MACHEREY-NAGEL



Safety Data Sheet

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

REF: 931040	VISOCOLOR ECO Nickel	Page: 1/10
Printing date: 04.01.2018	Date of issue: 14.09.2017	

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

1.1	Product identifier		
	REF	931040	
	Product name	VISOCOLOR ECO Nickel	
	REACH Registration number(s): A registration number for the subst the substance or its use is exclude	see SECTION 3.1/3.2 or tance(s) does not exist because the annual tonnage does not re ed from registration.	equire registration or
		1 x 10 g Ni-1 2 x 20 mL Ni-2	
1.2	Relevant identified uses of the Relevant identified uses	e substance or mixture and uses advis	sed against
	Product for analytical use. Exposure Scenario Classific The exposure scenario is int Uses advised against	cation according REACh, RIP 3.2 Codes: SU 0-2, F tegrated into sections 1-16.	PC 21, PROC 15, AC 0
	not described		
1.3	Details of the supplier of the s	safety data sheet	
	Manufactured by: MACHEREY-NAGEL GmbH & Co.		
	Neumann-Neander-Str. 6-8, 52355 Tel.: +49 2421 969 0	E-mail: msds@mn	-net.com
1.4	Emergency telephone number	r	
	Outside Germany (DE): Call your re DE: Gemeinsames Giftinformations	egional Poisons Information Service or call local Lif szentrum (GGIZ) 99089 Erfurt tel. +4	
	You find our current versions of SDS (22 lan	nguages) in Internet: http://www.mn-net.com/N	ISDS
SECTI	ON 2: Hazard identificatio	n	

2.0 Classification of the complete product

	GHS03	GHS05	GHS07
	DANGER		
1	Hazard cl	lasses/cate	gories

GHS08

Hazard identification	Hazard classes/categori		
H272	Ox. Sol. 2		
H290	Met. Corr. 1		
H302	Acute Tox. 4		
H314	Skin Corr. 1A		
H315	Skin Irrit. 2		
H317	Skin Sens. 1		
H319	Eye Irrit. 2		
H334	Resp. Sens. 1		
H335	STOT SE 3		

Classification of the substance or mixture 2.1

10 g Ni-1

Signal word



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	v v v	

Signal word	DANGER		
Hazard identification	Hazard classes/categories		
H272	Ox. Sol. 2		
H302	Acute Tox. 4		
H315	Skin Irrit. 2		
H317	Skin Sens. 1		
H319	Eye Irrit. 2		
H334	Resp. Sens. 1		
H335	STOT SE 3		

20 mL Ni-2

	GHS05
Signal word	DANGER
Hazard identification	Hazard classes/categories
H290 H314	Met. Corr. 1 Skin Corr. 1A

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 must not be labelled with H and P phrases until 125 mL (EU 1272/2008 Annex I - 1.5.2). This labelling exemption is NOT valid for sensibilizing substances. Oxidizing mixtures with signal word: DANGER and H272 must not be labelled with H and P phrases until 125 mL .

10 g Ni-1



Signal word: DANGER

H317, H334

May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

P261sh, P280sh, P342+311

Avoid breathing dust/vapours. Wear protective gloves/eye protection. If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

20 mL Ni-2



Signal word: DANGER



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H314

Causes severe skin burns and eye damage.

P260sh, P280sh, P303+361+353, P305+351+338, P310

Do not breathe dust/vapours. Wear protective gloves/eye protection. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

2.3 Other hazards

Possible hazards from physicochemical properties

Generally in the case of pH values are less than 2 or higher than 11.5 then it is corrosive. In the case of pH values are less than 5 or higher than 9 then it is irritant. H290 "May be corrosive to metals." has only relevance for higher concentrations and larger amounts. The labelling GHS05 would be creating an "OVERLABELLING" (see GHS Directive 1272/2008/EC Annex I, chapter 1.5.2.1.3., until 125 mL no labelling necessary).

