

Revision nr.3 Dated 27/08/2019 Printed on 27/08/2019 Page n. 1 / 13 Replaced revision:2 (Dated 01/12/2017)

Safety Data Sheet

According to Annex II to REACH - Regulation 2015/830

SECTION 1. Identification of the substance/mixture and of the company/undertaking					
1.1. Product identifier					
Product name	WAX STRIPPER				
1.2. Relevant identified uses of the substance or m	nixture and uses advised against				
Intended use	Water-based stripper				
Identified Uses ADHESIVE SYSTEM/TREATMENT FOR STONE	Industrial Professional Consumer				
SECTOR	- 🖌 -				
1.3. Details of the supplier of the safety data sheet					
Name Full address District and Country	Tenax Spa Via I Maggio, 226 37020 Volargne (VR) Italy Tel. +39 045 6887593 Fax +39 045 6862456				
e-mail address of the competent person responsible for the Safety Data Sheet	msds@tenax.it				
1.4. Emergency telephone number					
For urgent inquiries refer to	800.883300 (24h)Centro Antiveleni (Bergamo)0 800 314 7900 (Turkey) only, or +90 0312 433 70 01Toxicology Department andPoisons Centre+98 21 6419306 / +98 21 6405569Poisons Information Centre (Tehran)+91 484 4008056Poison Control Centre (South India)(011) 642 2417 / (011) 488 3108Anti-Poison Centre (Johannesburg)				

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2015/830.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:		
Skin corrosion, category 1A	H314	Causes severe skin burns and eye damage.
Serious eye damage, category 1	H318	Causes serious eye damage.
Specific target organ toxicity - single exposure, category 3	H335	May cause respiratory irritation.

2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:



Danger



Revision nr.3 Dated 27/08/2019 Printed on 27/08/2019 Page n. 2 / 13 Replaced revision:2 (Dated 01/12/2017)

SECTION 2. Hazards identification

Hazard statements: H314 H335	Causes severe skin burns and eye damage. May cause respiratory irritation.
Precautionary statement	S
P260	Do not breathe dust / fume / gas / mist / vapours / spray.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P303+P361+P353 P280	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. Wear protective gloves/ protective clothing / eye protection / face protection.
Contains:	SODIUM HYDROXIDE ETHANOLAMINE Sodium silicate

2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification 1272/2008 (CLP)
2-BUTOXYE	THANOL	
CAS	<i>111-76-2</i> 5 ≤ x < 10	Acute Tox. 4 H302, Acute Tox. 4 H312, Acute Tox. 4 H332, Eye Irrit. 2 H319, Skin Irrit. 2 H315
EC	203-905-0	
INDEX	603-014-00-0	
Reg. no.	01-2119475108-36	
ETHANOLA	MINE	
CAS	<i>141-43-5</i> 5 ≤ x < 10	Acute Tox. 4 H302, Acute Tox. 4 H312, Acute Tox. 4 H332, Skin Corr. 1B H314 Eye Dam. 1 H318, STOT SE 3 H335
EC	205-483-3	
INDEX	603-030-00-8	
Reg. no.	01-2119486455-28	
SODIUM HY	DROXIDE	
CAS	<i>1310-73-2</i> 2 ≤ x < 4,5	Met. Corr. 1 H290, Skin Corr. 1A H314, Eye Dam. 1 H318
EC	215-185-5	
INDEX	011-002-00-6	
Reg. no.	01-2119457892-27	
Sodium sili	cate	
CAS	1344-09-8 1 ≤ x < 3,5	Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335
EC INDEX	215-687-4	
Reg. no.	01-2119448725-31-000	

The full wording of hazard (H) phrases is given in section 16 of the sheet.

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.

INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.

INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.



Revision nr.3 Dated 27/08/2019 Printed on 27/08/2019 Page n. 3 / 13 Replaced revision:2 (Dated 01/12/2017)

SECTION 4. First aid measures

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

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray. UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE Do not breathe combustion products.

