# 1) substance-/ preparation and company name Chemical name/ Trade name: VGT - A Application/use: Photographic developer Company name: Wolfgang Moersch Photochemie, Am Heideberg 48 D 50354 Hürth, Germany Telephone: ++49 22 33 943137 2) Hazards identification

#### contains hydroquinon Xn harmful MAY BE HARMFUL IF ABSORBED THROUGH SKIN, OR SWALLOWED CAUSES SKIN AND EYE IRRITATION MAY CAUSE ALLERGIC SKIN REACTION

#### 3) composition/details on components

This product is a preparation according to the law for chemicals. Description: Aqueous solution containing inorganic and organic substances

Name	Content	CAS	EINECS	CLASSIFICATION
1,4 DIHYDROXYBENZENE	10-15%	21799-87-1	244-584-7	not classified
POTASSIUM SALT 1,4-DIHYDROXYBENZENE (Hydrochinon)	10%	123-31-9	204-617-8	Xn ,N R-22, 40, 41, 43, 50, 68 Carc3 Mut3
DIETHYLENE GLYCOL	20-25%	111-46-6	203-872-2	Xn R-22
POTASSIUM BROMIDE	>1%	7758-02-3	231-830-3	Xn R-20/22, 36/37/38
1-PHENYL-4-METHYL-4- HYDROXYMETHYL-3 PYRAZOLIDONE	>1%	13047-13-7	235-920-3	Xn R-48/22
DIETHYLENTRIAMINE PENTAACETIC ACID NA5	>1%	67-43-6	200-652-8	Xi R-36
SODIUM SULPHITE	0,5-1%	7757-83-7	231-821-4	not classified
SODIUM DISULPHITE	0,5-1%	7681-57-4	231-673-0	Xn; R22

Other information:

further principal ingredient: Water

4) first aid pecautions

General notes:	change contaminated, wet clothing. consult a doctor.
After breathing in:	None of special precautions required.
After skin contact:	at skin contact wash immediately with water and soap. Wash clothing before reuse.
After eye contact:	At eye contact open eyelids wash with water, then immediately consult an eye specialist.
After swallowing:	Consult eye specialist at eye irritation. Rinse out mouth with water and drink a lot of water afterwards

#### 5) PRECAUTIONS for fire fighting

Suitable extinguishing agents: for security reasons	Coordinate extinguishing precautions on the surrounding fire. None confessed.
unsuitable extinguishing agents: Special endangerings of the substance or the product itself	released by fire can be : carbon monoxide, carbon dioxide
its waste products of combustion of	Dr
arising gasses:	sulfur dioxide
Special protection equipment	None of special equipment required.
for fire fighting:	
Additional notes:	Product does not burn.

#### 6) PRECAUTIONS at unintentional release

Person drawee Precautions:	Use personal protective clothing.	
	Don't let it drain into the sewage system/surface water/ground water.	
proceedings for cleaning/binding:	liquid binding materials (e.g. sand, pebble sand sawdust, universal binding agents).	
Additional notes:	Treat the taken material according to waste management section.	

#### 7) handling and storage

Indications for safe contact:	At proper use none of special precautions required.
Points on fire-and explosion protection:	The product is not combustible.
Requirements on storerooms and containers:	None of special requirements necessary. Keep container tightly closed.
Together storage notes: More details on	None of special precautions required.
Storage conditions: Store class:	Recommended storage temperature: 10 to 25 C LGK 12 (VCI strategy)

#### 8) outline demarcation and personal protection equipment

Additional information about design of technical systems: No further data; see item 7.
Components with limit values that require monitoring at the workplace:
123-31-9 1,4-dihydroxybenzene (hydroquinone)
MEL
OES
Long-term value: 0.5 mg/m<sup>3</sup>
Short-term value: 4 mg/m<sup>3</sup>
Long-term value: 2 mg/m<sup>3</sup>
CHAN, ILV
Additional information: The lists that were valid during the compilation were used as basis.
Personal protective equipment

· General protective and hygienic measures

The usual precautionary measures should be adhered to general rules for handling chemicals.

Keep away from foodstuffs, beverages and food.

Take off immediately all contaminated clothing

Wash hands during breaks and at the end of the work.

Avoid contact with the eyes and skin.

#### Do not eat, drink or smoke while working.

· Breathing equipment: Not required.

