

# DETECTAMET

## Material Safety Data Sheet

Document Reference	108-A05
Date of Issue	15 <sup>th</sup> Sept 2025
Revision Number	001
Date of Last Revision	15 <sup>th</sup> Sept 2025

108-A05

4 in 1 Retractable Pen



Material Safety Data Sheet Applicable To:

108-A05	4 in 1 Retractable Pen
---------	------------------------

Blue Ink

Section 1 – Identification of the substance

Trade name: B-488 Ink Blue

Registration number: All ingredients are registered

Relevant identified uses of the substance or mixture and uses advised against: No further relevant information available

Application of the substance/the mixture: Ball point pen ink – Writing ink

Section 2 – Hazards identification

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



GHS09 Environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects



GHS07

Acute Tox. 4 H302 Harmful if swallowed  
Skin Irrit. 2 H315 Causes skin irritation  
Eye Irrit. 2 H319 Causes serious eye irritation  
Skin Sens. 1 H317 May cause an allergic skin reaction

#### Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation

Hazard pictograms



GHS07



GHS09

Signal word: Warning

Hazard-determining components of labelling:

2-Phenoxyethanol

C.I. Solvent Violet 8

Benzyl alcohol

Alpha,alpha-bis[4-(dimethylamino)phenyl]-4-(phenylamino)naphthalene-1-methanol

Hazard statements

H302 Harmful if swallowed

H315 Causes skin irritation

H319 Causes serious eye irritation

H317 May cause an allergic skin reaction

H411 Toxic to aquatic life with long lasting effects

Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray

P280 Wear protective gloves/eye protection/face protection

P301+P312 If swallowed: Call a poison centre/doctor if you feel unwell

P330 Rinse mouth

P305/P351/P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P501 Dispose of contents/container in accordance with local/regional/national/international regulations

Other hazards

Results of PBT and vPvB assessment

PBT: N/A

vPvB: N/A

Section 3 – Composition/information on ingredients

Chemical characterization: mixtures

Description: Mixture of substances listed below with non-hazardous additions

Dangerous Components:		
CAS: 122-99-6 EINECS: 204-589-7 Index number: 603-098-00-9	2-Phenoxyethanol Acute Tox. 4, H302; Eye Irrit. 2, H319	25-35%
CAS: 100-51-6 EINECS: 202-859-9 Index number: 603-057-00-5	Benzyl alcohol Acute Tox. 4, H302, Acute Tox. 4, H312, Acute Tox. 4, H332	10-20%
CAS:561-41-1 EINECS: 209-218-2	C.I. Solvent Violet 8 Aquatic Acute 1, H400, Aquatic Chronic 1, H410; Skin Sens. 1, H317	5-10%
CAS: 6786-83-0 EINECS: 204-007-1	Alpha,alpha-bis[4-(dimethylamino)phenyl]-4-(phenylamino)naphthalene-1-methanol Acute Tox. 4, H302	5-10%
CAS: 112-80-1 EINECS: 204-007-1	Oleic acid, pure Skin Irrit. 2, H315, Eye Irrit 2, H319; STOT SE 3 H335	10%

SVHC	
6786-83-0	Alpha,alpha-bis[4-(dimethylamino)phenyl]-4-(phenylamino)naphthalene-1-methanol

Additional information: For the wording of the listed hazard phrases refer to section 16

#### Section 4 – First Aid Measures

Description of first aid measures

General information:

Immediately remove any clothing soiled by the product

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident

After inhalation:

Supply fresh air and call for a doctor

In case of unconsciousness, place patient stably in recovery position for transportation

After skin contact:

Immediately wash with water and soap and rinse thoroughly

After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor

After swallowing:

Call for a doctor immediately

Information for doctor:

Most important symptoms and effects, both acute and delayed: No further relevant information available

Indication of any immediate medical attention and special treatment needed: No further relevant information available

#### Section 5 – Firefighting measures

Extinguishing media

Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions

Special hazards arising from the substance or mixture: No further relevant information available

Advice for firefighters

Protective equipment: No special measures required

## Section 6 – Accidental release measures

Personal precautions, protective equipment and emergency procedures: Not required

Environmental precautions:

Do not allow product to reach sewage system or any water course

Inform respective authorities in case of seepage into water course or sewage system

Do not allow to enter sewers/surface or ground water.

Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust)

Dispose contaminated material as waste according to item 13

Ensure adequate ventilation

Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protective equipment

See Section 13 for disposal information

## Section 7 – Handling and Storage

Handling:

Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace

Prevent formation of aerosols

Information about fire- and explosion protection: No special measures required

Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: No special requirements

Information about storage in one common storage facility: Not required

Further information about storage conditions: Keep container tightly sealed

Specific end use(s): No further relevant information available

## Section 8 – Exposure controls/Personal Protection

Additional information about design of technical facilities: No further data, see item 7

Control parameters

Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace

Additional information: The lists valid during the making were used as basis

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work

Avoid contact with the eyes and skin

Respiratory protection

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protection of hands:



Protective Gloves

The glove material has to be impermeable and resistant to the product/the substance/the preparation. Due to missing tests no recommendation to the glove material can be given for the product/the preparation/the chemical mixture.

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

Material of gloves

The selection of the suitable gloves does not only depends on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection



Tightly sealed goggles

Section 9 – Physical and Chemical properties

Information on basic physical and chemical properties

General information

Appearance:

Form: Fluid

Colour: Blue

Odour: Characteristic

Odour threshold: Not determined

pH-value at 20°C: 4-7

Change in condition

Melting point/freezing point: Undetermined

Initial boiling point and boiling range: 205°C

Flash Point: >100°C

Flammability (Solid, gas): Not applicable

Decomposition temperature: Not determined

Auto-ignition temperature: Product is not self-igniting

Explosive properties: Product does not present an explosion hazard

Explosion limits

Lower: 1.3 Vol %

Upper: 13 Vol %

Vapour pressure at 20°C: 0.1 hPa

Density at 20°C: 1.11 g/cm<sup>3</sup>

Relative density: Not determined

Vapour density: Not determined

Evaporation rate: Not determined

Solubility in / Miscibility with water: Not miscible or difficult to mix

Partition coefficient: n-octanol/water: Not determined

Viscosity:

Dynamic at 20°C: 15000 mPas

Kinematic: Not determined

Solvent content:

Organic solvents: 35-55%

VOC (EC) 35-55%

Solids content: 45%

Other information: No further relevant information available

Section 10 – Stability and reactivity

Reactivity: No further relevant information available

Chemical stability

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

Possibility of hazardous reactions: No dangerous reactions known

Conditions to avoid: No further relevant information available

Incompatible materials: No further relevant information available

Hazardous decomposition products: No dangerous decomposition products known.

Section 11 – Toxicological information

Information on toxicological effects

Acute toxicity

Harmful if swallowed

LD/LC50 Values Relevant for Classification

ATE (Acute Toxicity Estimates)		
Oral	LD50	1,562 – 2,634 mg/kg
Dermal	LD50	10,000 – 20,000 mg/kg
Inhalative	LC50/4h	55 – 110 mg/l

122-99-6 2-Phenoxyethanol		
Oral	LD50	1,260 mg/kg
Dermal	LD50	5,000 mg/kg

100-51-6 Benzyl alcohol		
Oral	LD50	1,230 mg/kg
Dermal	LD50	2,000 mg/kg
Inhalative	LC50/4h	11 mg/l

6786-83-0 Alpha, alpha-bis[4-(dimethylamino)phenyl]-4-(phenylamino)naphthalene-1-methanol		
Oral	LD50	500 mg/kg

112-80-1 oleic acid, pure		
Oral	LD50	74,000 mg/kg

Primary irritant effect:

Skin corrosion/irritation: Causes skin irritation

Serious eye damage/irritation: Causes serious eye irritation

Respiratory or skin sensitization: May cause an allergic skin reaction

Additional toxicological information:

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Germ cell mutagenicity: Based on available data, the classification criteria are not met