5.3. Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations. SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with

self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material. Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Ensure that there is an adequate earthing system for the equipment and personnel. Avoid contact with eyes and skin. Do not breathe powders, vapours or mists. Do not eat, drink or smoke during use. Wash hands after use. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store in a ventilated and dry place, far away from sources of ignition. Keep containers well sealed. Keep the product in clearly labelled containers. Avoid overheating. Avoid violent blows. Keep containers away from any incompatible materials, see section 10 for details.



SECTION 7. Handling and storage

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

CZE	Česká Republika	Nařízení vlády č. 246/2018 Sb. Nařízení vlády, kterým se mění nařízení vlády č. 361/2007 Sb., kterým se stanoví podmínky ochrany zdraví při práci, ve znění pozdějších předpisů
DEU	Deutschland	TRGS 900 - Seite 1 von 69 (Fassung 29.03.2019)- Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte
DNK	Danmark	Bekendtgørelse om ændring af bekendtgørelse om grænseværdier for stoffer og materialer1- BEK nr 655 af 31/05/2018
ESP	España	LÍMITES DE EXPOSICIÓN PROFESIONAL PARA AGENTES QUÍMICOS EN ESPAÑA 2019 (INSST)
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Third edition,published 2018)
GRC	Ελλάδα	ΕΦΗΜΕΡΙΔΑ ΤΗΣ ΚΥΒΕΡΝΗΣΕΩΣ - ΤΕΥΧΟΣ ΠΡΩΤΟ Αρ. Φύλλου 152 - 21 Αυγούστου 2018
ITA	Italia	DIRETTIVA (UE) 2017/164 DELLA COMMISSIONE del 31 gennaio 2017
NLD	Nederland	Regeling van de Staatssecretaris van Sociale Zaken en Werkgelegenheid van 13 juli 2018, 2018-0000118517 tot wijziging van de Arbeidsomstandighedenregeling in verband met de implementatie van Richtlijn 2017/164 in Bijlage XIII
NOR	Norge	Fastsatt av Arbeids- og sosialdepartementet 21. august 2018 med hjemmel i lov 17. juni 2005 nr. 62 om arbeidsmiljø, arbeidstid, stillingsvern mv. (arbeidsmiljøloven) § 1-3, § 1-4 og § 4-5
POL	Polska	ROZPORZĄDZENIE MINISTRA RODZINY, PRACY I POLITYKI SPOŁECZNEJ z dnia 12 czerwca 2018 r
PRT	Portugal	Ministério da Economia e do Emprego Consolida as prescrições mínimas em matéria de protecção dos trabalhadores contra os riscos para a segurança e a saúde devido à exposição a agentes químicos no trabalho - Diário da República, 1.ª série - N.º 111 - 11 de junho de 2018
SVN	Slovenija	Uradni list Republike Slovenije 04.12.2018 - Uradnem listu RS št. 78 -PRAVILNIK o varovanju delavcev pred tveganji zaradi izpostavljenosti kemičnim snovem pri delu
SWE	Sverige	Hygieniska gränsvärden, AFS 2018:1
TUR	Türkiye	KİMYASAL MADDELERLE ÇALIŞMALARDA SAĞLIK VE GÜVENLİK ÖNLEMLERİ HAKKINDA YÖNETMELİK - Resmi Gazete Tarihi: 12.08.2013 Resmi Gazete Sayısı: 28733
EU	OEL EU	Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 91/322/EEC.
	TLV-ACGIH	ACGIH 2019



Revision nr.3 Dated 27/08/2019 Printed on 27/08/2019 Page n. 5 / 13 Replaced revision:2 (Dated 01/12/2017)

