# **MACHEREY-NAGEL**



# **Safety Data Sheet**

## according to Regulations 1907/2006/EC (REACh) and 2015/830/EU

REF: 931029	VISOCOLOR ECO Total Hardness	Page: 1/10
Printing date: 02.06.2020	Date of issue: 20.05.2019	

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

		· ·
1.1	Product identifier REF Product name	931029 VISOCOLOR ECO Total Hardness
	REACH Registration number(s): A registration number for the subst the substance or its use is exclude	see SECTION 3.1/3.2 or ance(s) does not require registration or d from registration.
		1 x 8 mL GH-1 2 x 30 mL GH-2
1.2	Relevant identified uses Product for analytical use.	e substance or mixture and uses advised against ation according REACh, RIP 3.2 Codes: SU 0-2, PC 21, PROC 15, AC 0 egrated into sections 1-16.
1.3	Details of the supplier of the s Manufactured by: MACHEREY-NAGEL GmbH & Co. Neumann-Neander-Str. 6-8, 52355 Tel.: +49 2421 969 0	<g< th=""></g<>
1.4	Emergency telephone number Outside Germany (DE): Call your re DE: Gemeinsames Giftinformations	gional Poisons Information Service or call local Life Saving Service.
	You find our current versions of SDS (22 lang	puages) in Internet: http://www.mn-net.com/SDS
SECT	ON 2: Hazard identification	1
20	Classification of the complete	product

#### Classification of the complete product 2.0

	GHS02 GHS07
Signal word	WARNING
Hazard identification	Hazard classes/categories
H226	Flam. Liq. 3
H315	Skin Irrit. 2
H319	Eye Irrit. 2

#### 2.1 Classification of the substance or mixture

8 mL GH-1





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	Signal word	WARNING	
	Hazard identification	Hazard classes/categories	
	H226	Flam. Liq. 3	
	H315	Skin Irrit. 2	
	H319	Eye Irrit. 2	
30	0 mL GH-2		

Signal word

Do not need labelling as hazardous

No hazard class

#### 2.2 Label elements

According CLP directive inner packages must be only labelled with GHS symbol(s) and product identificator(s) (EU 1272/2008 Annex I - 1.5.1.2).

Harmful chemicals/mixtures with signal word: WARNING and highly flammable chemicals/mixtures must not be labelled with H and P phrases until 125 mL (EU 1272/2008 Annex I - 1.5.2).

### 8 mL GH-1



Signal word: WARNING

### 30 mL GH-2

Do not need labelling as hazardous Signal word: -

#### 2.3 Other hazards

Possible hazards from physicochemical properties

In the case of pH values are less than 5 or higher than 9 then it is irritant. Flammable properties. ---

Information pertaining to particular risks to human and possible symptoms

Information pertaining to particular risks to the environment

Other hazards

## **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances or 3.2 Mixtures

8 mL GH-1

Chemical: trietha	nolamine	CAS No.: 102-71-6
Classification:	H315, Skin Irrit. 2, H319, Eye Irrit. 2, H335, STOT SE 3	
Formula:	C <sub>6</sub> H <sub>15</sub> NO <sub>3</sub>	
Pseudonym:	2,2',2"-nitrilotriethanol; tris(2-hydroxyethyl)amine	
TSCA Inventory:	listed	
REACH Reg. No.:	01-2119486482-31-xxxx	
Dual-use:	The application of this chemical is exempt from the regula	tion 2017/2268/EU (see IC350 remark 4).
EC No.:	203-049-8	, ,
RTECS:	KL9275000	
KE No.:	KE-25940	
Concentration:	20 - <45 %	
acc. CLP (GHS):	H315, Skin Irrit. 2, H319, Eye Irrit. 2	