Carcinogenicity: Based on available data, the classification criteria are not met

Reproductive toxicity: Based on available data, the classification criteria are not met

STOT-single exposure: Based on available data, the classification criteria are not met

STOT-repeated exposure: Based on available data, the classification criteria are not met

Aspiration hazard: Based on available data, the classification criteria are not met

Section 12 – Ecological information

Toxicity

Aquatic toxicity: No further relevant information available

Persistence and degradability: No further relevant information available

Behaviour in environmental systems:

Bioaccumulative potential: No further relevant information available

Mobility in soil: No further relevant information available

Ecotoxicological effects:

Remark: Toxic for fish

Additional ecological information:

General notes:

Water hazard class 3 (German Regulation)(Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground

Also poisonous for fish and plankton in water bodies

Toxic for aquatic organisms

Results of PBT and vPvB assessment

PBT: Not applicable

vPvB: Not applicable

Other adverse effects: No further relevant information available

Section 13 – Disposal considerations

Waste treatment methods

Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

European Waste Catalogue	
HP4	Irritant – skin irritation and eye damage
HP6	Acute Toxicity
HP13	Sensitizing
HP14	Ecotoxic

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations

Section 14 – Transport information

UN-Number

ADR,IMDG,IATA                      UN 3082

UN Proper Shipping Name

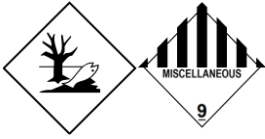
ADR                      3082 Environmentally Hazardous Substance, Liquid, N.O.S

IMDG                      Environmentally Hazardous Substance, Liquid, N.O.S, Marine Pollutant

IATA                      Environmentally hazardous substance, liquid, n.o.s

Transport hazard class(es)

ADR,IMDG,IATA



Class 9 Miscellaneous dangerous substances and articles

Label 9

Packaging group

ADR,IMDG,IATA III

Environmental hazards:

Marine pollutant: Symbol (fish and tree)

Special marking (ADR): Symbol (fish and tree)

Special marking (IATA): Symbol (fish and tree)

Special precautions for user Warning: Miscellaneous dangerous substances and articles

Hazard identification number (Kemler code): 90

EMS Number: F-A, S-F

Stowage Category: A

Transport in bulk according to Annex II of Marpol and the IBC Code: Not applicable

Transport/additional information:

ADR

Limited quantities (LQ): 5L

Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging: 30ml

Maximum net quantity per outer packaging: 1000ml

Transport category: 3

Tunnel restriction code: N/A

IMDG

Limited quantities (LQ): 5L

Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging: 30ml

Maximum net quantity per outer packaging: 1000ml

UN "Model regulation": UN 3082 Environmentally Hazardous Substance, Liquid, N.O.S, 9, III

Section 15 – Regulatory Information

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

Directive 2012/18/EU

Named dangerous substances – Annex I: None of the ingredients are listed

Seveso category: E2 Hazardous to the Aquatic environment

Qualifying quantity (tonnes) for the application of lower-tier requirements: 200 t

Qualifying quantity (tonnes) for the application of upper-tier requirements: 500 t

Regulation (EC) No 1907/2006 Annex XVII Conditions of restriction: 3

Directive: 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment

– Annex II: None of the ingredients are listed

Regulation (EU) 2019/1148

Annex I – Restricted Explosives Precursors (Upper limit value for the purpose of licensing under Article 5(3)): None of the ingredients are listed

Annex II – Reportable Explosives Precursors

None of the ingredients are listed

National regulations:

Other regulations, limitations and prohibitive regulations

Substances of very high concern (SVHC) according to REACH, Article 57

6786-83-0 Alpha,alpha-bis[4-(dimethylamino)phenyl]-4-(phenylamino)naphthalene-1-methanol

Chemical safety assessment: A chemical safety assessment has not been carried out

Section 16 – Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

H302 Harmful if swallowed

H312 Harmful in contact with skin

H315 Causes skin irritation

H317 May cause an allergic skin reaction

H319 Causes serious eye irritation

H332 Harmful if inhaled

H335 May cause respiratory irritation

H400 Very toxic to aquatic life

H410 Very toxic to aquatic life with long lasting effects

Contact:

Abbreviations and acronyms:

ADR: Accord relative au transport international des marchandises danereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

*\*No warranty is given or implied with respect to this information or patent infringement. Detectamet Ltd do not accept liability for loss or damage arising from the use of this information. Results are based on a test sample, our general experience and information from suppliers. Data and results may be confirmed by the buyer by testing for its intended conditions of use.\**

Safety You Detect

[detectamet.global](https://www.detectamet.global)

Black Ink

Section 1 – Identification of the substance

Trade name: K-191/F Black

Registration number: All ingredients are registered

Relevant identified uses of the substance or mixture and uses advised against: No further relevant information available

Application of the substance/the mixture: Ball point pen ink – Writing ink

Section 2 – Hazards identification

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



GHS08 Health Hazard

Muta. 2 H341 Suspected of causing genetic defects



GHS09 Environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects



GHS07

Acute Tox. 4

H302 Harmful if swallowed

Skin Irrit. 2

H315 Causes skin irritation

Eye Irrit. 2

H319 Causes serious eye irritation

Skin Sens. 1

H317 May cause an allergic skin reaction

Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation

Hazard pictograms



GHS07



GHS08



GHS09

Signal word: Warning

Hazard-determining components of labelling:

2-Phenoxyethanol

C.I. Solvent Violet 8

Chrysoidine

Benzyl alcohol

Hazard statements

H302 Harmful if swallowed

H315 Causes skin irritation  
 H319 Causes serious eye irritation  
 H317 May cause an allergic skin reaction  
 H341 Suspected of causing genetic defects  
 H411 Toxic to aquatic life with long lasting effects

Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray  
 P280 Wear protective gloves/protective clothing/eye protection/face protection  
 P301/P312 If swallowed: Call a poison centre/doctor if you feel unwell  
 P305/P351/P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P405 Store locked up  
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable

vPvB: Not applicable

Section 3 – Composition/information on ingredients

Chemical characterization: mixtures

Description: Mixture of substances listed below with non-hazardous additions

Dangerous Components:		
CAS: 122-99-6 EINECS: 204-589-7 Index number: 603-098-00-9	2-Phenoxyethanol Acute Tox. 4, H302; Eye Irrit. 2, H319	25-35%
CAS: 100-51-6 EINECS: 202-859-9 Index number: 603-057-00-5	Benzyl alcohol Acute Tox. 4, H302, Acute Tox. 4, H312, Acute Tox. 4, H332	10-20%
CAS:561-41-1 EINECS: 209-218-2	C.I. Solvent Violet 8 Aquatic Acute 1, H400, Aquatic Chronic 1, H410; Skin Sens. 1, H317	5-10%
CAS: 6786-83-0 EINECS: 204-007-1	Alpha,alpha-bis[4-(dimethylamino)phenyl]-4-(phenylamino)naphthalene-1-methanol Acute Tox. 4, H302	<3%
CAS: 112-80-1 EINECS: 204-007-1	Oleic acid, pure Skin Irrit. 2, H315, Eye Irrit 2, H319; STOT SE 3 H335	10%
CAS: 495-54-5 EINECS: 207-803-7 Index Number: 611-151-00-2	Chrysoidine Muta. 2, H341; STOT RE 2, H373; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302; Skin Irrit. 2, H315	≥2.5 - < 5%
SVHC		
6786-83-0	Alpha,alpha-bis[4-(dimethylamino)phenyl]-4-(phenylamino)naphthalene-1-methanol	

Additional information: For the wording of the listed hazard phrases refer to section 16

#### Section 4 – First Aid Measures

##### Description of first aid measures

##### General information:

Immediately remove any clothing soiled by the product

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident

##### After inhalation:

Supply fresh air and call for a doctor

In case of unconsciousness, place patient stably in recovery position for transportation

##### After skin contact:

Immediately wash with water and soap and rinse thoroughly

##### After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor

##### After swallowing:

Call for a doctor immediately

##### Information for doctor:

Most important symptoms and effects, both acute and delayed: No further relevant information available