Information pertaining to particular risks to human and possible symptoms

Causes varying degrees of acid burns on the skin, to the eyes and to the mucous membranes and wounds which do not heal quickly depending on the concentration, temperature and the exposure time. Vapours especially which steam from hot liquids and mist can have a severe irritant effect upon the eyes and the respiratory organs. Cause after oral intake, inhalation of vapours/dust, skin contact, impairments of health when ingested in small quantities. May

cause sensitization by skin contact, also in repeated contact of small amounts. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Information pertaining to particular risks to the environment

Avoid contact of substance/mixture to environment. not onnligable

FDI.	not applicable
vPvB:	not applicable

Other hazards

SECTION 3: Composition/information on ingredients

3.1 Substances or 3.2 Mixtures

10 g Ni-1

Chemical: ammo	nium peroxydisulfate		CAS No.: 7727-54-0	
Classification:	H272, Ox. Liq. 2, H302, Aku	t Tox. 4 oral, H315, Skin Ir	rit. 2, H317, Skin Sens. 1, H319, Eye Irrit. 2,	,
H334, Resp. Sens. 1	, H335, STOT SE 3			
Formula:	H ₈ N ₂ O ₈ S ₂			
Pseudonym:	diammonium persulfate			
TSCA Inventory:	listed			
REACH Reg. No.:	01-2119495973-19-xxxx			
EC No.:	231-786-5	Indice No.:	016-060-00-6	
RTECS:	SE0350000	MFCD:	00003390	
KE No.:	KE-09815			
Concentration:	80 - <99 %			
acc. CLP (GHS):	H272, Ox. Liq. 2, H302, Aku	t Tox. 4 oral, H315, Skin Ir	rit. 2, H317, Skin Sens. 1, H319, Eye Irrit. 2,	,
H334, Resp. Sens. 1	, H335, STOT SE 3		· · · · · · · ·	
•				

20 mL Ni-2

Chemical: sodium	hydroxide solution		CAS No.: 1310-73-2
Classification:	H290, Met. Corr. 1, H314, Skin Corr.	1B	
Formula:	NaOH•H ₂ O		
Pseudonym:	soda lye		
TSCA Inventory:	listed		
REACH Reg. No.:	01-2119457892-27-xxxx		
EC No.:	215-185-5	Indice No.:	011-002-00-6
RTECS:	WB4900000		
KE No.:	KE-31487		
Concentration:	10 - <20 %		
acc. CLP (GHS):	H290, Met. Corr. 1, H314, Skin Corr.	1B	



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Printing date: 04.01.20	018	Date of iss	sue: 14.09.2017		
	Chemical: dimet	hylglyoxime		CAS No.: 95-45-4	
	Classification: Formula: Pseudonym:	No criteria for classification or $C_4 H_8 N_2 O_2$ diacetyl dioxime, 2,3-bu	naming of chemical not required. tanedione, 2,3-dioxime		
	TSCA Inventory: REACH Reg. No.: EC No.: RTECS: Concentration:	listed not necessary, amount - 202-420-1 EK2975000 < 1.00 %	<1 t/a MFCD:	00002117	
	acc. CLP (GHS):	The criteria for classification ar	e not fulfilled.		

3.3 Remarks

When not listed, mixtures are added with water [CAS No. 7732-18-5] to 100%.

List of H and P phrases: see section 16.1

SECTION 4: First aid measures

4.1 Description of first aid measures

Place insured person out of danger zone to fresh air immediately. Ensure quiet, warmth, and provide resuscitation if necessary. If necessary contact medical advice. Remove contaminated clothing. Show product package, packing insert and this material safety data sheet to the doctor. Take to a doctor, in a raised position if there are breathing difficulties.

4.1.1 After SKIN Contact

Remove contaminated clothing immediately. Rinse the affected skin or mucous membrane thoroughly for min. 15 minutes under running water. (If possible) use soap. Avoid neutralisation. Then apply a loose bandage.

4.1.2 After EYE Contact

After contact with the eyes rinse thoroughly under running water with the eyelid wide open for min. 10 minutes with eye washing bottle, eye douche or running water (protect intact eye). Before (if possible) apply eye drops Proxymetacaine 0.5%, if the opening the eyelid convulsion is painful. Further treatment to be carried out by an eye specialist.

After INHALATION of vapours 4.1.3

After inhalation of foam or vapour fresh air should be inhaled. Keep airways free. If vomiting and if insensible place patient in recovery position and keep airways free. Administer a Dexamethasone spray as soon as possible. Ensure quiet, warmth, and provide resuscitation if necessary. In the event of respiratory distress ensure that the patient inhales oxygen. Secure the breathing, heart and circulatory function.