MACHEREY-NAGE  $\langle MN \rangle$ ISO 9001 CERTIFIED

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C	hemical: ethan			CAS No.: 64-17-5	
		or Itured with 1%IPA/1%MEK, acc.2016	6/1867/FU)	CAS No.: 04-17-5	
С	lassification:	H225, Flam. Liq. 2	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
F	ormula:	C <sub>2</sub> H <sub>6</sub> O, C <sub>2</sub> H <sub>5</sub> OH			
P	seudonym:	ethyl alcohol, methylated spirit			
	SCA Inventory:	listed			
	EACH Reg. No.:	01-2119457610-43-xxxx			
	C No.:	200-578-6	Indice No.:	603-002-00-5	
	TECS:	KQ6300000	MFCD:	00003568	
	E No.:	KE-13217			
	concentration:	20 - <35 %			
a	cc. CLP (GHS):	H226, Flam. Liq. 3			
C	hemical: indica	tor dye(s)		CAS No.: -	
C	lassification:	No criteria for classification or naming of ch	emical not required.		
	SCA Inventory:	all listed, <1%			
	concentration:	0.1 - <1 %			
a	cc. CLP (GHS):	The criteria for classification are not fulfilled			
30 mL GH	2				
		onia solution		CAS No.: 1336-21-6	
	lassification:	H314, Skin Corr. 1B, H335, STOT	SE 3. H400. Aquatic		
F	ormula:	NH <sub>3</sub> •H <sub>2</sub> O	· · ·		
P	seudonym:	ammonium hydroxide, Aqua ammo	onia, aqueous ammo	nia	
	SCA Inventory:	listed			
	EACH Reg. No.:	01-2119488876-14-xxxx, 01-2119			
	C No.:	215-647-6	Indice No.:	007-001-01-2	
	TECS:	BQ9625000	MFCD:	00011418	
	E No.:	KE-01688, >10% Toxic 97-1-184 0.1 - <1 %			
	concentration: cc. CLP (GHS):	0.1 - < 1 70 The criteria for classification are not fulfilled			
		ndinitrilo tetraacetic acid, di Na-salt (		CAS No.: 6381-92-6	
	lassification:	H332, Acute Tox. 4 inh., H373, ST	OT RE 2		
	ormula:	$C_{10} H_{14} N_2 N_{20} O_8 \cdot 2 H_2 O_{10}$			
	SCA Inventory: C No.:	listed (CAS 139-33-3) 205-358-3			
	TECS:	AH4410000; AH4375000	MFCD:	00150037	
	Concentration:	0.1 - <1 %	MFCD.	00150057	
-	cc. CLP (GHS):	The criteria for classification are not fulfilled			
.3 Remarks					
When not I	listed, mixtures are	added with water [CAS No. 7732-18	-5] to 100%.		
List of H a	nd P phrases: see s	section 16.1			
ECTION 4: First	t aid measu	'es			
•	of first aid me			al muandala manya -14 - 41 - 12 - 16	
	erson out of dange act medical advice	r zone to fresh air immediately. Ensu	ire quiet, warmth, an	a provide resuscitation if nece	essary. If

#### 4.1.1 After SKIN Contact

Remove contaminated clothing. Rinse the affected skin or mucous membrane thoroughly under running water. (If possible) use soap.

#### 4.1.2 After EYE Contact

After contact with the eyes rinse thoroughly under running water with the eyelid wide open with eye washing bottle, eye douche or running water (protect intact eye).

E-mail: sales-fr@mn-net.com

#### 4.1.3 After INHALATION of vapours

After inhalation of foam or vapour fresh air should be inhaled. Keep airways free. ---

#### 4.1.4 After ORAL Intake

After oral intake lots of water should be drunk after it has been ingested. ---



Tel.:

Fax:

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

Indication of any immediate medical attention and special treatment needed 4.3 No additionally recommendations. ---

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

Fire extinguishers appropriate to the fire classification, and, if applicable, a fire blanket must be available in a prominent location in the work area. All extinguishers like FOAM, WATER SPRAY, DRY POWDER, CARBON DIOXIDE can be used.

- 5.2 Special hazards arising from the substance or mixture WARNING: Flammable (GHS regulation). May form explosive vapour-air mixtures. Formation of hazardous and caustic vapour-air mixtures possible.
- 5.3 Advice for firefighters

No, for listed product. Product package burns like paper or plastic.

Additional information 5.4

### SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures Do not breathe vapours. Regular staff training is necessary.
- 6.2 **Environmental precautions** not necessary
- 6.3 Methods and material for containment and cleaning up Bind any escaping liquid with inert absorbent. Collect small amounts of leaked liquid and flush with water into drains.
- 6.4 **Reference to other sections**

## SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

Handling in accordance with the test instruction, that comes with the product.

- 7.2 Conditions for safe storage, including any incompatibilities The original product package of MACHEREY-NAGEL allows a safe storage. Storage class (VCI): 3 Water hazard class (DE): 2
- 7.2.1 Requirements for stock rooms and containers Keep original product packages tightly closed during handling and storage.
- 7.3 Specific end use(s) Product for analytical use.

### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

8 mL GH-1 Chemical: triethanolamine CAS No.: 102-71-6 DNEL: [derm] 6.3; [inh] 5 mg/m<sup>3</sup> DNEL = Derived No-Effect Level (for workers) PNEC (fresh water) : 0.32 mg/L PNEC = Predicted No Effected Concentration TRGS 900 (DE): - DFG: 5 E mg/m<sup>3</sup> E/e respirable Short-term exposure factor: I. (2) skin resorptive (H), respiratory sensitizable (Sa), skin sensitizable (Sh), teratogenic (Z) not securely excluded / (Y) certainly excluded SUVA(CH) MAK value: [MAK] 5 e/[STEL] 10 e mg/m<sup>3</sup>



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	NIOSH: [TWA] Time-weighted OSHA:	not listed average to a reference period of 8 hours, [STEL] Short-term e not listed	exposure limit related to a 15-minute period
	Chemical: ethanol DNEL:	[derm] 343 mg/kg; [inh] 950 mg/m³ ffect Level (for workers)	CAS No.: 64-17-5
	PNEC (fresh water) : PNEC = Predicted No	, ,	
	TRGS 900 (DE):	200 mL/m³ / 380 mg/m³	
	Short-term exposure fact	E/e respirable or: 4 (II), Y espiratory sensitizable (Sa), skin sensitizable (Sh), teratogenic	(7) not securally evoluted / (V) containly evoluted
	SUVA(CH) MAK value: NIOSH:	500 ppm / 960 mg/m <sup>3</sup> [TWA] 1000 ppm / 1900 mg/m <sup>3</sup> average to a reference period of 8 hours, [STEL] Short-term e	
	OSHA:	[TWA] 1000 ppm / 1900 mg/m <sup>3</sup>	
	Chemical: indicator d	ye(s)	CAS No.: -
	<b>30 mL GH-2</b> Chemical: ammonia s DNEL: DNEL = Derived No-E	solution [inh] 14 mg/m³ ffect Level (for workers)	CAS No.: 1336-21-6
		0.0011 mg/L Effected Concentration	
	EU value: TRGS 900 (DE):	20 ppm / 14 mg/m <sup>3</sup> 20 ppm / 14 mg/m <sup>3</sup> E/e respirable	
	Short-term exposure fact skin resorptive (H), re	or: 2 (I), Y espiratory sensitizable (Sa), skin sensitizable (Sh), teratogenic	: (Z) not securely excluded / (Y) certainly excluded
	SUVA(CH) MAK value: NIOSH: NIOSH STEL:	20 ppm / 14 mg/m³ [TWA] 25 ppm / 18 mg/m³ 35 ppm / 27 mg/m³	
	OSHA:	average to a reference period of 8 hours, [STEL] Short-term e Yes (TQ = 15000 lbs) - n/a; [TWA] 50 ppm / 3	
	DNEL:	itrilo tetraacetic acid, di Na-salt (EDTA-Na) [inh] 1.5 mg/m³ ffect Level (for workers)	CAS No.: 6381-92-6
	PNEC(fresh water)	2.2 mg/L Effected Concentration	
8.2	Exposure controls Good ventilation and extraction level of cleanliness must be n		with floor drainage and washing facilities. The highest
.2.1	Respiratory protection No additional recommend	dations.	
3.2.2		N 374 (permeation time >30 min - level 2), consist nes chemical resistant latex gloves with code EN 3	of PVC, natural latex, Neopren, or Nitril (f.ex. from Ansel 374-3 level 1.
.2.3	<b>Eye protection</b> Yes, safety glasses acco	rding EN 166 with integrated side shields or wrap	-around protection.
.2.4	Skin protection Not necessary.		
8.2.5	with the skin, eyes and c		nd at outdoor workplaces is prohibited. Avoid contact e has been spilled, and soak it in water. Wash hands d then apply protective skin cream.



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SECTION 9: Phys	ical and chemical properties	
9.1 Information	on basic physical and chemical properties	
8 mL GH-1		

### Appearance: liquid pH: . Flash point:

10 27 °C

Colour: green

Odor: alcoholic

30 mL GH-2 Appearance: liquid pH:

Colour: colourless 10,5

Odor: aminic

#### 9.2 Other information

Data for the other parameters of the mixtures are not available, because no registration and no chemical safety report is required. **Relevant Properties of Substance Group** 

### SECTION 10: Stability and reactivity

#### 10.1 Reactivity

- no further data available.
- 10.2 Chemical stability No known instability.

#### 10.3 Possibility of hazardous reactions No further data available.

#### 10.4 Conditions to avoid

10.5 Incompatible materials

Avoid contact with strong acids or alkalines.