Indication of any immediate medical attention and special treatment needed: No further relevant information available

#### Section 5 – Firefighting measures

##### Extinguishing media

Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions

Special hazards arising from the substance or mixture: No further relevant information available

##### Advice for firefighters

Protective equipment: No special measures required

#### Section 6 – Accidental release measures

Personal precautions, protective equipment and emergency procedures: Not required

##### Environmental precautions:

Do not allow product to reach sewage system or any water course

Inform respective authorities in case of seepage into water course or sewage system

Do not allow to enter sewers/surface or ground water.

##### Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust)

Dispose contaminated material as waste according to item 13

Ensure adequate ventilation

##### Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protective equipment

See Section 13 for disposal information

#### Section 7 – Handling and Storage

##### Handling:

Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace  
Open and handle receptacle with care  
Prevent formation of aerosols  
Information about fire- - and explosion protection: No special measures required

Conditions for safe storage, including any incompatibilities  
Storage:  
Requirements to be met by storerooms and receptacles: No special requirements  
Information about storage in one common storage facility: Not required  
Further information about storage conditions: Keep container tightly sealed  
Specific end use(s): No further relevant information available

Section 8 – Exposure controls/Personal Protection  
Additional information about design of technical facilities: No further data, see item 7

Control parameters  
Ingredients with limit values that require monitoring at the workplace:  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace  
Additional information: The lists valid during the making were used as basis

Exposure controls  
Personal protective equipment:  
General protective and hygienic measures:  
Keep away from foodstuffs, beverages and feed  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work  
Avoid contact with the eyes and skin

Respiratory protection  
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protection of hands:



Protective Gloves

The glove material has to be impermeable and resistant to the product/the substance/the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/the preparation/the chemical mixture.  
Selection of the glove material on consideration of the penetration times, rates of diffusions and the degradation.

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection



Tightly sealed goggles

## Section 9 – Physical and Chemical Properties

Information on basic physical and chemical properties

General Information

Appearance:

Form: Fluid

Colour: Black

Odour: Characteristic

Odour Threshold: Not determined

pH-value at 20°C: 4-7

Change in condition

Melting point/freezing point: Undetermined

Initial boiling point and boiling range: 205°C

Flash point:  $\geq 100^{\circ}\text{C}$

Flammability (solid, gas): Not applicable

Decomposition temperature: Not determined

Auto-ignition temperature: Product is not self-igniting

Explosive properties: product does not present an explosion hazard

Explosion limits:

Lower: 1.3 Vol %

Upper: 13 Vol %

Vapour pressure at 20°C: 0.1 hPa

Density at 20°C: 1.12 g/cm<sup>3</sup>

Relative density: Not determined

Vapour density: Not determined

Evaporate rate: Not determined

Solubility in/Miscibility with water: Not miscible or difficult to mix

Partition coefficient: N-octanol/water: Not determined

Viscosity:

Dynamic at 20°C: 15,000 mPas

Kinematic: Not determined

Solvent content:

Organic solvents: 35-55%

VOC (EC): 35-55%

Solids content: 45%

Other information: No further relevant information available

## Section 10 – Stability and reactivity

Reactivity: No further relevant information available

Chemical stability

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

Possibility of hazardous reactions: No dangerous reactions known

Conditions to avoid: No further relevant information available

Incompatible materials: No further relevant information available

Hazardous decomposition products: No dangerous decomposition products known

## Section 11 – Toxicological Information

Information on toxicological effects

Acute toxicity

Harmful if swallowed

LD/LC50 values relevant for classification:

ATE (Acute Toxicity Estimates)		
Oral	LD50	>1,666-2,274 mg/kg
Dermal	LD50	10,000-20,000 mg/kg
Inhalative	LC50/4h	55-110 mg/l