#### · Protection of hands:

Protective gloves.

The protective gloves to be used must comply with the specifications of the EC directive 89/686/ EEC and the resultant standard EN 374.

This recommendation applies only to the product stated in the Safety Data Sheet and supplied by us as well as to the purpose specified by us.

Only use chemical-protective gloves with CE-labelling of category III.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

#### Material of gloves

Nitrile rubber, NBR Butyl rubber, BR Fluorocarbon rubber (Viton) Chloroprene rubber, CR Recommended thickness of the material: ≥ 0.5 mm · Penetration time of glove material

Value for permeation: Level  $\geq$  6 (480 min)

The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

# $\cdot$ For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:

Synthetic gloves

Value for permeation: Level:

≥ 3 (60 min)

 $\cdot$  Not suitable are gloves made of the following materials: Natural rubber, NR

· Eye protection: Tightly sealed safety glasses.

#### 9) physical and chemical qualities

Form: Color: Smell: pH value:	Liquid slightly yellow, clear. Odourless. 5.8 (20 C)
Boiling-point/boiling area:	≥ 100 C
Melting point/glaze area:	≤ 0 C
Flaming point:	Not applicable.
Imflammatory/	Not inflammable.
Catching light temperature:	
Self flammability:	Not self-flammable
Fire promoting	Not combustible.
qualities:	
Danger of explosion:	No danger of explosion.
Vapor pression:	Remark: Corresponds to the vapor pression of water.
Density:	1.180 g/ml (20 Č)
Pouring density:	Not applicable.
Solubility into water:	Mixable.
in other solvents:	No relevant data.
Distribution coefficient	No relevant data.
n-Oktanol/water:	
Dynamic viscosity:	no relevant data.
other details:	There are not further data.



#### 10) stability and reactivity

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Dangerous reactions: No dangerous reactions known

Dangerous products of decomposition: No dangerous decomposition products known

#### 11) details on toxicology

Toxicological tests: Acute Toxicity: Specific symptoms in this Animal experiment:	No relevant data No relevant data.
Irritation-/ etching effect:	The details refer to the technical active agents
Skin: Eyes: Sensitization: Effect after repeated or long Other details: Experiences from the practice: General remarks:	irritating strongly irritating Sensitization of skin is possible. <b>er continuous expose:</b> Possibility of irreversible damage if swallowed. No further data. No relevant data. There are no toxicologgical data. The classification was carried out according the calculation proceedings of preparation guideline ( 88/379/EEC).
12) details on ecology	
General notes:	There are no data. The product was not tested. Remarks: Does not reach by correct use into the waste water.
13) indications for waste managen Product:	nent The corresponding local water-and waste regulations must be observed. Do not dispose with domestic garbage. Do not let it get into the sewage system.
European waste catalog: Packing:	09 00 00: Waste from the photographic industry 09 01 00: Waste from the photographic industry 09 01 01: Developer and activators on water base Not contaminated packings can be recycled .
	Empty packing completely, wash well (Cleaning agent: water), can be recycled afterwards



Transport/further details:	No dangerous goods according to transport regulations (ADR/RID IMDG code, ICAO-TI/IATA-DGR)		
15) regulations			
Identification by EC directives:	The product is classified and labeled according to EC guidelines ( GefStoffVO)		
Classification letter: Danger identification: R sentences:	Xndanger symbol:harmfulR-36 Irritating to eyes.R-22 Harmful if swallowedR-40 Limited evidence of a carcinogenic effect.		
S sentences:	S-2 Keep out of reach of children. S-26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S-36/37 Wear suitable protective clothing and gloves. S-46 If swallowed seek medical advice immediately and show this container label.		
Remarks:	This classification was carried out according to the calculation method for preparations guideline (88/379/EEC).		
Technical instructions air: Water endangering class (WGK):	This TA isn't a subject. 2 (water endangering) (Classification in accordance with VwVwS, appendix 4)		

#### 16). other details

**Use:** Photographic developer

#### Further information:

These details refer merely on this above product and not needs to be valid, if this is occurred with another product or in an arbitrary process.

The information corresponds to our today's knowledge, it is correct and complete and with best conscience, given without a guarantee, though. It shall describe our product with a view to safety requirements and has therefore not the meaning to assure of certain qualities. The responsibility of the use of this product remains on the user whether the information is complete and suitable for his special use.