#### 10.6 Hazardous decomposition products

In the original package all parts/all reagents are safety and separated stored. Decompositions are not observed during the expiration period under recommended conditions.

## SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

Following information is valid for pure substances. Quantitative data on the toxicity of this product are not available.

### 8 mL GH-1

Chemical: triethan	olamine		CAS No.: 102-71-6
TSCA Inventory:	listed	California Proposition 65 List: not li	sted
Australia NICNAS:	not listed	Canada CEPA 1999: DSL	Yes
Japan CSCL/PRTR:	PAC Yes, Japan PDS	SCL: not listed	
Japan ISHL:	listed ≥0,1%/≥0,1%, A	Article 57-2 (SDS required)	
South Korea TCCA:	not listed		
Korea Exist.Chem.Inventory:	KE-25940		
LD50 <sub>orl rat</sub> :	> 5000 mg/kg		
LD50 <sub>drm rbt</sub> :	> 2000 mg/kg		
Chemical: ethanol			CAS No.: 64-17-5

TSCA Inventory:	listed	California Proposition 65 List: not listed
ACGIH:	1000 ppm	
Exposure Routes:	inhalation, inge	stion, skin and/or eye contact
Target Organs:	Eyes, skin, res	piratory system, central nervous system, liver, blood, reproductive system
Symptoms:	irritation eyes, s	skin, nose; headache, drowsiness, lassitude (weakness, exhaustion), narcosis; cough;
liver damage; anemia; i	eproductive, teratoge	nic
Australia NICNAS:	not listed	Canada CEPA 1999: DSL yes
Japan CSCL/PRTR:	not listed, Japa	n PDSCL: not listed
Japan ISHL:	listed ≥0,1%/≥0	),1%, Article 57-2 (SDS required)
South Korea TCCA:	not listed	

