigniting.		
Flash point:	Not Flammable		
Upper:	Not determined		
Lower:	Not determined		
Lower and upper explosion limit			
Flammability	Not applicable		
range	Not determined		
Boiling point or initial boiling point and boiling			
Melting point/freezing point:	Not determined		
Odour threshold:	Not determined		
Odour:	Mild		
Colour:	blue transparent		
Physical state	Liquid		
General Information			
9.1 Information on basic physical and chemical pr	operties		

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Viscosity:	
Kinematic viscosity	Not determined
Kinematic viscosity	
Dynamic:	Not determined
Solubility	
water:	Not determined
Partition coefficient n-octanol/water (log value)	Not determined
Vapour pressure:	Not determined
Density and/or relative density	
Density at 20 °C:	1.02-1.06 g/cm <sup>3</sup>
Relative density	Not determined
Vapour density	Not determined
9.2 Other information	Specific weight $(20^{\circ}C) = 1,02-1,06 \text{ g/ml}$
Appearance:	
Form:	Liquid
Important information on protection of health and	d
environment, and on safety.	
Auto-ignition temperature:	Not determined
Explosive properties:	Product does not present an explosion hazard.
Cloud point / clarification point:	
Oxidising properties	Not oxidising
Evaporation rate	Not determined
Information with regard to physical hazard classe	S
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 Stable under normal conditions

**10.2** Chemical stability

Thermal decomposition / conditions to be avoided Stable at environment temperature.

10.3 Possibility of hazardous reactions No dangerous reactions known.

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10.4 Conditions to avoid No further relevant information available.

10.5 Incompatible materials Do not use with other detergents, soaps or disinfections substances.

10.6 Hazardous decomposition products No dangerous decomposition products known.

# 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.

	J	able data, the classification cifient are not met.	
LD/LC50 values relevant for classification:			
ATE (Acu	ATE (Acute Toxicity Estimates)		
Oral	LD50	>6,765 mg/kg	
Dermal	LD50	13,750 mg/kg (rabbit)	
Inhalative	LC50/4 h (vapour)	138 mg/l	
CAS: 111-	-76-2 2-butoxyetha	nol	
Oral	Oral LD50 1,200 mg/kg (ATE)		
		1,746 mg/kg (rat)	
CAS: 64-0	2-8 tetrasodium et	hylenediaminetetraacetate	
Oral	LD50	1,780 mg/kg (rat)	
Inhalative	LC50/4 h (vapour)	<5,000 mg/l (rat)	
	osion/irritation Cau		
		n Causes serious eye damage.	
	Respiratory or skin sensitisation Based on available data, the classification criteria are not met.		
	0 1	d on available data, the classification criteria are not met.	
		nilable data, the classification criteria are not met.	
<b>Reproductive toxicity</b> Based on available data, the classification criteria are not met.			
		on available data, the classification criteria are not met.	
		sed on available data, the classification criteria are not met.	
		available data, the classification criteria are not met.	
	l toxicological info		
-	ť	on available data, the classification criteria are not met.	
11.2 Infor	mation on other ha	nzards	
	e disrupting proper		
None of th	None of the ingredients is listed.		

\*

\*

**SECTION 12: Ecological information** 

12.1 Toxicity Aquatic toxicity: (CAS: 111-76-2) 2-Butoxyethanol Acute toxicity Fish LC50 / EC50 / IC50> 100mg/l LC50, Oncorhynchus mykiss, static test, 96 h, 1 464 mg/l, OECD 203

Aquatic invertebrates EC50, Daphnia magna, static test, 48 h, 1 550 mg/l, OECD TG 202