SECTION 8. Exposure controls/personal protection/>>

				ETHAI	NOLAMINE				
nreshold Limit \									
Туре	Country	TWA/8h		STEL/15					
		mg/m3	ppm	mg/m3	ppm				
TLV	CZE	2,5	1,0025	7,5	3,0075				
AGW	DEU	0,5	0,2	0,5	0,2	SKIN			
MAK	DEU	0,51	0,2	0,51	0,2				
TLV	DNK	2,5	1			SKIN	E		
VLA	ESP	2,5	1	7,5	3	SKIN			
VLEP	FRA	2,5	1	7,6	3	SKIN			
WEL	GBR	2,5	1	7,6	3	SKIN			
TLV	GRC	2,5	1	7,6	3				
VLEP	ITA	2,5	1	7,6	3	SKIN			
TGG	NLD	2,5		7,6		SKIN			
TLV	NOR	2,5	1			SKIN			
NDS/NDSCh	POL	2,5		7,5		SKIN			
VLE	PRT	2,5	1	7,6	3	SKIN			
MV	SVN	2,5	1	7,6	3	SKIN			
NGV/KGV	SWE	2,5	1	7,5	3	SKIN			
OEL	EU	2,5	1	7,6	3	SKIN			
TLV-ACGIH		7,5	3	15	6				
redicted no-effe	ct concentra	ation - PNE	С						
Normal value ir	n fresh water						0,08	mg/l	
Normal value ir	n marine wate	ər					0	mg/l	
Normal value for	or fresh wate	r sediment					0,42	mg/kg	
Normal value for	or marine wa	ter sedimen	t				0,04	mg/kg	
Normal value for	or water, inte	rmittent rele	ase				0,02	mg/l	
Normal value o							100	mg/l	
Normal value for			ment				0,03	mg/kg	
ealth - Derived I	no-effect lev	el - DNEL /	DMEL					0 0	
	Effe	cts on cons	umers			Effects on w	orkers		
Route of expos	ure Acu	te Ac	ute	Chronic	Chronic	Acute	Acute	Chronic	Chronic
	loca	l sv	stemic	local	systemic	local	systemic	local	systemic
Oral		-,			3,75 mg/kg/d		,		, <u> </u>
Inhalation				2 mg/m3				3,3 mg/m3	
Skin				mg/mo	0,24			mg/m5	1
ONIT					0,24 mg/kg/d				ng/kg/d
					mg/kg/u				mg/kg/u



Revision nr.3 Dated 27/08/2019 Printed on 27/08/2019 Page n. 6 / 13 Replaced revision:2 (Dated 01/12/2017)