ISSUED BY:	Wolfgang Moersch – Moersch-Photochemie ++49 2233 943137 <u>info@moersch-photochemie.com</u>
REVISION DATE:	18 JUL 2002
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#### **R-PHRASES (FULL TEXT)**

R-22 Harmful if swallowed. R-36 Irritating to eyes. R-40 Limited evidence of a carcinogenic effect.. R-36/38 Irritating to eyes and skin. R-48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.

1) substance-/ preparation and company name			
Chemical name/ Trade name:	VGT - B		
Application/use: Company name:	Photographic developer Wolfgang Moersch Photochemie, Am Heideberg 48 D 50354 Hürth, Germany		
Telephone: 2) Possible risks	++49 22 33 943137		
Definition of dangers:	Bad for health: Possibility of irreversible damage if swallowed. Danger of serious eye damage. Sensitization by skin contact possible.		

#### 3) composition/details on components

This product is a preparation according to the law for chemicals. Description: Aqueous solution containing inorganic and organic substances

Name	Content	CAS	EINECS	CLASSIFICATION
1,4 DIHYDROXYBENZENE POTASSIUM SALT	1-2%	21799-87-1	244-584-7	not classified
4-(METHYLAMINO)PHENOLSULFATE	5-10%	55-55-0	200-237-1	Xn R-22-50/53
TRIETHANOLAMINE	1-2%	102-71-6	203-049-8	not clasified
POTASSIUM BROMIDE	>1%	7758-02-3	231-830-3	Xn R-20/22, 36/37/38
DIETHYLENTRIAMINE PENTAACETIC ACID NA5	>1%	67-43-6	200-652-8	Xi R-36
SODIUM DISULPHITE	0,5-1%	7681-57-4	231-673-0	Xn; R22

Other information:	further principal ingredient: Water

#### 4) first aid pecautions

General notes:	change contaminated, wet clothing. consult a doctor.
After breathing in:	None of special precautions required.
After skin contact:	at skin contact wash immediately with water and soap. Wash clothing before reuse.
After eye contact:	At eye contact open eyelids wash with water, then immediately consult an eye specialist. Consult eye specialist at eye irritation.
After swallowing:	Rinse out mouth with water and drink a lot of water afterwards

#### 5) PRECAUTIONS for fire fighting

Suitable extinguishing agents:	Coordinate extinguishing precautions on the surrounding fire.
for security reasons	None confessed.
unsuitable extinguishing agents:	
Special endangerings of	released by fire can be : carbon monoxide, carbon dioxide

the substance or the product itself its waste products of combustion of			
arising gasses:	sulfur dioxide		
Special protection equipment	None of special equipment required.		
for fire fighting:			
Additional notes:	Product does not burn.		
6) PRECAUTIONS at unintentional release			
Person drawee Precautions:	Use personal protective clothing.		
Environment protective measures:	Don't let it drain into the sewage system/surface water/ground water.		
proceedings for cleaning/binding:	liquid binding materials (e.g. sand, pebble sand sawdust, universal binding agents).		
Additional notes:	Treat the taken material according to waste management section.		
7) handling and storage			
Indications for safe contact:	At proper use none of special precautions required.		
Points on fire-and explosion protection:	The product is not combustible.		
Requirements on storerooms	None of special requirements necessary. Keep container tightly		
and containers:	closed.		
Together storage notes:	None of special precautions required.		
More details on			
Storage conditions:	Recommended storage temperature: 10 to 25 C		
Store class:	LGK 12 (VCI strategy)		

#### 8) outline demarcation and personal protection equipment

Additional indications for arranger of technical plants: Personal protection equipment:	<b>nent</b> See section 7; no requirements going beyond this.	
Breathing protection:	Sufficient ventilation, no additional protection necessary.	
Hand protection:	Gloves. Required qualities: Liquid proof.	

#### 9) physical and chemical qualities

Form:	Liquid
Color:	Colourless or slightly yellow, clear.
Smell:	Odourless.
pH value:	5.2 (20 C)
Boiling-point/boiling area:	≥ 100 C
Melting point/glaze area:	≤ 0 C
Flaming point:	Not applicable.
Imflammatory/	Not inflammable.
Catching light temperature:	
Self flammability:	Not self-flammable
Fire promoting	Not combustible.
qualities:	
Danger of explosion:	No danger of explosion.
Vapor pression:	Remark: Corresponds to the vapor pression of water.

