MACHEREY-NAGEI



Safety Data Sheet

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

REF: 920028	VISOCOLOR HE Cyanide	Page: 1/11
Printing date: 02.06.2020	Date of issue: 06.02.2020	

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

1.1 I	Product	identifier
-------	---------	------------

REF Product name 920028 VISOCOLOR HE Cyanide

REACH Registration number(s): see SECTION 3.1/3.2 or A registration number for the substance(s) does not exist because the annual tonnage does not require registration or the substance or its use is excluded from registration.

1	x 10 g CN-1
1	x 6 g CN-2
1	x 30 mL CN-3
1	x 30 mL CN-4

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

Relevant identified uses

Product for analytical use.

Exposure Scenario Classification according REACh, RIP 3.2 Codes: SU 0-2, PC 21, PROC 15, AC 0 The exposure scenario is integrated into sections 1-16. Uses advised against

not described

1.3 Details of the supplier of the safety data sheet

Manufactured by:

MACHEREY-NAGEL GmbH & Co. KG Neumann-Neander-Str. 6-8, 52355 Dueren, GERMANY Tel.: +49 2421 969 0

E-mail: sds@mn-net.com (msds@mn-net.com)

1.4 Emergency telephone number

Outside Germany (DE): Call your regional Poisons Information Service or call local Life Saving Service. 99089 Erfurt tel. +49 361 730 730 DE: Gemeinsames Giftinformationszentrum (GGIZ)

You find our current versions of SDS (22 languages) in Internet:

http://www.mn-net.com/SDS

SECTION 2: Hazard identification

2.0 Classification of the complete product



Signal word	DANGER
Hazard identification	Hazard classes/categories
EUH031 H226 H314 H332 H334	031 not defined Flam. Liq. 3 Skin Corr. 1B Acute Tox. 4 inh. Resp. Sens. 1

2.1 Classification of the substance or mixture

10 g CN-1



MACHEREY-NAGEL GmbH & Co. KG · Neumann-Neander-Str. 6-8 · 52355 Düren · Germany DE/international: CH: FR: US: Tel.: +49 24 21 969-0 Tel.: +41 62 388 55 00 Tel.: +33 388 68 22 68 Tel.: +1 484 821 0984 Fax: +49 24 21 969-199 Fax: +41 62 388 55 05 Fax: +33 388 51 76 88 +1 484 821 1272 Fax: Version: M V 4.12.0 E-mail: info@mn-net.com E-mail: sales-ch@mn-net.com E-mail: sales-fr@mn-net.com E-mail: sales-us@mn-net.com



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

REF: 920028	VISOCOLOR HE Cyanide	Page: 2/
Printing date: 02.06.2020	Date of issue: 06.02.2020	
	GHS05 GHS08	
Signal word	DANGER	
Hazard identification	Hazard classes/categories	
EUH031	031 not defined	
H314 H334	Skin Corr. 1B Resp. Sens. 1	
6 g CN-2		
Signal word	Do not need labelling as hazardous	
Signal word	-	
No hazard class		
30 mL CN-3		
	Do not need labelling as hazardous	
Signal word	-	
No hazard class		
30 mL CN-4		
	GHS02 GHS07	
Signal word		
Signal word	WARNING	
Hazard identification	Hazard classes/categories	
H226	Flam. Liq. 3	

2.2 Label elements

H332

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). This labelling exemption is NOT valid for sensibilizing substances.

10 g CN-1



Signal word: DANGER

H314, H334

Causes severe skin burns and eye damage. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

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

Acute Tox. 4 inh.

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.