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algae / aquatic plants		
EbC50, Pseudokirchneriella su	bcapitata, static test, 72 h, biomass, 911 mg/l, OEC	CD TG 201
bacteria		
IC50, bacteria, growth inhibitio	on,> 1 000 mg/l	
Long-term toxicity		
Fish		
NOEC, Danio rerio, semi-statio	c test, 21 d,> 100 mg/l	
Aquatic invertebrates		
	static test, 21 d, Other, 100 mg/l	
CAS: 64-02-8 tetrasodium et	hylenediaminetetraacetate	
EC50 (72h) >300 mg/l (algae	e) (Freshwater Alga and Cyanobacteria, Grow Inhib	oition)
EC50 (48h) 140 mg/l (Daphr	ia magna)	
LC50 (96h) >1,000 mg/l (Le	pomis macrochirus (Bluegill))	
NOEC (21d) 25 mg/l (Daphni	a)	
≥25.7 mg/l (fis)		
12.2 Persistence and degrada	bility	
(CAS: 111-76-2) 2-Butoxyetha		
Biodegradation 94%, 28d, OE		
	this preparation complies(comply) with the biodeg	
	48/2004 on detergents. Data to support this assertion	
	e Member States and will be made available to the	m, at their direct request or a
the request of a detergent manual <b>12.3 Bioaccumulative potenti</b>		
(CAS: 111-76-2) 2-Butoxyetha		
(log Pow): 0.81		
(BCF): 3.2		
12.4 Mobility in soil		
(CAS: 7758-29-4) pentasodium	n triphosphate	
KOC: 142.44		
12.5 Results of PBT and vPv	B assessment	
<b>PBT:</b> Not applicable.		
<b>vPvB:</b> Not applicable.		
	<b>operties</b> For information on endocrine disrupting p	properties see section 11.
12.7 Other adverse effects	ation	
Additional ecological inform		utralized
General notes: whust not reach	n sewage water or drainage ditch undiluted or unne	GF

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SECTION 13: Disposal considerations 13.1 Waste treatment methods

Recommendation



Dispose according to National Regulations.



Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Contact manufacturer for recycling information.

## **Uncleaned packaging:**

Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information		
14.1 UN number or ID number ADR, ADN, IMDG, IATA	Void	
14.2 UN proper shipping name ADR, ADN, IMDG, IATA	Void	
14.3 Transport hazard class(es)		
ADR, ADN, IMDG, IATA Class	Void	
14.4 Packing group ADR, IMDG, IATA	Void	
14.5 Environmental hazards:	Not applicable.	
14.6 Special precautions for user	Not applicable.	
14.7 Maritime transport in bulk according t instruments	to IMO Not applicable.	
UN "Model Regulation":	Void	

\*

# **SECTION 15: Regulatory information**

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture REACH Regulation 1907/2006/EC
Regulation (EU) 2020/878
CLP Regulation 1272/2008/EC
Directive 98/24/EC on the protection of health and safety of workers from the risks related to chemicals agents at work.
Council Directive 94/33/EC on the protection of young people at work, as ammended.

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Directive 92/85/EEC on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding, as ammended Regulation (EC) No.648/2004 on detergents, as amended.

### 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

#### **National regulations:**

## Other regulations, limitations and prohibitive regulations

Substances of very high concern (SVHC) according to REACH, Article 57

It doesn't contain substances of very high concern (SVHC).

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.

## **Relevant phrases**

H302 Harmful if swallowed.

H315 Causes skin irritation.

H318 Causes serious eye damage.

- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

H412 Harmful to aquatic life with long lasting effects.

#### **Training hints**

Suitable training on safety in handling, storing and converting the product should be given to the employees based on all the existing information.

#### **Department issuing SDS:**



SUST<sup>⊕</sup> SUSTCHEM S.A.

- **REACH & Chemical Services Department** 
  - A: 144, 3rd Septemvriou, GR 112 51 | Athens, Greece T: +30 210 8252510 | F: +30 210 8252575

W: www.sustchem.gr | E: info@suschem.gr

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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) DNEL: Derived No-Effect Level (REACH) PNEC: Predicted No-Effect Concentration (REACH) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent

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PBT: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 4: Acute toxicity – Category 4
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
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3
\* Data compared to the previous version altered.

GB -