Density:	1.11 g/ml (20 C)
Pouring density:	Not applicable.
Solubility into water:	Mixable.
in other solvents:	No relevant data.
Distribution coefficient	No relevant data.
n-Oktanol/water:	
Dynamic viscosity:	no relevant data.
other details:	There are not further data.

#### 110) stability and reactivity

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Dangerous reactions: No dangerous reactions known

Dangerous products of decomposition: No dangerous decomposition products known

#### 11) details on toxicology

Toxicological tests: Acute Toxicity: Specific symptoms in this Animal experiment:	No relevant data No relevant data.
Irritation-/ etching effect:	The details refer to the technical active agents
Skin: Eyes: Sensitization: Effect after repeated or long	slightly irritating strongly irritating Sensitization of skin is possible. <b>er continuous expose:</b> Possibility of irreversible damage if swallowed.
Other details:	No further data.
Experiences from the practice: General remarks:	No relevant data. There are no toxicologgical data. The classification was carried out according the calculation proceedings of preparation guideline ( 88/379/EEC).
12) details on ecology	
	There are no data.
12) details on ecology General notes:	There are no data. The product was not tested. Remarks: Does not reach by correct use into the waste water.
	The product was not tested. Remarks: Does not reach by correct use into the waste water.
General notes: 13) indications for waste manager	The product was not tested. Remarks: Does not reach by correct use into the waste water. nent The corresponding local water-and waste regulations must be observed. Do not dispose with domestic garbage.



	Empty packing completely, wash well (Cleaning agent: water), can be recycled afterwards		
14) details on transport			
Transport/further details:	No dangerous goods according to transport regulations (ADR/RID IMDG code, ICAO-TI/IATA-DGR)		
15) regulations			
Identification by EC directives:	The product is classified and labeled according to EC guidelines ( GefStoffVO)		
Classification letter: Danger identification: R sentences:	Xndanger symbol:Bad for healthR-36 Irritating to eyes.R-22 Harmful if swallowed		
S sentences:	S-2 Keep out of reach of children. S-26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S-36/37 Wear suitable protective clothing and gloves. S-46 If swallowed seek medical advice immediately and show this container label.		
Remarks:	This classification was carried out according to the calculation method for preparations guideline (88/379/EEC).		
Technical instructions air: Water endangering class (WGK):	This TA isn't a subject. 2 (water endangering) (Classification in accordance with VwVwS, appendix 4)		

#### 16). other details

Use: Photographic developer

#### **Further information:**

These details refer merely on this above product and not needs to be valid, if this is occurred with another product or in an arbitrary process.

The information corresponds to our today's knowledge, it is correct and complete and with best conscience, given without a guarantee, though. It shall describe our product with a view to safety requirements and has therefore not the meaning to assure of certain qualities. The responsibility of the use of this product remains on the user whether the information is complete and suitable for his special use.

ISSUED BY:	Wolfgang Moersch – Moersch-Photochemie ++49 2233 943137 info@moersch-photochemie.com
REVISION DATE:	20 JUL 1999
PRINTING DATE	20 JUL 1999



**R-PHRASES (FULL TEXT)** 

R-22 Harmful if swallowed. R-36 Irritating to eyes.

1) substance-/ preparation and company name		
Chemical name/ Trade name:	VGT - C	
Application/use:	Photographic developer	
Company name:	Wolfgang Moersch Photochemie, Am Heideberg 48	
	D 50354 Hürth, Germany	
Telephone:	++49 22 33 943137	
2) Possible risks		
Definition of dangers:	Bad for health: Possibility of irreversible damage if swallowed. Danger of serious eye damage.	