ACHEREY-NAGE (MN> ISO 9001 CERTIFIEI

Tel.:

Fax:

MACHEREY-NAGEL GmbH & Co. KG · Neumann-Neander-Str. 6-8 · 52355 Düren · Germany DE/international: CH: FR: US: +49 24 21 969-0 Tel.: +41 62 388 55 00 Tel.: +33 388 68 22 68 Tel.: +1 484 821 0984 +49 24 21 969-199 Fax: +41 62 388 55 05 Fax: +33 388 51 76 88 Fax: +1 484 821 1272 Version: M V 4.12.0 E-mail: info@mn-net.com E-mail: sales-ch@mn-net.com E-mail: sales-fr@mn-net.com E-mail: sales-us@mn-net.com

MACHEREY-NAGEI



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

REF: 920028	VISOCOLOR HE Cyanide	Page: 3/11
Printing date: 02.06.2020	Date of issue: 06.02.2020	

6 g CN-2

Do not need labelling as hazardous Signal word: -

30 mL CN-3

Do not need labelling as hazardous Signal word: -

30 mL CN-4



Signal word: WARNING

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. Flammable properties. ---

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 impairments of health when ingested in small quantities. 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.
PBT:	not applicable

vPvB: not applicable

Other hazards

Contains an odor intensive reagent. ---

SECTION 3: Composition/information on ingredients

3.1 Substances or 3.2 Mixtures

10 g CN-1			
Chemical: chlo	ramine T		CAS No.: 127-65-1
Classification:	H302 Acute Tox 4 oral H314	Skin Corr 1B H334 F	Resp. Sens. 1, EUH031, 031 not defined
Formula:	C ₇ H ₇ CINNaO ₂ S		
	-1 1	anagulfanamida. N abla	ra 4 mathyl hanzanagylfanamida, godiym golt
Pseudonym:		enesuionamide, N-chio	ro-4-methyl-benzenesulfonamide, sodium salt
TSCA Inventory:	listed		
EC No.:	204-854-7	Indice No.:	616-010-00-9
RTECS:	XT5616800	MFCD:	00000522
KE No.:	2000-3-1539		
Concentration:	5 - <10 %		
acc. CLP (GHS):	H314, Skin Corr. 1B, H334, Re	esp Sens 1 FUH031 (031 not defined
Chemical: di-se	odium hydrogen phosphate		CAS No.: 7558-79-4
Classification:	No criteria for classification or naming	of chemical not required	
Formula:	Na ₂ HPO ₄	or orionnoal not required.	
TSCA Inventory:	listed		
REACH Reg. No.:			
EC No.:	231-448-7		
RTECS:	WC460000		
KE No.:	KE-12344		
Concentration:	50 - <100 %		
acc. CLP (GHS):	The criteria for classification are not fu	ılfilled.	

6 g CN-2



MACHEREY-NAGEL GmbH & Co. KG · Neumann-Neander-Str. 6-8 · 52355 Düren · Germany DE/international: CH: FR: US: Tel.: +49 24 21 969-0 Tel.: +41 62 388 55 00 Tel.: +33 388 68 22 68 Tel.: +1 484 821 0984 Fax: +49 24 21 969-199 Fax: +41 62 388 55 05 Fax: +33 388 51 76 88 Fax: +1 484 821 1272 Version: M V 4.12.0 E-mail: info@mn-net.com E-mail: sales-ch@mn-net.com E-mail: sales-fr@mn-net.com E-mail: sales-us@mn-net.com