4.1.4 After ORAL Intake

After oral intake lots of water with activated charcoal supplement should be drunk after it has been ingested. Do not induce vomiting under any circumstances. Do not make any efforts to neutralise it. Contact medical advice for possible consequences.

4.2 Most important symptoms and effects, both acute and delayed

Chronic Effects: May cause sensitization by skin contact, also in repeated contact of small amounts. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Avoid inhalation of dust. ---

4.3 Indication of any immediate medical attention and special treatment needed

CORROSIVE DAMAGE: After SKIN CONTACT rinse with water for a long time. Efforts to neutralise the substance can frequently make matters worse. Apply glucocorticosteroides following inflammatory reactions. After EYE CONTACT rinse immediately with plenty of water for a long time. Eyelid convulsion measures. Name the corrosive chemical. Further treatment must to be carried out by an eye specialist. After INTAKÉ administer aluminium oxide drug suspensions. Administer a prophylaxis to counter pulmonary oedema following the INGESTION of corrosive aerosols. In the event of RESPIRATORY DISTREES ensure that the patient inhales oxygen. Inform patient respectively further measures and the possibility of long-term damages. ---

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

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. Spray any vapours released with water. Retent fire water. Use only acid-resistant safety equipment.

For great amount - if necessary - protective breathing apparatus which is independent of the ambient air (isolated equipment), and sealed protective clothing is necessary in the event of a large-scale formation of toxic substances.



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5.4 Additional information

Danger for environment only in the event of a large-scale leakage or formation of hazardous substances. ---

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Do not breathe vapours. Wear suitable protective gloves (see 8.2.2). Wear eye protection, respectively face protection. Regular staff training is necessary, indicating hazards and precautions on the basis of operating instructions. Restrictions on activity must be observed

6.2 **Environmental precautions**

not necessarv

6.3 Methods and material for containment and cleaning up

Bind any escaping liquid with inert absorbent. And dispose in accordance to local regulations for the disposal of hazardous chemicals. Clean any contaminated equipment and floors with plenty of water. Collect small amounts of leaked liquid and flush with water into drains.

6.4 Reference to other sections

see information in section 5.4 ---

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handling in accordance with the test instruction, that comes with the product. Use only in well-ventilated working areas.

7.2 Conditions for safe storage, including any incompatibilities The original product package of MACHEREY-NAGEL allows a safe storage. Storage class (VCI): 5.1B Water hazard class (DE): 2

Requirements for stock rooms and containers Keep original product packages tightly closed during handling and storage. Use inbreakable container for transport of glass bottles.

7.3 Specific end use(s)

7.2.1

Product for analytical use.

SECTION 8: Exposure controls/personal protection

8.1 **Control parameters**

10 g Ni-1 Chemical: ammonium p DNEL: DNEL = Derived No-Effec	[inh] 2,06 mg/m ³	CAS No.: 7727-54-0
NIOSH: [TWA] Time-weighted ave	not listed erage to a reference period of 8 hours, [STEL] Short-term exposure limit re	elated to a 15-minute period
OSHA:	not listed	
20 mL Ni-2 Chemical: sodium hydro DNEL: DNEL = Derived No-Effec	[inh] 1 mg/m³	CAS No.: 1310-73-2
TRGS 900 (DE):	2 mg/m³ E/e respirable	
Short-term exposure factor: skin resorptive (H), resp	(=1=, Y) ratory sensitizable (Sa), skin sensitizable (Sh), teratogenic (Z) not secure	ly excluded / (Y) certainly excluded
	2 e mg/m ³ 2 mg/m ³ rage to a reference period of 8 hours, [STEL] Short-term exposure limit re	elated to a 15-minute period
OSHA:	[TWA] 2 mg/m³	
Chemical: dimethylglyox	lime	CAS No.: 95-45-4



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8.2	Exposure controls Good ventilation and extraction s level of cleanliness must be mair	ystem in the room, floor resistant to chemicals with floor drainage and tained at the workplace.	d washing facilities. The highest
8.2.1	2.1 Respiratory protection Use for open access of these substances for example a protection filter, class A/AX. No additional recommendations.		al recommendations.
8.2.2	Hand protection Yes, gloves according EN 374 (permeation time >30 min - level 2), consist of PVC, natural latex, Neopren, or Nitril (f.e or KCL). Use for short times chemical resistant latex gloves with code EN 374-3 level 1.		Neopren, or Nitril (f.ex. from Ansell

8.2.3 Eye protection

Yes, safety glasses according EN 166 with integrated side shields or wrap-around protection or face protection.