#### 3) composition/details on components

This product is a preparation according to the law for chemicals. Description: Aqueous solution containing inorganic and organic substances

Name	Content	CAS	EINECS	CLASSIFICATION
POTASSIUM CARBONATE	25-30%	584-08-7	209-529-3	Xn R-22, 36
POTASSIUM BROMIDE	>1%	7758-02-3	231-830-3	Xn R-20/22, 36/37/38
DIETHYLENTRIAMINE PENTAACETIC	>1%	67-43-6	200-652-8	Xi R-36
ACID NA5				
SODIUM SULPHITE	10-15%	7757-83-7	231-821-4	not classified

Other information:

further principal ingredient: Water

#### 4) first aid precautions

General notes:	change contaminated, wet clothing. consult a doctor.
After breathing in:	None of special precautions required.
After skin contact:	at skin contact wash immediately with water and soap. Wash clothing before reuse.
After eye contact:	At eye contact open eyelids wash with water, then immediately consult an eye specialist. Consult eye specialist at eye irritation.
After swallowing:	Rinse out mouth with water and drink a lot of water afterwards

#### 5) PRECAUTIONS for fire fighting

Suitable extinguishing agents: for security reasons unsuitable extinguishing agents:	Coordinate extinguishing precautions on the surrounding fire. None confessed.
Special endangerings of the substance or the product itself	
its waste products of combustion of arising gasses: Special protection equipment	or sulfur dioxide None of special equipment required.



for fire fighting: Additional notes:	Product does not burn.		
6) PRECAUTIONS at unintentional	release		
Person drawee	Use personal protective clothing.		
Precautions: Environment protective measures:	Don't let it drain into the sewage system/surface water/ground water.		
proceedings for cleaning/binding:	liquid binding materials (e.g. sand, pebble sand sawdust, universal binding agents).		
Additional notes:	Treat the taken material according to waste management section.		
7) handling and storage			
Indications for safe contact:	At proper use none of special precautions required.		
Points on fire-and explosion protection:	The product is not combustible.		
Requirements on storerooms and containers:	None of special requirements necessary. Keep container tightly closed.		
Together storage notes: More details on	None of special precautions required.		
Storage conditions: Store class:	Recommended storage temperature: 10 to 25 C LGK 12 (VCI strategy)		
8) outline demarcation and personal protection equipment			
HAND PROTECTION:	Use chemical resistent gloves.		
RESPIRATORY EQUIPMENT	Respiratory protection not required.		
EYE PROTECTION OTHER PROTECTION	Use approved safety goggles or face shield. Wear appropriate clothing to prevent any possibility of skin contact.		
<ul> <li>Material of gloves Nitrile rubber, NBR Butyl rubber, BR Fluorocarbon rubber (Viton) Chloroprene rubber, CR Recommended thickness of the material: ≥ 0.5 mm · Penetration time of glove material Value for permeation: Level ≥ 6 (480 min) The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended. · For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable: Synthetic gloves Value for permeation: Level: ≥ 3 (60 min) · Not suitable are gloves made of the following materials: Natural rubber, NR · Eye protection: Tightly sealed safety glasses.</li> </ul>			