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	Korea Exist.Chem.Inve	vontory: KE-13217		
	LD50 <sub>orl rat</sub> :	6200 mg/kg		
	LC_Low <sub>ihl gpg</sub> :	21.9 g/m <sup>3</sup>		
	LC Loworl hmn :	1400 mg/kg		
	LC50 <sub>ihl mouse</sub> :	[4h] 39 g/m <sup>3</sup>		
	LC50 <sub>ibl rat</sub> :	[10h] 20 g/m <sup>3</sup>	1 <sup>3</sup>	
	LD50 <sub>drm rbt</sub>	20 000 mg/kg		
	LD50 <sub>oral mouse</sub> :	3450 mg/kg		
	TRGS 905 (DE):	K5, M5, R <sub>F</sub> C		
	Chemical: <i>i</i> TSCA Inventory:	indicator dye(s) all listed, <1%	% CAS No.: -	
3(	) mL GH-2			
		ammonia solution	CAS No.: 1336-21-6	
	TSCA Inventory:	listed	California Proposition 65 List: not listed	
	Exposure Routes: Target Organs:		ngestion (solution), skin and/or eye contact (solution/liquid) respiratory system	
	Symptoms:		respiratory system es, nose, throat; dyspnea (breathing difficulty), wheezing, chest pain; r	nulmonary edema:
	pink frothy sputum; ski			Juinonary Sacha,
	Australia NICNAS: (Item 53.)	not listed	Canada CEPA 1999: DSL yes, Toxic Substances (	(Schedule 1) Yes
	Japan CSCL/PRTR:	not listed, Ja	apan PDSCL: Deleterious Substance	
	Japan ISHL:		ó0,1%, Article 57-2 (SDS required)	
	South Korea TCCA:	not listed		
	Korea Exist.Chem.Inve	ventory: KE-01688, >	•10% Toxic 97-1-184	
	LD50 <sub>orl rat</sub> :	350 mg/kg		
	LC_Low <sub>ihl hmn</sub> :	5000 mg/m <sup>3</sup> [4b] 2000 pp		
	LC50 <sub>ihl rat</sub> : LD50drm rbt :	[4h] 2000 ppr [5min] 5000 p		
		[011111] 0000 - 1	ppm	
			acetic acid, di Na-salt (EDTA-Na) CAS No.: 6381-92-6	
	TSCA Inventory:	listed (CAS 1		
	LD50 <sub>orl rat</sub> :	2800 mg/kg		
	N 12: Ecological	• information		
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	•			
2.1 To	oxicity ollowing information is		tances.	
2.1 To	OXICITY Dilowing information is 8 mL GH-1	s valid for pure subst		
2.1 To	Dillowing information is 8 mL GH-1 Chemical:	s valid for pure subst	CAS No.: 102-71	-6
2.1 To	Dillowing information is 8 mL GH-1 Chemical:	s valid for pure subst		I-6
2.1 To	oxicity ollowing information is 8 mL GH-1 Chemical: PNEC(fresh water): PNEC = Predicted No LC50fish/96h :	s valid for pure subst triethanolamine : 0 o Effected Concentration	CAS No.: 102-71	1-6
2.1 To	oxicity bllowing information is 8 mL GH-1 Chemical: PNEC(fresh water) : PNEC = Predicted No LC50fish/96h : EC50daphnia/48h :	s valid for pure subst triethanolamine : C o Effected Concentration	e CAS No.: 102-71 0.32 mg/L >1000 mg/L >1000 <sub>24h</sub> mg/L	1-6
2.1 To	oxicity ollowing information is 8 mL GH-1 Chemical: PNEC(fresh water): PNEC = Predicted No LC50fish/96h : EC50daphnia/48h : Water hazard clas	triethanolamine triethanolamine c Effected Concentration ass (DE): 1	e CAS No.: 102-71 0.32 mg/L >1000 mg/L >1000 <sub>24h</sub> mg/L 1 WGK No.: 0201	1-6
2.1 To	oxicity ollowing information is 8 mL GH-1 Chemical: PNEC = Predicted No LC50fish/96h : EC50daphnia/48h : Water hazard clas Dispersion coeffic	triethanolamine triethanolamine Coeffected Concentration ass (DE): 1 icient(octanol-water): -	e CAS No.: 102-71 0.32 mg/L >1000 mg/L >1000 <sub>24h</sub> mg/L 1 WGK No.: 0201 -2.3	1-6
2.1 To	oxicity ollowing information is 8 mL GH-1 Chemical: PNEC(fresh water): PNEC = Predicted No LC50fish/96h : EC50daphnia/48h : Water hazard clas	triethanolamine triethanolamine Coeffected Concentration ass (DE): 1 icient(octanol-water): -	e CAS No.: 102-71 0.32 mg/L >1000 mg/L >1000 <sub>24h</sub> mg/L 1 WGK No.: 0201	1-6
2.1 To	oxicity ollowing information is 8 mL GH-1 Chemical: PNEC = Predicted No LC50fish/96h : EC50daphnia/48h : Water hazard clas Dispersion coeffic	triethanolamine triethanolamine Coeffected Concentration ass (DE): 1 icient(octanol-water): -	e CAS No.: 102-71 0.32 mg/L >1000 mg/L >1000 <sub>24h</sub> mg/L 1 WGK No.: 0201 -2.3	
2.1 To	oxicity blowing information is 8 mL GH-1 Chemical: PNEC = Predicted No LC50fish/96h : EC50daphnia/48h : Water hazard clas Dispersion coeffic Storage class (VC Chemical:	s valid for pure subst triethanolamine c o Effected Concentration ass (DE): 1 icient <sub>(octanol-water)</sub> : - CI): 1 ethanol	CAS No.: 102-71 0.32 mg/L >1000 mg/L >1000 <sub>24h</sub> mg/L 1 WGK No.: 0201 -2.3 12	
2.1 To	oxicity blowing information is 8 mL GH-1 Chemical: PNEC(fresh water) : PNEC = Predicted No LC50fish/96h : EC50daphnia/48h : Water hazard clas Dispersion coeffic Storage class (VC Chemical: PNEC(fresh water) : PNEC = Predicted No	s valid for pure subst triethanolamine : Co o Effected Concentration ass (DE): 1 icient <sub>(octanol-water)</sub> : - CI): 1 ethanol : Co o Effected Concentration	CAS No.: 102-71 0.32 mg/L >1000 mg/L >1000 <sub>24h</sub> mg/L 1 WGK No.: 0201 -2.3 12 CAS No.: 64-17-5 0.96 mg/L	
2.1 To	oxicity blowing information is 8 mL GH-1 Chemical: PNEC(fresh water) : PNEC = Predicted No LC50fish/96h : EC50daphnia/48h : Water hazard clas Dispersion coeffic Storage class (VC Chemical: PNEC(fresh water) : PNEC = Predicted No LC50daphnia magna	s valid for pure subst triethanolamine : Co o Effected Concentration ass (DE): 1 icient(octanol-water): - CI): 1 ethanol : co o Effected Concentration ma/48h : 2	CAS No.: 102-71 0.32 mg/L >1000 mg/L >1000 <sub>24h</sub> mg/L 1 WGK No.: 0201 -2.3 12 CAS No.: 64-17-5 0.96 mg/L >100 mg/L	