8.2.4 Skin protection

Recommended to avoid clothing damage, and to avoid contamination with these hazards.

8.2.5 Personal hygiene

Eating, drinking, smoking, taking snuff and storage of food in work areas and at outdoor workplaces is prohibited. Avoid contact with the skin, eyes and clothing. Rinse any clothing on which the substance has been spilled, and soak it in water. Wash hands thoroughly with soap and water when stopping work and before eating, and then apply protective skin cream.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

10 g Ni-1 Appearance: solid Colour: colourless Odor: odorless pH: 2 - 3120 °C Melting point: instable °C Boiling point: Specific gravity: 1,98 sol. g/cm³ Solubility in water: 0-38 % 20 mL Ni-2 Appearance: liquid Colour: slightly yellow Odor: odorless pH: 13-14 Specific gravity: 1,11 g/cm3

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 F	Reactivity
--------	------------

no further data available.

- 10.2 Chemical stability No known instability.
- 10.3 Possibility of hazardous reactions

Can react violently with organic material. No further data available.

10.4 Conditions to avoid

Not necessary. ---

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.



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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.

10 g Ni-1

Chemical: CAS No.: 7727-54-0 ammonium peroxydisulfate **TSCA** Inventory: California Proposition 65 List: not listed listed Yes (PEC/18) Australia NICNAS: Canada CEPA 1999: DSL Yes not listed, Japan PDSCL: not listed Japan CSCL/PRTR: Japan ISHL: listed ≥1,0%/≥0,1%, Article 57-2 (SDS required) South Korea TCCA: not listed Korea Exist.Chem.Inventory: KE-09815 LD50orl rat : 495 mg/kg Acute Effects: Cause after oral intake, inhalation of vapours/dust, skin contact, impairments of health when ingested in small quantities. Chronic Effects: May cause sensitization by skin contact, also in repeated contact of small amounts. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

20 mL Ni-2

Chemical:	sodium hydroxide solution	CAS No.: 1310-73-2
TSCA Inventory:	listed	California Proposition 65 List: not listed
Exposure Routes:	inhalation, ingestion,	skin and/or eye contact
Target Organs:	Eyes, skin, respirator	y system
Symptoms:	irritation eyes, skin, m	nucous membrane; pneumonitis; eye, skin burns; temporary loss of hair
Australia NICNAS:	not listed	Canada CEPA 1999: DSL Yes
Japan CSCL/PRTR:	not listed, Japan PDS	SCL: not listed
Japan ISHL:	listed ≥1,0%/≥1,0%, <i>F</i>	Article 57-2 (SDS required)
South Korea TCCA:	not listed	
Korea Exist.Chem.Inve	entory: KE-31487	
LD50 _{orl rat} :	[40%] 1250 / [<25%] >	>2000 mg/kg
LD50orl mus :	40 mg/kg	

Chemical:	dimethylglyoxime	CAS No.: 95-45-4
TSCA Inventory:	listed	
LD50 _{orl rat} :	250 mg/kg	

SECTION 12: Ecological information

12.1 Toxicity

Following information is valid for pure substances.

10 g Ni-1

g Ni-1			
Chemical:	ammonium p	eroxydisulfate	CAS No.: 7727-54-0
EC50 _{daphnia/48h} :		185 _{24h} mg/L	
IC50 _{scenedesmus}	quadricauda/72h:	540 mg/L	
Water hazard cla		1 WGK No.: 0836	
Storage class (V	'CI):	5.1 B	

20 mL Ni-2

20			
	Chemical: sodiui	n hydroxide solution	CAS No.: 1310-73-2
	Avoid contact of substance/	mixture to environment.	
	LC50leuciscus idus/96h :	35-189 mg/L	
	LC50fish/96h :	45.4 mg/L	
	EC50 _{daphnia/48h} :	>100 mg/L	
	Water hazard class (DE):	1 WGK No.: 142	
	Storage class (VCI):	8 B	
	Chemical: dimeti	hylqlyoxime	CAS No.: 95-45-4
	Water hazard class (DE):	2	
	Storage class (VCI):	12-13	