#### 9) physical and chemical qualities

Color:ColourlessSmell:Odourless.pH value:13.4 (20 C)Boiling-point/boiling area:≥ 100 CMelting point/glaze area:≤ 0 CFlaming point:Not applicable.Imflammatory/Not inflammable.Catching light temperature:Self flammability:Self flammability:Not self-flammableFire promotingNot combustible.qualities:Danger of explosion:Danger of explosion:No danger of explosion.Vapor pression:Remark: Corresponds to the vapor pression of water.Density:1.5g/ml (20 C)Pouring density:Not applicable.Solubility into water:Mixable.in other solvents:No relevant data.Disteindement fieldement fi	Form:	Liquid
pH value:       13.4 (20 C)         Boiling-point/boiling area:       ≥ 100 C         Melting point/glaze area:       ≤ 0 C         Flaming point:       Not applicable.         Imflammatory/       Not inflammable.         Catching light temperature:       Self flammability:         Self flammability:       Not self-flammable         Fire promoting       Not combustible.         qualities:       Danger of explosion:         Danger of explosion:       No danger of explosion.         Vapor pression:       Remark: Corresponds to the vapor pression of water.         Density:       1.5g/ml (20 C)         Pouring density:       Not applicable.         Solubility into water:       Mixable.         in other solvents:       No relevant data.	Color:	Colourless
Boiling-point/boiling area:≥ 100 CMelting point/glaze area:≤ 0 CFlaming point:Not applicable.Imflammatory/Not inflammable.Catching light temperature:Self flammability:Self flammability:Not self-flammableFire promotingNot combustible.qualities:Danger of explosion:Danger of explosion:No danger of explosion.Vapor pression:Remark: Corresponds to the vapor pression of water.Density:1.5g/ml (20 C)Pouring density:Not applicable.Solubility into water:Mixable.in other solvents:No relevant data.	Smell:	Odourless.
Melting point/glaze area:       ≤ 0 C         Flaming point:       Not applicable.         Imflammatory/       Not inflammable.         Catching light temperature:       Self flammability:         Self flammability:       Not self-flammable         Fire promoting       Not combustible.         qualities:       Danger of explosion:         Vapor pression:       No danger of explosion.         Vapor pression:       Remark: Corresponds to the vapor pression of water.         Density:       1.5g/ml (20 C)         Pouring density:       Not applicable.         Solubility into water:       Mixable.         in other solvents:       No relevant data.	pH value:	13.4 (20 C)
Flaming point:Not applicable.Imflammatory/Not inflammable.Catching light temperature:Not self-flammable.Self flammability:Not self-flammableFire promotingNot combustible.qualities:Not danger of explosion.Danger of explosion:No danger of explosion.Vapor pression:Remark: Corresponds to the vapor pression of water.Density:1.5g/ml (20 C)Pouring density:Not applicable.Solubility into water:Mixable.in other solvents:No relevant data.	Boiling-point/boiling area:	≥ 100 C
Imflammatory/Not inflammable.Catching light temperature:Not self-flammable.Self flammability:Not self-flammableFire promotingNot combustible.qualities:Not danger of explosion.Danger of explosion:No danger of explosion.Vapor pression:Remark: Corresponds to the vapor pression of water.Density:1.5g/ml (20 C)Pouring density:Not applicable.Solubility into water:Mixable.in other solvents:No relevant data.	Melting point/glaze area:	≤ 0 C
Catching light temperature:Self flammability:Not self-flammableFire promotingNot combustible.qualities:Image: of explosion:Danger of explosion:No danger of explosion.Vapor pression:Remark: Corresponds to the vapor pression of water.Density:1.5g/ml (20 C)Pouring density:Not applicable.Solubility into water:Mixable.in other solvents:No relevant data.	Flaming point:	Not applicable.
Self flammability:Not self-flammableFire promotingNot combustible.qualities:Not combustible.Danger of explosion:No danger of explosion.Vapor pression:Remark: Corresponds to the vapor pression of water.Density:1.5g/ml (20 C)Pouring density:Not applicable.Solubility into water:Mixable.in other solvents:No relevant data.	Imflammatory/	Not inflammable.
Fire promotingNot combustible.qualities:No danger of explosion.Danger of explosion:No danger of explosion.Vapor pression:Remark: Corresponds to the vapor pression of water.Density:1.5g/ml (20 C)Pouring density:Not applicable.Solubility into water:Mixable.in other solvents:No relevant data.	Catching light temperature:	
qualities:Danger of explosion:No danger of explosion.Vapor pression:Remark: Corresponds to the vapor pression of water.Density:1.5g/ml (20 C)Pouring density:Not applicable.Solubility into water:Mixable.in other solvents:No relevant data.	Self flammability:	Not self-flammable
Danger of explosion:No danger of explosion.Vapor pression:Remark: Corresponds to the vapor pression of water.Density:1.5g/ml (20 C)Pouring density:Not applicable.Solubility into water:Mixable.in other solvents:No relevant data.	Fire promoting	Not combustible.
Vapor pression:Remark: Corresponds to the vapor pression of water.Density:1.5g/ml (20 C)Pouring density:Not applicable.Solubility into water:Mixable.in other solvents:No relevant data.	qualities:	
Density:1.5g/ml (20 C)Pouring density:Not applicable.Solubility into water:Mixable.in other solvents:No relevant data.	Danger of explosion:	No danger of explosion.
Pouring density:       Not applicable.         Solubility into water:       Mixable.         in other solvents:       No relevant data.	Vapor pression:	Remark: Corresponds to the vapor pression of water.
Solubility into water:     Mixable.       in other solvents:     No relevant data.	Density:	1.5g/ml (20 C)
in other solvents: No relevant data.	Pouring density:	Not applicable.
	Solubility into water:	Mixable.
Distribution of finites to the second states	in other solvents:	No relevant data.
Distribution coefficient No relevant data.	Distribution coefficient	No relevant data.
n-Oktanol/water:	n-Oktanol/water:	
Dynamic viscosity: no relevant data.	Dynamic viscosity:	no relevant data.
other details: There are not further data.	other details:	There are not further data.