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

REF: 920028		VISOCOLOR H	E Cyanide	Page: 4/1
Printing date: 02.06.2020		Date of issue: 0	6.02.2020	
C	chemical: <i>barbit</i>	uric acid		CAS No.: 67-52-7
	lassification:	No criteria for classification or naming	a of chemical not required	CAS NO.: 07-52-7
	ormula:	$C_4 H_4 N_2 O_3$	g of offormout not required.	
P	seudonym:	2,4,6-trihydroxypyrimidine, 1H	I-pyrazole, 3,5-dimethyl-	
	SCA Inventory:	listed		
	REACH Reg. No.:	as intermediate		
	C No.:	200-658-0	NEOD	0000000
	RTECS:	CP800000	MFCD:	00006666
	E No.: Concentration:	97-3-1 80 - <100 %		
	cc. CLP (GHS):	The criteria for classification are not t	fulfilled	
-			luimeu.	
30 mL CN				
		hyl sulfoxide		CAS No.: 67-68-5
-	classification:	No criteria for classification or namin	g of chemical not required.	
	ormula:	$C_2 H_6 OS$	20	
	seudonym: SCA Inventory:	DMSO, 1,1'-sulfinylbis-metha listed	ne	
	REACH Reg. No.:	01-2119431362-50-xxxx		
	C No.:	200-664-3		
	TECS:	PV6210000	MFCD:	00002089
K	E No.:	KE-32367		
	concentration:	80 - <100 %		
a	cc. CLP (GHS):	The criteria for classification are not	fulfilled.	
C	hemical: chem	icals/mixture < 1%		CAS No.: -
	lassification:	No criteria for classification or naming	g of chemical not required.	
	SCA Inventory:	all listed, <1%		
	E No.:	listed		
	Concentration:	0.1 - <1 %		
a	cc. CLP (GHS):	The criteria for classification are not	fulfilled.	
30 mL CN	-4			
C	hemical: <i>pyridi</i>	ne		CAS No.: 110-86-1
-	lassification:		ute Tox. 4 oral, H312, Ad	cute Tox. 4 derm., H332, Acute Tox. 4 inh.
	ormula:	$C_5 H_5 N$		
	seudonym:	Azabenzene, Azine		
	SCA Inventory:	listed		
	REACH Reg. No.:	01-2119493105-40-xxxx	Indice No.:	613-002-00-7
	RTECS:	203-809-9 UR8400000	MFCD:	00011732
	E No.:	KE-29929	WIFCD.	00011732
	Concentration:	32 - <44 %		
	cc. CLP (GHS):	H226, Flam. Liq. 3, H332, Ac	ute Tox. 4 inh.	

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.



www.mn-net.com

MACHEREY-NAGEL GmbH & Co. KG · Neumann-Neander-Str. 6-8 · 52355 Düren · Germany DE/international: CH: FR: US: Tel.: +49 24 21 969-0 Tel.: +41 62 388 55 00 Tel.: +33 388 68 22 68 Tel.: +1 484 821 0984 +49 24 21 969-199 Fax: Fax: +41 62 388 55 05 Fax: +33 388 51 76 88 Fax: +1 484 821 1272 Version: M V 4.12.0 E-mail: info@mn-net.com E-mail: sales-ch@mn-net.com E-mail: sales-fr@mn-net.com E-mail: sales-us@mn-net.com



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

REF: 920028	VISOCOLOR HE Cyanide	Page: 5/11
Printing date: 02.06.2020	Date of issue: 06.02.2020	

4.1.3 After INHALATION of vapours

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. ---

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 INTAKE 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

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. 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.

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 necessary

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.



MACHEREY-NAGEL	MACH	HEREY-NAGEL GmbH & C	o. KG ·	Neumann-Neander-Str. 6–8	· 5235	5 Düren · Germany		
	DE/ir	iternational:	CH:		FR:		US:	
	Tel.:	+49 24 21 969-0	Tel.:	+41 62 388 55 00	Tel.:	+33 388 68 22 68	Tel.:	+1 484 821 0984
ISO 9001 CERTIFIED	Fax:	+49 24 21 969-199	Fax:	+41 62 388 55 05	Fax:	+33 388 51 76 88	Fax:	+1 484 821 1272
Version: M V 4.	1 _{2.0} E-mai	l: info@mn-net.com	E-mai	il: sales-ch@mn-net.com	E-mai	l: sales-fr@mn-net.com	E-mai	l: sales-us@mn-net.com