SECTION 8. Exposure controls/personal protection/>>

				2-BUTO	KYETHANOL				
reshold Limit V	/alue								
Туре	Country	TWA/8h		STEL/15	min				
		mg/m3	ppm	mg/m3	ppm				
TLV	CZE	100	20,7	200	41,4	SKIN			
AGW	DEU	49	10	98 (C)	20 (C)	SKIN			
MAK	DEU	49	10	98	20	SKIN	Hinweis		
TLV	DNK	98	20			SKIN	E		
VLA	ESP	98	20	245	50	SKIN			
VLEP	FRA	49	10	246	50	SKIN			
WEL	GBR	123	25	246	50	SKIN			
TLV	GRC	120	25						
VLEP	ITA	98	20	246	50	SKIN			
TGG	NLD	100		246		SKIN			
TLV	NOR	50	10			SKIN			
NDS/NDSCh	POL	98		200		SKIN			
VLE	PRT	98	20	246	50	SKIN			
MV	SVN	98	20	246	50	SKIN			
NGV/KGV	SWE	50	10	246	50	SKIN			
ESD	TUR	98	20	246	50	SKIN			
OEL	EU	98	20	246	50	SKIN			
TLV-ACGIH		97	20						
redicted no-effe	ct concentra	tion - PNE	C						
Normal value in	n fresh water						8,8	mg/l	
Normal value in	n marine wate	r					0,88	mg/l	
Normal value for	or fresh water	sediment					34,6	mg/kg	
Normal value for	or marine wate	er sedimen	t				3,46	mg/kg	
Normal value of	f STP microor	ganisms					463	mg/l	
ealth - Derived r	Effec	ts on cons	umers			Effects on worke			
Route of expos			ute	Chronic	Chronic	Acute	Acute	Chronic	Chronic
Oral	local		stemic	local	systemic	local	systemic	local	systemic
Oral		26			6,3				
			g/kg bw/d		mg/kg bw/d	0.40	4004		
Inhalation	147	42			59	246	1091		98
01.	mg/n		g/m3		mg/m3	mg/m3	mg/m3		mg/m3
Skin		89			75		89		125
		m	g/kg bw/d		mg/kg bw/d		mg/kg bw/d		mg/kg bw/d
							bw/d		bw/d
nreshold Limit V	/alue			Sodiu	m silicate				
Туре	Country	TWA/8h		STEL/15	min				
	,	mg/m3	ppm	mg/m3	ppm				
TLV-ACGIH		2		0					
redicted no-effe		tion - PNE	C				7,5	mg/l	
Normal value in		r					1	mg/l	
Normal value fo			ase				7,5	mg/l	
Normal value o							348	mg/l	
Normal value fo			darv poisoni	na)			348	mg/kg	
ealth - Derived r				.3/			010		
2011001		ts on cons				Effects on worke	ers		
D ()			ute	Chronic	Chronic	Acute	Acute	Chronic	Chronic
Route of expos									Chronic:
Route of expos	local		stemic	local	svstemic	local	svstemic	local	svstemic

local systemic local systemic local systemic local systemic Oral VND 0,8 mg/kg/d Inhalation VND 1,38 VND 5,61 mg/m3 mg/m3 Skin VND 0,8 VND 1,59 mg/kg/d mg/kg/d

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

TLV of solvent mixture: 14 mg/m3



Revision nr.3 Dated 27/08/2019 Printed on 27/08/2019 Page n. 7 / 13 Replaced revision:2 (Dated 01/12/2017)

SECTION 8. Exposure controls/personal protection/>>

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION

Wear category III professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION

Wear a hood visor or protective visor combined with airtight goggles (see standard EN 166).

RESPIRATORY PROTECTION

VOC (Directive 2010/75/EC) :

VOC (volatile carbon) :

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529. ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	liquid	
Colour	colourless	
Odour	characteristic	
Odour threshold	Not available	
pH	13	
Melting point / freezing point	Not available	
Initial boiling point	Not available	
Boiling range	Not available	
Flash point >	93 °C	
Evaporation Rate	Not available	
Flammability of solids and gases	Not available	
Lower inflammability limit	Not available	
Upper inflammability limit	Not available	
Lower explosive limit	Not available	
Upper explosive limit	Not available	
Vapour pressure	Not determined	
Vapour density	Not available	
Relative density	1,05 g/cc	
Solubility	soluble in water	
Partition coefficient: n-octanol/water	Not determined	
Auto-ignition temperature	Not available	
Decomposition temperature	Not determined	
Viscosity	Not determined	
Explosive properties	not explosive	
Oxidising properties	Not available	
9.2. Other information		

15,00 % - 157,50 7,52 % - 78,92

g/litre

g/litre

@EPY 9.11.0 - SDS 1004.13



Revision nr.3 Dated 27/08/2019 Printed on 27/08/2019 Page n. 8 / 13 Replaced revision:2 (Dated 01/12/2017)

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

2-BUTOXYETHANOL

Decomposes under the effect of heat.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

ETHANOLAMINE

May react dangerously with: acrylonitrile,chloroepoxypropane,chlorosulphuric acid,hydrogen chloride,iron-sulphur compounds,acetic acid,acetic anhydride,mesityl oxide,nitric acid,sulphuric acid,strong acids,vinyl acetate,cellulose nitrate.

2-BUTOXYETHANOL

May react dangerously with: aluminium,oxidising agents.Forms peroxides with: air.