10) stability and reactivity

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Dangerous reactions: No dangerous reactions known

Dangerous products of decomposition: No dangerous decomposition products known

#### 11) details on toxicology

Toxicological tests: Acute Toxicity: Specific symptoms in this Animal experiment:	No relevant data No relevant data.
Irritation-/ etching effect:	The details refer to the technical active agents
Skin:	strongly irritating
Eyes:	strongly irritating
Sensitization:	Sensitization of skin is possible.
Effect after repeated or longer continuous expose:	
	Possibility of irreversible damage if swallowed.
Other details:	No further data.
Experiences from the practice:	No relevant data.
General remarks:	There are no toxicological data. The classification was carried out according the calculation proceedings of preparation guideline



	( 88/379/EEC).	
12) details on ecology General notes:	There are no data. The product was not tested.	
13) indications for waste management       The corresponding local water-and waste regulations must be		
	observed. Do not dispose with domestic garbage. Do not let it get into the sewage system.	
European waste catalog: Packing:	09 00 00: Waste from the photographic industry 09 01 00: Waste from the photographic industry 09 01 01: Developer and activators on water base	
i doking.	Not contaminated packings can be recycled . Empty packing completely, wash well (Cleaning agent: water), can be recycled afterwards	
14) details on transport		
Transport/further details:	No dangerous goods according to transport regulations (ADR/RID IMDG code, ICAO-TI/IATA-DGR)	
15) regulations		
Identification by EC directives:	The product is classified and labeled according to EC guidelines ( GefStoffVO)	
Classification letter: Danger identification: R sentences:	Xndanger symbol:harmfulR-36/38 Irritating to eyes and skin.R-22 Harmful if swallowed	
S sentences:	S-2 Keep out of reach of children. S-26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S-36/37 Wear suitable protective clothing and gloves. S-46 If swallowed seek medical advice immediately and show this container label.	
Remarks:	This classification was carried out according to the calculation method for preparations guideline (88/379/EEC).	
Technical instructions air: Water endangering class (WGK):	This TA isn't a subject. 2 (water endangering) (Classification in accordance with VwVwS, appendix 4)	



#### 16). other details

**Use:** Photographic developer

#### Further information:

These details refer merely on this above product and not needs to be valid, if this is occurred with another product or in an arbitrary process.

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ISSUED BY:	Wolfgang Moersch – Moersch-Photochemie ++49 2233 943137 info@moersch-photochemie.com	
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#### **R-PHRASES (FULL TEXT)**

Not classified. R-22 Harmful if swallowed. R-36/38 Irritating to eyes and skin.

#### **1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

Chemical name/ Trade name:FINISHER BLUEApplication/use:photographic developer additiveCompany name:Moersch Photochemie, Am Heideberg 48D 50354 Hürth, GermanyTelephone:++49 22 33 9431372 HAZARDS IDENTIFICATION

Bad for health: Possibility of irreversible damage if swallowed. Danger of serious eye damage. Sensitization by skin contact possible.

#### **3 COMPOSITION/INFORMATION ON INGREDIENTS**

This product is a preparation according to the law for chemicals. Description: Aqueous solution containing inorganic and organic substances

Name	Content	CAS	EINECS	CLASSIFICATION
Benzotriazole	2-5%	95-17-4	209-394-1	Xn R-22, 36
1-phenyltetrazole-5-thiol	2-5%	86-93-1	201-710-5	not classified

Other information: further principal ingredient: Water

#### 4 FIRST-AID MEASURES

**Eyes:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

Skin: In case of contact, immediately flush skin with plenty of water.

**Ingestion:** If swallowed, DO NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

#### **5 FIRE-FIGHTING MEASURES**

Suitable extinguishing agents:	Coordinate extinguishing precautions on the surrounding fire.		
for security reasons	None confessed.		
unsuitable extinguishing agents:			
Special endangerings of	released by fire can be : carbon monoxide, carbon dioxide		
the substance or the product itself			
its waste products of combustion or			
arising gasses:	none		
Special protection equipment	None of special equipment required.		
Additional notes:	Product does not burn.		