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

REF: 9 Printing	20028 g date: 02.06.2020	VISOCOLOR HE Cyanide Date of issue: 06.02.2020	Page: 6/1
	Storage class (VCI): Water hazard class (DE):	3 2	
7.2.1	Requirements for stock r Keep original product pack	ooms and containers ages tightly closed during handling and storage. Use inb	reakable container for transport of glass bottles.
7.3	Specific end use(s) Product for analytical use.		
SECT	ION 8: Exposure cont	trols/personal protection	
8.1	Control parameters		
	10 g CN-1 Chemical: chloramine T NIOSH: ITWAI Time-weighted av	T not listed verage to a reference period of 8 hours, [STEL] Short-term exposure lin	CAS No.: 127-65-1
	OSHA:	not listed	
	Chemical: <i>di-sodium hy</i> DNEL: DNEL = Derived No-Effe	/drogen phosphate 4.07 _{inh} mg/m³ ect Level (for workers)	CAS No.: 7558-79-4
	TRGS 900 (DE):	- E/e respirable	
	6 g CN-2 Chemical: barbituric ac	id	CAS No.: 67-52-7
	30 mL CN-3 Chemical: <i>dimethyl suli</i> DNEL: DNEL = Derived No-Effe	394 _{inh} mg/m³	CAS No.: 67-68-5
	PNEC _(fresh water) : PNEC = Predicted No E TRGS 900 (DE):	17 mg/L ffected Concentration 50 ppm / 160 mg/m³	
	Short-term exposure factor skin resorptive (H), res SUVA(CH) MAK value:	 E/e respirable 2 (I), H, Z piratory sensitizable (Sa), skin sensitizable (Sh), teratogenic (Z) not sec 50 ppm / 160 mg/m³ 	curely excluded / (Y) certainly excluded
	Chemical: chemicals/m		CAS No.: -
	30 mL CN-4 Chemical: pyridine PNEC(fresh water) : PNEC = Predicted No E	300 μg/L ffected Concentration	CAS No.: 110-86-1
	EU value: TRGS 900 (DE):	[TWA] 5 ppm / 15 mg/m ³ [8h] 5 ppm / 15 mg/m ³ E/e respirable	
	Short-term exposure factor skin resorptive (H), res		curely excluded / (Y) certainly excluded
		5 ppm / 15 mg/m ³ [TWA] 5 ppm / 15 mg/m ³ verage to a reference period of 8 hours, [STEL] Short-term exposure lin	nit related to a 15-minute period
	OSHA:	[TWA] 5 ppm / 15 mg/m³	
8.2	Exposure controls Good ventilation and extraction level of cleanliness must be ma	system in the room, floor resistant to chemicals with floo intained at the workplace.	or drainage and washing facilities. The highest
8.2.1	Respiratory protection	se substances for example a protection filter, class A/AX	. No additional 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.ex. from Ansell or KCL). Use for short times chemical resistant latex gloves with code EN 374-3 level 1.

www.mn-net.com



MACHEREY-NAGEL GmbH & Co. KG · Neumann-Neander-Str. 6-8 · 52355 Düren · Germany DE/international: CH: FR: Tel.: +49 24 21 969-0 Tel.: +41 62 388 55 00 Tel.: +33 388 68 22 68 +49 24 21 969-199 Fax: Fax: +41 62 388 55 05 Fax: +33 388 51 76 88 E-mail: sales-ch@mn-net.com E-mail: sales-fr@mn-net.com

US: Tel.: +1 484 821 0984 Fax: +1 484 821 1272 E-mail: sales-us@mn-net.com



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

REF: 920	028	VISOCOLOR HE C	yanide	Page: 7/1				
Printing d	late: 02.06.2020	Date of issue: 06.02	2.2020					
8.2.3	Eye protection Yes, safety glasses according E	ion glasses according EN 166 with integrated side shields or wrap-around protection or face protection.						
3.2.4	Skin protection Recommended to avoid clothing	damage, and to avoid contamin	ation 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.							
	ON 9: Physical and cher	• •						
9.1	Information on basic physic	cal and chemical propert	ies					
	10 g CN-1 Appearance: powder (solid) pH: Solubility in water:	Colour: colourless 7-8 0-100 %	Odor: chloric					
	6 g CN-2 Appearance: powder (solid) Melting point:	Colour: white 250-252 °C	Odor: odorless					
	30 mL CN-3 Appearance: liquid pH: Flash point: Specific gravity: Solubility in water:	Colour: colourless 6-8 95 °C 1,1 g/cm³ 0-100 %	Odor: fusty, mouldy					
	30 mL CN-4 Appearance: liquid pH: Specific gravity: Solubility in water:	Colour: colourless 6-8 0,99 g/cm³ 0-100 %	Odor: like pyridine					
9.2	Other information Data for the other parameters of the Relevant Properties of Substance		ise no registration and no chemical safety r	report is required.				