2.1 To	oxicity blowing information is 8 mL GH-1 Chemical: PNEC(fresh water) : PNEC = Predicted No LC50fish/96h : EC50daphnia/48h : Water hazard clas Dispersion coeffic Storage class (VC Chemical: PNEC(fresh water) : PNEC = Predicted No LC50daphnia magna LC50pimephales pro	s valid for pure subst triethanolamine : Co o Effected Concentration ass (DE): 1 icient(octanol-water): - CI): 1 ethanol : Co o Effected Concentration a/48h: 2 romelas/96h: 1	CAS No.: 102-71 0.32 mg/L >1000 mg/L >1000 <sub>24h</sub> mg/L 1 WGK No.: 0201 -2.3 12 CAS No.: 64-17-5 0.96 mg/L >100 mg/L 13400 - 15100 mg/L	
2.1 To	oxicity blowing information is 8 mL GH-1 Chemical: PNEC = Predicted No LC50fish/96h : EC50daphnia/48h : Water hazard class Dispersion coeffic Storage class (VC Chemical: PNEC = Predicted No LC50daphnia magna LC50gimephales pro LC50leuciscus idus/s	s valid for pure subst triethanolamine : Co o Effected Concentration ass (DE): 1 icient(octanol-water): - CI): 1 ethanol : Co o Effected Concentration na/48h : 2 romelas/96h : 1 //96h : [4]	CAS No.: 102-71 0.32 mg/L >1000 mg/L >1000 <sub>24h</sub> mg/L 1 WGK No.: 0201 -2.3 12 CAS No.: 64-17-4 0.96 mg/L >100 mg/L >100 mg/L 13400 - 15100 mg/L [48h] 8140 mg/L	
2.1 To	oxicity billowing information is 8 mL GH-1 Chemical: PNEC = Predicted No LC50fish/96h : EC50daphnia/48h : Water hazard class Dispersion coeffic Storage class (VC Chemical: PNEC(fresh water) : PNEC = Predicted No LC50daphnia magna LC50pimephales pro LC50leuciscus idus/6 LC50fish/96h :	s valid for pure substitution triethanolamine co Effected Concentration sass (DE): 1 icient(octanol-water): - CI): 1 ethanol co Effected Concentration na/48h : 2 romelas/96h : 1 /96h : [4]	CAS No.: 102-71 0.32 mg/L >1000 mg/L >1000 <sub>24h</sub> mg/L 1 WGK No.: 0201 -2.3 12 CAS No.: 64-17-4 0.96 mg/L >100 mg/L 13400 - 15100 mg/L [48h] 8140 mg/L 13 g/L	
2.1 To	oxicity billowing information is 8 mL GH-1 Chemical: PNEC (fresh water) : PNEC = Predicted No LC50fish/96h : EC50daphnia/48h : Water hazard class Dispersion coeffic Storage class (VC Chemical: PNEC (fresh water) : PNEC = Predicted No LC50daphnia magna LC50daphnia magna LC50pimephales pro LC50fish/96h : EC50daphnia/48h :	s valid for pure subst triethanolamine : Co o Effected Concentration ass (DE): 1 cicient <sub>(octanol-water)</sub> : -: CI): 1 ethanol : o Effected Concentration na/48h : 2 romelas/96h : 1 y96h : 1 S	CAS No.: 102-71 0.32 mg/L >1000 mg/L >1000 <sub>24h</sub> mg/L 1 WGK No.: 0201 -2.3 12 CAS No.: 64-17-4 0.96 mg/L >100 mg/L 13400 - 15100 mg/L [48h] 8140 mg/L 13 g/L 9.3-14.2 g/L	
2.1 To	oxicity billowing information is 8 mL GH-1 Chemical: PNEC (fresh water) : PNEC = Predicted No LC50fish/96h : EC50daphnia/48h : Water hazard class Dispersion coeffic Storage class (VC Chemical: PNEC (fresh water) : PNEC = Predicted No LC50daphnia magna LC50pimephales pro LC50pimephales pro LC50pieuciscus idus/s LC50fish/96h : EC50daphnia/48h : IC50scenedesmus q	s valid for pure subst triethanolamine : Co o Effected Concentration ass (DE): 1 icient(octanol-water): - CI): 1 ethanol : o Effected Concentration na/48h : 2 romelas/96h : 1 y96h : 4 guadricauda/72h : [	CAS No.: 102-71 0.32 mg/L >1000 mg/L >1000 <sub>24h</sub> mg/L 1 WGK No.: 0201 -2.3 12 CAS No.: 64-17-4 0.96 mg/L >100 mg/L 13400 - 15100 mg/L [48h] 8140 mg/L 13 g/L	
2.1 To	oxicity billowing information is 8 mL GH-1 Chemical: PNEC(fresh water): PNEC = Predicted No LC50fish/96h : EC50daphnia/48h : Water hazard clas Dispersion coeffic Storage class (VC Chemical: PNEC(fresh water): PNEC = Predicted No LC50daphnia magna LC50pimephales pro LC50leuciscus idus/8 LC50fish/96h : EC50daphnia/48h : IC50scenedesmus q EC10pseudomonas Water hazard clas	s valid for pure subst triethanolamine : Co o Effected Concentration : Sass (DE): 1 icient(octanol-water): - CI): 1 ethanol : co o Effected Concentration ma/48h : 2 romelas/96h : 1 y96h : [1 : g quadricauda/72h : [2 s putita/16h : [2 ass (DE): 1	CAS No.: 102-71 0.32 mg/L >1000 mg/L >1000 <sub>24h</sub> mg/L 1 WGK No.: 0201 -2.3 12 CAS No.: 64-17-3 0.96 mg/L >100 mg/L 13400 - 15100 mg/L [48h] 8140 mg/L 13 g/L 9.3-14.2 g/L [7d] 5000 mg/L [EC5] 6500 mg/L 1 WGK No.: 0096	
2.1 To	oxicity billowing information is 8 mL GH-1 Chemical: PNEC(fresh water): PNEC = Predicted No LC50fish/96h : EC50daphnia/48h : Water hazard clas Dispersion coeffic Storage class (VC Chemical: PNEC(fresh water): PNEC = Predicted No LC50daphnia magna LC50pimephales pro LC50leuciscus idus/8 LC50fish/96h : EC50daphnia/48h : IC50scenedesmus q EC10pseudomonas Water hazard clas	s valid for pure subst triethanolamine : Co o Effected Concentration ass (DE): 1 cicient(octanol-water): - CI): 1 ethanol : co o Effected Concentration na/48h : 2 romelas/96h : 1 y96h : [4 : 9 quadricauda/72h : [7 s putita/16h : 1]	<ul> <li>CAS No.: 102-71</li> <li>0.32 mg/L</li> <li>&gt;1000 mg/L</li> <li>&gt;100024h mg/L</li> <li>1 WGK No.: 0201</li> <li>-2.3</li> <li>12</li> <li>CAS No.: 64-17-4</li> <li>0.96 mg/L</li> <li>&gt;100 mg/L</li> <li>&gt;13400 - 15100 mg/L</li> <li>[48h] 8140 mg/L</li> <li>13 g/L</li> <li>9.3-14.2 g/L</li> <li>[7d] 5000 mg/L</li> <li>[EC5] 6500 mg/L</li> </ul>	