10.4. Conditions to avoid

None in particular. However the usual precautions used for chemical products should be respected.

ETHANOLAMINE

Avoid exposure to: air, sources of heat.

2-BUTOXYETHANOL

Avoid exposure to: sources of heat, naked flames.

SODIUM HYDROXIDE

Avoid exposure to: air,moisture,sources of heat.

10.5. Incompatible materials

ETHANOLAMINE

Incompatible with: iron,strong acids,strong oxidants. SODIUM HYDROXIDE

Incompatible with: strong acids, ammonia, zinc, lead, aluminium, water, flammable liquids.

10.6. Hazardous decomposition products

ETHANOLAMINE May develop: nitric oxide,carbon oxides. 2-BUTOXYETHANOL

May develop: hydrogen.

SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification. It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the

toxicological effects of exposure to the product.

11.1. Information on toxicological effects

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

Interactive effects

Information not available



> 20 mg/l

>2000 mg/kg

>2000 mg/kg

Revision nr.3 Dated 27/08/2019 Printed on 27/08/2019 Page n. 9 / 13 Replaced revision:2 (Dated 01/12/2017)

ACUTE TOXICITY

LC50 (Inhalation) of the mixture: LD50 (Oral) of the mixture: LD50 (Dermal) of the mixture:

SECTION 11. Toxicological information

SODIUM HYDROXIDE LD50 (Oral) LD50 (Dermal)

2-BUTOXYETHANOL LD50 (Oral) LD50 (Dermal) LC50 (Inhalation)

Sodium silicate LD50 (Oral) LD50 (Dermal) LC50 (Inhalation) 1350 mg/kg Rat 1350 mg/kg Rat

615 mg/kg Rat 405 mg/kg Rabbit 2,2 mg/l/4h Rat

3400 mg/kg rat > 5000 mg/kg rat > 2,06 mg/l/4h rat

SKIN CORROSION / IRRITATION

Corrosive for the skin Classification according to the experimental Ph value

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

May cause respiratory irritation

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

SECTION 12. Ecological information

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

12.1. Toxicity



Revision nr.3 Dated 27/08/2019 Printed on 27/08/2019 Page n. 10 / 13 Replaced revision:2 (Dated 01/12/2017)

SECTION 12. Ecological information

2-BUTOXYETHANOL LC50 - for Fish EC50 - for Crustacea EC50 - for Algae / Aquatic Plants Chronic NOEC for Fish Chronic NOEC for Crustacea	1474 mg/l/96h Oncorhynchus mykiss 1550 mg/l/48h Daphnia magna 1840 mg/l/72h Pseudokirchneriella subcapitata > 100 mg/l Brachydanio rerio - NOEC 21d 100 mg/l Daphnia magna - NOEC 21d
Sodium silicate LC50 - for Fish EC50 - for Algae / Aquatic Plants	3185 mg/l/96h > 345,4 mg/l/72h
12.2. Persistence and degradability	
SODIUM HYDROXIDE Solubility in water Degradability: information not available	> 10000 mg/l
2-BUTOXYETHANOL Solubility in water Rapidly degradable	1000 - 10000 mg/l
ETHANOLAMINE Solubility in water Rapidly degradable	1000 - 10000 mg/l
12.3. Bioaccumulative potential	
2-BUTOXYETHANOL Partition coefficient: n-octanol/water	0,81
ETHANOLAMINE Partition coefficient: n-octanol/water	-2,3
12.4. Mobility in soil	
ETHANOLAMINE Partition coefficient: soil/water	-0,5646
12.5. Results of PBT and vPvB assessment	

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

12.6. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information

14.1. UN number

ADR / RID, IMDG, IATA: 1719



Revision nr.3 Dated 27/08/2019 Printed on 27/08/2019 Page n. 11 / 13 Replaced revision:2 (Dated 01/12/2017)