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

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.



MACHEREY-NAGEL GmbH & Co. KG · Neumann-Neander-Str. 6-8 · 52355 Düren · Germany DE/international: CH: FR: Tel.: +49 24 21 969-0 Tel.: +41 62 388 55 00 Tel.: Fax: +49 24 21 969-199 Fax: +41 62 388 55 05 Fax:

US: Tel.: +1 484 821 0984 Fax: +1 484 821 1272 E-mail: sales-us@mn-net.com

Version: M V 4.12.0 E-mail: info@mn-net.com

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

+33 388 68 22 68 +33 388 51 76 88 E-mail: sales-fr@mn-net.com



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

REF: 92 Printing	20028 date: 02.06.2020	VISOCOLOR HE Cyanide Date of issue: 06.02.2020	Page: 8/
	ION 11: Toxicological		
1.1	Information on toxicolog		is product are not available
	10 g CN-1	or pure substances. Quantitative data on the toxicity of the	s product are not available.
	Chemical: chlorat TSCA Inventory: Australia NICNAS: Japan CSCL/PRTR: Japan ISHL: South Korea TCCA: Korea Exist.Chem.Inventory LD50 _{orl} rat : Acute Effects: Cause after in	listed California Proposition 65 List: not lis not listed Canada CEPA 1999: DSL Y not listed, Japan PDSCL: not listed not listed 2000-3-1539 ~1000 mg/kg pairments of health when ingested in small quantities. sensitization by skin contact, also in repeated contact of sm	/es
	Chemical: <i>di-sodi</i> TSCA Inventory: Korea Exist.Chem.Inventory LD50 _{orl rat} :	um hydrogen phosphate listed KE-12344 17 g/kg	CAS No.: 7558-79-4
	6 g CN-2		
	Chemical: barbitu TSCA Inventory: Korea Exist.Chem.Inventory	ric acid listed California Proposition 65 List: Barbit 97-3-1	CAS No.: 67-52-7 turates listed, developmental
	30 mL CN-3		
	Chemical: dimeth TSCA Inventory: Korea Exist.Chem.Inventory LD50 _{orl rat} : LD50 _{drm rat} :	yl sulfoxide listed KE-32367 14.5 g/kg 40 g/kg	CAS No.: 67-68-5
	Chemical: chemic TSCA Inventory: Korea Exist.Chem.Inventory	cals/mixture < 1% all listed, <1% listed	CAS No.: -
	30 mL CN-4		
	Chemical: pyridin TSCA Inventory: Exposure Routes: Target Organs: Symptoms: damage Japan CSCL/PRTR: Japan ISHL: Korea Exist.Chem.Inventory LD50 _{orl rat} : LC_LoWihl rat : LC_LoWorl gpg : LC_LoWorl gpg : LC_LoWorl hmn : LC50 _{ihl rat} : LD50 _{drm rbt} : Acute Effects: Cause after sl	listed California Proposition 65 List: listed inhalation, skin absorption, ingestion, skin and/or eye cont Eyes, skin, central nervous system, liver, kidneys, gastroir irritation eyes; headache, anxiety, dizziness, insomnia; nau PRTR: ≥1,0% class I listed ≥1,0%/≥0,1%,	act ntestinal tract, usea, anorexia; dermatitis; liver, kidney



MACHEREY-NAGEL GmbH & Co. KG · Neumann-Neander-Str. 6-8 · 52355 Düren · Germany US: DE/international: CH: FR: +41 62 388 55 00 +41 62 388 55 05 Tel.: +49 24 21 969-0 Tel.: Tel.: +33 388 68 22 68 Tel.: +1 484 821 0984 +49 24 21 969-199 Fax: Fax: Fax: +33 388 51 76 88 Fax: +1 484 821 1272 Version: M V 4.12.0 E-mail: info@mn-net.com E-mail: sales-ch@mn-net.com E-mail: sales-fr@mn-net.com E-mail: sales-us@mn-net.com