#### 6 ACCIDENTAL RELEASE MEASURES

Person drawee Precautions:	Use personal protective clothing.
	Don't let it drain into the sewage system/surface water/ground water.
proceedings for cleaning/binding:	liquid binding materials (e.g. sand, pebble sand sawdust, universal binding agents).
Additional notes:	Treat the taken material according to waste management section.

#### 7 HANDLING AND STORAGE

Indications for safe contact:	At proper use none of special precautions required.
Points on fire-and explosion protection:	The product is not combustible.
Requirements on storerooms and containers:	None of special requirements necessary. Keep container tightly closed.
Together storage notes: More details on	None of special precautions required.
Storage conditions: Store class:	Recommended storage temperature: 5 to 25 C LGK 12 (VCI strategy)

#### 8 OUTLINE DEMARCATION AND PERSONAL PROTECTION EQUIPMENT

HAND PROTECTION:	Not required
RESPIRATORY EQUIPMENT	Respiratory protection not required.
EYE PROTECTION OTHER PROTECTION	Use approved safety goggles or face shield. Wear appropriate clothing to prevent any possibility of skin contact.
Eye protection:	Tightly sealed safety glasses.

#### 9 PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid
Color:	Light blue
Smell:	Odourless.
pH value:	11.95(20 C)
Boiling-point/boiling area:	≥ 100 C
Melting point/glaze area:	$\leq$ 0 C
Flaming point:	Not applicable.
Imflammatory/	Not inflammable.
Catching light temperature:	

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Self flammability:	Not self-flammable
Fire promoting	Not combustible.
qualities:	No denger of evolution
Danger of explosion:	No danger of explosion.
Vapor pression:	Remark: Corresponds to the vapor pression of water.
Density:	1.31 g/ml (20 C)
Pouring density:	Not applicable.
Solubility into water:	Mixable.
in other solvents:	No relevant data.
Distribution coefficient	No relevant data.
n-Oktanol/water:	
Dynamic viscosity:	no relevant data.
other details:	There are not further data.

#### **10 STABILITY AND REACTIVITY**

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Dangerous reactions: No dangerous reactions known

Dangerous products of decomposition: No dangerous decomposition products known

#### **11 TOXICOLOGICAL INFORMATION**

Irritation-/ etching effect:	The details refer to the technical active agents
Skin:	strongly irritating
Eyes:	strongly irritating
Sensitization:	Sensitization of skin is possible.
Effect after repeated or longer continuous expose:	
	Possibility of irreversible damage if swallowed.
Other details:	No further data.
General remarks:	There are no toxicologgical data. The classification was carried out
	according the calculation proceedings of preparation guideline
	( 88/379/EEC).

#### **12 ECOLOGICAL INFORMATION**

The product was not tested. Remarks: Does not reach by correct use into the waste water.

#### **13 INDICATIONS FOR WASTE MANEGEMENT**

Product:	The corresponding local water-and waste regulations must be observed. Do not dispose with domestic garbage. Do not let it get into the sewage system.
European waste catalog: Packing:	09 00 00: Waste from the photographic industry 09 01 00: Waste from the photographic industry 09 01 01: Developer and activators on water base Not contaminated packings can be recycled .
	Empty packing completely, wash well (Cleaning agent: water), can be recycled afterwards

**14 TRANSPORT INFORMATION** 

ADR CLASS: ROAD TRANSPORT NOTES: RAIL TRANSPORT NOTES: SEA TRANSPORT NOTES: AIR TRANSPORT NOTES:	Not classified for transportation. Not classified for road transport Not classified for rail transport Not classified for sea transport Not classified for air transport	
15 REGULATIONS		
Identification by EC directives: Classification letter: Danger identification: R sentences:	The product is classified and labeled according to EC guidelines         ( GefStoffVO)         -       danger symbol:         -         R-36/38 Irritating to eyes and skin.         R-22 Harmful if swallowed	
S sentences:	S-2 Keep out of reach of children. S-26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S-46 If swallowed seek medical advice immediately	
Remarks:	This classification was carried out according to the calculation method for preparations guideline (88/379/EEC).	
Technical instructions air:	This TA isn't a subject.	

#### **16 OTHER INFORMATION**

**Use:** Photographic developer

#### Further information:

These details refer merely on this above product and not needs to be valid, if this is occurred with another product or in an arbitrary process.

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