SECTION 14. Transport information

14.2. UN proper shipping name

ADR / RID:	CAUSTIC ALKALI LIQUID, N.O.S. (ETHANOLAMINE; SODIUM HYDROXIDE)
IMDG:	CAUSTIC ALKALI LIQUID, N.O.S. (ETHANOLAMINE; SODIUM HYDROXIDE)
IATA:	CAUSTIC ALKALI LIQUID, N.O.S. (ETHANOLAMINE; SODIUM HYDROXIDE)

14.3. Transport hazard class(es)

ADR / RID:	Class: 8	Label: 8	
IMDG:	Class: 8	Label: 8	4
IATA:	Class: 8	Label: 8	ł

14.4. Packing group

ADR / RID, IMDG, IATA: III

14.5. Environmental hazards

ADR / RID:	NO
IMDG:	NO
IATA:	NO

14.6. Special precautions for user

ADR / RID:	HIN - Kemler: 80	Limited Quantities: 5 L	Tunnel restriction code: (E)
	Special Provision: -		
IMDG:	EMS: F-A, S-B	Limited Quantities: 5 L	
IATA:	Cargo:	Maximum quantity: 60 L	Packaging instructions: 856
	Pass.:	Maximum quantity: 5 L	Packaging instructions: 852
	Special Instructions:	A3, A803	

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Information not relevant

SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EC:

3

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

None

Product Point

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage greater than 0,1%.

Substances subject to authorisation (Annex XIV REACH)
None

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012: None

Substances subject to the Rotterdam Convention: None

Substances subject to the Stockholm Convention: None



Revision nr.3 Dated 27/08/2019 Printed on 27/08/2019 Page n. 12 / 13 Replaced revision:2 (Dated 01/12/2017)

SECTION 15. Regulatory information

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Met. Corr. 1 Acute Tox. 4 Skin Corr. 1A Skin Corr. 1B Eye Dam. 1 Eye Irrit. 2 SKin Irrit. 2 STOT SE 3 H290 H302 H312 H312 H314 H318 H319 H315	Substance or mixture corrosive to metals, category 1 Acute toxicity, category 4 Skin corrosion, category 1A Skin corrosion, category 1B Serious eye damage, category 1 Eye irritation, category 2 Skin irritation, category 2 Specific target organ toxicity - single exposure, category 3 May be corrosive to metals. Harmful if swallowed. Harmful in contact with skin. Harmful in contact with skin. Harmful if inhaled. Causes severe skin burns and eye damage. Causes serious eye damage. Causes serious eye irritation. Causes skin irritation.
H315 H335	May cause respiratory irritation.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

- 1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
- 2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
- 3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament



Revision nr.3 Dated 27/08/2019 Printed on 27/08/2019 Page n. 13 / 13 Replaced revision:2 (Dated 01/12/2017)

SECTION 16. Other information

- 4. Regulation (EU) 2015/830 of the European Parliament5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
- 6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
- 7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
- 8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
- 9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament 10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
- 11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
- 12. Regulation (EU) 2016/1179 (IX Atp. CLP)
- 13. Regulation (EU) 2017/776 (X Atp. CLP)
- 14. Regulation (EU) 2018/669 (XI Atp. CLP)
- 15. Regulation (EU) 2018/1480 (XIII Atp. CLP)
- 16. Regulation (EU) 2019/521 (XII Atp. CLP)
- The Merck Index. 10th Edition
- Handling Chemical Safety
- INRS Fiche Toxicologique (toxicological sheet)
- Patty Industrial Hygiene and Toxicology
- N.I. Sax Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website

- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

Product's classification is based on the calculation methods set out in Annex I of the CLP Regulation, unless otherwise indicated in sections 11 and 12.

The data for evaluation of chemical-physical properties are reported in section 9.

Changes to previous review: The following sections were modified: 01 / 02 / 03 / 08 / 09 / 11 / 12 / 14 / 15. Changed TLVs in section 8.1 for following countries: CZE,