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12.2	Persistence and degradabilit not necessary	y	
12.3	Bioaccumulative potential not necessary		
12.4	Mobility in soil not necessary		
12.5	Results of PBT and vPvB ass no data available	sessment	
12.6	Other adverse effects no additional data available		
SECT	ION 13: Disposal conside	rations	
	lease observe local regulations for collecti formation on laboratory waste disposal (w	on and disposal of hazardous waste and contact waste disposal aste code number 16 05 06).	company, where you will obtain

13.1 Waste treatment methods

Normally it is possible to empty small amounts (diluted!) into drains. Empty containers of corrosive reagents prior to disposal, rinse with water.

SECTION 14: Transport information

14.1. UN number:	3316 14.2.	UN proper shipping	name: Chemical Kit
14.3. Class:	9 14.4.	Packing group: II	
Road transport			
Classification code:	M11	Tunnel restriction co	de: E
Limited Quantity:	acc. ADR 3.3	.1/251: see LQ in Alter	rnative declaration for transportation
Air transport			
PAX:	960	max. weight PAX:	10 KG
CAO:	960	max. weight CAO:	10 KG
Maritime transport		-	
EmS:	F-A, S-P	Storage category:	A

Or use Alternative declaration for transportation:

UN No.: (see below) class 8 II, Excepted Quantities (≤30 mL/∑≤500 mL) = ADR/ IATA E2

or 14.1 UN number: 14.3 Class: 3266 14.2 UN proper shipping name: Corrosive liquid, basic, inorganic, n.o.s. (sodium hydroxide solution) 8 14.4 Packing group: II Road transport Classification code: C5 Limited Quantity: Tunnel restriction code: Е 1 L Excepted Quantity: E 2 Air transport PAX: 851 max. weight PAX: 1 L CAO: 855 max. weight CAO: 30 L Maritime transport F-A, S-B Storage category: В EmS:

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

14.5 **Environmental hazards**

not necessary, 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



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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

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		
	H272	May intensify fire; oxidizer.		
	H290	May be corrosive to metals.		
	H302	Harmful if swallowed.		
	H314	Causes severe skin burns and eye damage.		
	H315	Causes skin irritation.		
	H317	May cause an allergic skin reaction.		
	H319	Causes serious eye irritation.		
	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.		
	H335	May cause respiratory irritation.		
16.1.2	List of relevant P phrases			
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.		
	P260sh	Do not breathe dust/vapours.		
	P261sh	Avoid breathing dust/vapours.		
	P264W	Wash with water thoroughly after handling.		
	P280sh	Wear protective gloves/eye protection.		
	P301+312	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.		
	P303+361+353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].		
	P304+340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.		
	P305+351+338	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.		
	P330	Rinse mouth.		
	P342+311	If experiencing respiratory symptoms: Call a POISON CENTER/doctor.		
	P390	Absorb spillage to prevent material damage.		
	P403+233	Store in a well-ventilated place. Keep container tightly closed.		

16.2 Training advice

Multiple safety training of staffs about danger and protection by using hazards in working area. Additionally training and introduction of staffs for using these products.

16.3 Recommended restriction on use

Only for professional user.

Look about employee restrictions for young people (f. ex. 94/33/EC or DE § 22 JArbSchG)! Look about employee restrictions for pregnant women and nursing women (f.ex. 92/85/EEC or for DE §§ 3, 4 und 6 MuSchG)! 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, 4th adaptation of CLP regulation to technical and scientific progress
- TRGS 900, German engineering rules governing limits in air at work, updated September 2016
- SUVA .CH, Limits in air at work 2009, revised on 01.2009

TRGS 907, German engineering rules governing listing of substances and causes of sensitizations, updated November 2011



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MACHEREY-NAGEI



Safety Data Sheet

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

REF: 931040	VISOCOLOR ECO Nickel	Page: 10/10
Printing date: 04.01.2018	Date of issue: 14.09.2017	

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

Revisions/Updates

Reason for Revision: 2016-03 Adaptation of regulation 1221/2015/EU

(MN) EN ISO 9001 CERTIFIED

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