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REF: 931029		VISOCOLOR ECO Total Hardness		Page: 8/10
Printing date:	02.06.2020	Date of issue: 20.05.2019		-
	Storage class (VCI):	3		
	C ( )		CAS No.: -	
	Chemical: indicator dye Storage class (VCI):	( <i>s)</i> 12-13	CAS NO.: -	
	30 mL GH-2			
	Chemical: ammonia sol PNEC(fresh water) : PNEC = Predicted No Effected Concentration		CAS No.: 1336-21-6	
	LC50 <sub>fish/96h</sub> : EC50 <sub>daphnia/48h</sub> : Water hazard class (DE): Storage class (VCI):	0,89 mg/L 101 mg/L 2 WGK No.: 0211 8 B		
	Chemical: ethylendinitri PNEC(fresh water) : PNEC = Predicted No Effected Concentrati	<i>lo tetraacetic acid, di Na-salt (EDTA-Na)</i> 2.2 mg/L <sup>on</sup>	CAS No.: 6381-92-6	
	LC50 <sub>fish/96</sub> h : EC50 <sub>daphnia/48</sub> h : IC50 <sub>scenedesmus</sub> quadricauda/72h : EC10 <sub>pseudomonas</sub> putita/16h : Water hazard class (DE): Dispersion coefficient <sub>(octanol-water)</sub> : Storage class (VCI):	[4d] 41-1592 mg/L 140 mg/L [72h] 2.77-1000 mg/L [EC10, 30h] 500 mg/L 2		
	rsistence and degradability necessary			
	oaccumulative potential			
	<b>bility in soil</b> necessary			
	esults of PBT and vPvB assess data available	ment		
	her adverse effects additional data available			