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

	20028 g date: 02.06.2020	VISOCOLOR HE Cyanide Date of issue: 06.02.2020	Page: 9/1
	FION 12: Ecological informatio	n	
12.1	Toxicity		
	Following information is valid for pure su	DStances.	
	10 g CN-1 Chemical: chloramine T Avoid contact of substance/mixture		CAS No.: 127-65-1
	Water hazard class (DE): Storage class (VCI):	2 WGK No.: 0640 8 A	
	Chemical: di-sodium hyd Water hazard class (DE): Storage class (VCI):	drogen phosphate 1 WGK No.: 330 12-13	CAS No.: 7558-79-4
	6 g CN-2 Chemical: barbituric acid	1	CAS No.: 67-52-7
	30 mL CN-3		
	Chemical: dimethyl sulfo PNEC(fresh water) : PNEC = Predicted No Effected Concentratio		CAS No.: 67-68-5
	LC50 _{fish/96h} :	38.5 g/L	
	EC50 _{daphnia/48h} :	24.6 g/L	
	EC10 _{pseudomonas} putita/16h : Water hazard class (DE):	EC/16h: 7100 mg/L 1 WGK No.: 5050	
	Dispersion coefficient _(octanol-water) : Storage class (VCI):		
	Chemical: chemicals/mi Water hazard class (DE):	xture < 1% 1	CAS No.: -
	Storage class (VCI):	12-13	
	30 mL CN-4		
	Chemical: pyridine PNEC(fresh water) : PNEC = Predicted No Effected Concentration	300 μg/L	CAS No.: 110-86-1
	LC50fish/96h :	[EC50 4h] 560-1000 mg/L	
	EC50daphnia/48h: IC50 _{scenedesmus} quadricauda/72h:	320 mg/L IC5/7d: 120 mg/L	
	EC10pseudomonas putita/16h	[EC50 72h] 320 mg/L mg/L	
	Water hazard class (DE): Dispersion coefficient _(octanol-water) :	2 WGK No.: 0179 0.64	
	Storage class (VCI):	3	
12.2	Persistence and degradability not necessary		
12.3	Bioaccumulative potential not necessary		
12.4	Mobility in soil not necessary		
12.5	Results of PBT and vPvB assess no data available	ment	
12.6	Other adverse effects no additional data available		



MACHEREY-NAGEL GmbH & Co. KG · Neumann-Neander-Str. 6-8 · 52355 Düren · Germany FR: DE/international: CH: +41 62 388 55 00 Tel.: +49 24 21 969-0 Tel.: Tel.: +33 388 68 22 68 +49 24 21 969-199 +41 62 388 55 05 Fax: Fax: Fax: +33 388 51 76 88 Version: M V 4.12.0 E-mail: info@mn-net.com

US: Tel.: +1 484 821 0984 Fax: +1 484 821 1272 E-mail: sales-us@mn-net.com

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



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

REF: 920028	VISOCOLOR HE Cyanide	Page: 10/11
Printing date: 02.06.2020	Date of issue: 06.02.2020	

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. Empty containers of corrosive reagents prior to disposal, rinse with water.

SECTION 14: Transport information

14.1. UN number: 14.3. Class: Road transport	3316 9		UN proper shipping Packing group: II	name:	Chemical Kit
Classification code: Limited Quantity: <i>Air transport</i>	M11 acc. A	ADR 3.3	Tunnel restriction coo 3.1/251: see LQ in Alter		E declaration for transportation
PAX: CAO: Maritime transport	960 960		max. weight PAX: max. weight CAO:	10 KG 10 KG	
EmS:	F-A, S	S-P	Storage category:	А	
	class 8	III, Exc	transportation: cepted Quantities (≤30 ntities (≤30 mL/∑≤500		
14.1 UN number: 14.3 Class:	1993 3		UN proper shipping n Packing group: II	ame: F	Iammable liquid, n.o.s. (pyridine mixture)
Road transport Classification code: Limited Quantity: Excepted Quantity: Air transport PAX: CAO: Maritime transport EmS:	F1 1 L E 2 353 364 F-E, S	8-E	Tunnel restriction coor Special instructions: max. weight PAX: max. weight CAO: Storage category:		E
14.1 UN number: 14.3 Class: Road transport	3263 8		UN proper shipping n Packing group: III	ame: C	Corrosive solid, basic, organic, n.o.s. (chloramine T mixture)
Classification code: Limited Quantity: Excepted Quantity: Air transport	C8 5 Kg E 1		Tunnel restriction coo	de:	E
PAX: CAO: Maritime transport	860 864		max. weight PAX: max. weight CAO:	25 Kg 100 K	
EmS:	F-A, S	6-В	Storage category:	А	

14.5 **Environmental hazards**

not necessary

none, contains only small quantities of hazardous substances

14.6 Special precautions for user

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.