### SECTION 13: Disposal considerations

Please observe local regulations for collection and disposal of hazardous waste and contact waste disposal company, where you will obtain information on laboratory waste disposal (waste code number 16 05 06).

#### 13.1 Waste treatment methods

Normally it is possible to empty small amounts (diluted!) into drains.

### SECTION 14: Transport information

14.1. UN number: 3316 14.2. UN proper shipping name: Chemical Kit 14.3. Class: 14.4. Packing group: 9 11 Road transport Classification code: M11 Tunnel restriction code: Е Limited Quantity: acc. ADR 3.3.1/251: see LQ in Alternative declaration for transportation Air transport max. weight PAX: PAX: 960 10 KG CAO: 960 10 KG max. weight CAO: Maritime transport EmS: F-A, S-P Storage category: А

Or use Alternative declaration for transportation: UN 1993 class 3 III, Excepted Quantities (≤30 mL/∑≤1 L) = ADR/ IATA E1 or 1993 14.2 UN proper shipping name: Flammable liquid, n.o.s. (ethanol mixture) 14.1 UN number: 14.3 Class: 3 14.4 Packing group: III Road transport Classification code: F1



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REF: 931029 Printing date: 02.06.2020			VISOCOLOR ECO Total Hardness Date of issue: 20.05.2019		Page: 9/10
Limited Quantity:	5 L	Tunnel restriction co	ode:	E	
Excepted Quantity: Air transport	E 1	Special instructions:	640E		
PAX:	355	max. weight PAX:	60 L		
CAO: Maritime transport	366	max. weight CAO:	220 L		
EmS:	F-E, S-E	Storage category:	А		

### 14.5 Environmental hazards

none, contains only small quantities of hazardous substances

- 14.6 Special precautions for user not necessary
- 14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code not applicable

## **SECTION 15: Regulatory information**

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture German act governing protection from hazardous substances (Chemicals Act / Chemikaliengesetz- ChemG), revised on August 2013 German order governing protection from hazardous substances (Ordinance on Hazardous Substances / Gefahrstoffverordnung -GefStoffV), revised on November 2010, according to Directive 98/24/EC TRGS 200, German engineering rules governing the classification and labelling of hazardous substances, preparations and products, updated October 2011 MN Leaflet/User manual, also see www.mn-net.com Look for your country-specific regulations.

## 15.2 Chemical safety assessment

not necessary for these small amounts ---

## **SECTION 16: Other information**

### 16.1 List of H and P phrases

### 16.1.1 List of relevant H phrases

H226	Flammable liquid and vapour.		
H315	Causes skin irritation.		
H319	Causes serious eye irritation.		

### 16.1.2 List of relevant P phrases

P210Keep away from heat/sparks/open flames/hot surfaces. No smoking.P280shWear protective gloves/eye protection.

16.2 Training advice

Regular safety training.

### 16.3 Recommended restriction on use

Only for professional user.

An individual package of this product or test kit has a moderate hazardous potential.

### 16.4 Further information

MACHEREY-NAGEL GmbH & Co. KG provides the information contained herein in good faith being up-to-date of own realizations at revision time. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgement in determining its appropriateness for a particular purpose.

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### 16.5 Sources of key data

Regulation 453/2010/EU REACH - REQUIREMENTS FOR THE COMPILATION OF SAFETY DATA SHEETS Regulation 487/2013/EU, 4<sup>th</sup> adaptation of CLP regulation to technical and scientific progress Regulation 669/2018/EU, 4<sup>th</sup> adaptation of CLP regulation to technical and scientific progress Regulation 1480/2018/EU, 4<sup>th</sup> adaptation of CLP regulation to technical and scientific progress TRGS 900, German engineering rules governing limits in air at work, updated 03/2019 SUVA .CH, Limits in air at work 2009, revised on 01.2009





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KÜHN, BIRETT Merkblätter Gefährliche Arbeitsstoffe (Data Sheets of Hazardous Substances)

**Revisions/Updates** 

Reason for Revision: 2016-03 Adaptation of regulation 1221/2015/EU 2017-08 Adaption of new ethanol denaturation 2016/1867/EU

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