HEREY-NAGEL	MACH	HEREY-NAGEL GmbH & (Co. KG ·	Neumann-Neander-Str. 6–	8 · 5235	5 Düren · Germany		
MN	DE/ir	iternational:	CH:		FR:		US:	
	Tel.:	+49 24 21 969-0	Tel.:	+41 62 388 55 00	Tel.:	+33 388 68 22 68	Tel.:	+1 484 821 0984
ISO 9001 CERTIFIED	Fax:	+49 24 21 969-199	Fax:	+41 62 388 55 05	Fax:	+33 388 51 76 88	Fax:	+1 484 821 1272
rsion: M V 4.1	12.0 E-mai	l: info@mn-net.com	E-ma	il: sales-ch@mn-net.com	E-mai	l: sales-fr@mn-net.com	E-mai	l: sales-us@mn-net.com



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

REF: 9		VISOCOLOR HE Cyanide	Page: 11/11
Printing date: 02.06.2020		Date of issue: 06.02.2020	
15.2	Chemical safety assessment		

.2 Cnemical safety assessment not necessary for these small amounts ---

SECTION 16: Other information

16.1 List of H and P phrases

•							
List of relevant H phrases							
H226	Flammable liquid and vapour.						
H314	Causes severe skin burns and eye damage.						
H332	Harmful if inhaled.						
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.						
EUH031	Contact with acids liberates toxic gas.						
List of relevant P phrases							
P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.						
P260D	Do not breathe vapours.						
P260sh	Do not breathe dust/vapours.						
P261sh	Avoid breathing dust/vapours.						
P280sh	Wear protective gloves/eye protection.						
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.						
P342+311	If experiencing respiratory symptoms: Call a POISON CENTER/doctor.						
	H226 H314 H332 H334 EUH031 List of relevant P ph P210 P260D P260sh P260sh P261sh P280sh P303+361+353 P304+340 P305+351+338 P310						

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 §§ 11-13 MuSchG 2017)! 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.

MACHEREY-NAGEL GmbH & Co. KG makes NO REPRESENTATIONS or WARRANTIES, either expressed or implied, including without limitation any warranties of merchantability, fitness for a particular purpose with respect to the information set forth herein or the product to which the information refers. Accordingly MACHEREY-NAGEL GmbH & Co. KG will not be responsible for damages resulting from use of or reliance upon this information. See terms and conditions at the end of our price lists for additional information.

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 Regulation 669/2018/EU, 4th adaptation of CLP regulation to technical and scientific progress Regulation 1480/2018/EU, 4th 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 TRGS 907, German engineering rules governing listing of substances and causes of sensitizations, updated November 2011 KÜHN, BIRETT Merkblätter Gefährliche Arbeitsstoffe (Data Sheets of Hazardous Substances)

Revisions/Updates

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



www.mn-net.com

MACHEREY-NAGEL GmbH & Co. KG · Neumann-Neander-Str. 6–8 · 52355 Düren · Germany DE/international: CH: FR:

 ISO 9001 CERTIFIED
 Tel.:
 +49 24 21 969-0

 Version: M V 4.12.0
 F-mail: info@mn-net.com
 CH: Tel.: +41 62 388 55 00 Fax: +41 62 388 55 05 E-mail: sales-ch@mn-net.com FR: Tel.: +33 388 68 22 68 Fax: +33 388 51 76 88 E-mail: sales-fr@mn-net.com US: Tel.: +1 484 821 0984 Fax: +1 484 821 1272 E-mail: sales-us@mn-net.com