122-99-6 2-Phenoxyethanol		
Oral	LD50	1,260 mg/kg
Dermal	LD50	5,000 mg/kg
100-51-6 Benzyl alcohol		
Oral	LD50	1,230mg mg/kg
Dermal	LD50	2,000 mg/kg
Inhalative	LC50/4h	11 mg/l
112-80-1 oleic acid, pure		
Oral	LD50	74,000 mg/kg
495-54-5 chrysoidine		
Oral	LD50	500 mg/kg
6786-83-0 Alpha,alpha-bis[4-(dimethylamino)phenyl]-4-(phenylamino)naphthalene-1-methanol		
Oral	LD50	500 mg/kg

Primary irritant effect:

Skin corrosion/irritation

Causes skin irritation

Serious eye damage/irritation

Causes serious eye irritation

Respiratory or skin sensitisation

May cause an allergic skin reaction

Additional toxicological information:

CMR effects (Carcinogenetic, mutagenicity and toxicity for reproduction)

Germ cell mutagenicity

Suspected of causing genetic defects

Carcinogenicity: Based on available data, the classification criteria are not met

Reproductive toxicity: Based on available data, the classification criteria are not met

STOT-single exposure: Based on available data, the classification criteria are not met

STOT-repeated exposure: Based on available data, the classification criteria are not met

Aspiration hazard: Based on available, the classification criteria are not met

## Section 12 – Ecological information

### Toxicity

Aquatic toxicity: No further relevant information available

Persistence and degradability: No further relevant information available

Behaviour in environmental systems:

Bioaccumulative potential: No further relevant information available

Mobility in soil: No further relevant information available

Ecotoxicological effects:

Remark: Toxic for fish

Additional ecological information:

General notes:

Water hazard class 3 (German Regulation)(Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground

Also poisonous for fish and plankton in water bodies

Toxic for aquatic organisms

Results of PBT and vPvB assessment

PBT: Not applicable

vPvB: Not applicable

Other adverse effects: No further relevant information available

## Section 13 – Disposal considerations

Waste treatment methods

Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

European Waste Catalogue	
HP4	Irritant – skin irritation and eye damage
HP6	Acute Toxicity
HP11	Mutagenic
HP13	Sensitizing
HP14	Ecotoxic

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations

## Section 14 – Transport Information

UN-Number

ADR,IMDG,IATA            UN 3082

UN Proper Shipping Name

ADR            3082 Environmentally Hazardous Substance, Liquid, N.O.S

IMDG            Environmentally Hazardous Substance, Liquid, N.O.S, Marine Pollutant

IATA            Environmentally hazardous substance, liquid, n.o.s

Transport hazard class(es)

ADR,IMDG,IATA



Class 9 Miscellaneous dangerous substances and articles

Label 9

Packaging group

ADR,IMDG,IATA III

Environmental hazards:

Marine pollutant: Symbol (fish and tree)

Special marking (ADR): Symbol (fish and tree)

Special marking (IATA): Symbol (fish and tree)

Special precautions for user Warning: Miscellaneous dangerous substances and articles

Hazard identification number (Kemler code): 90

EMS Number: F-A, S-F

Stowage Category: A

Transport in bulk according to Annex II of Marpol and the IBC Code: Not applicable

Transport/additional information:

ADR

Limited quantities (LQ): 5L

Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging: 30ml

Maximum net quantity per outer packaging: 1000ml

Transport category: 3

Tunnel restriction code: N/A

IMDG

Limited quantities (LQ): 5L

Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging: 30ml

Maximum net quantity per outer packaging: 1000ml

UN "Model regulation": UN 3082 Environmentally Hazardous Substance, Liquid, N.O.S, 9, III

### Section 15 – Regulatory Information

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

Directive 2012/18/EU

Named dangerous substances – Annex I: None of the ingredients are listed

Seveso category: E2 Hazardous to the Aquatic environment

Qualifying quantity (tonnes) for the application of lower-tier requirements: 200 t

Qualifying quantity (tonnes) for the application of upper-tier requirements: 500 t

Regulation (EC) No 1907/2006 Annex XVII Conditions of restriction: 3

Directive: 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic

equipment – Annex II: None of the ingredients are listed

Regulation (EU) 2019/1148

Annex I – Restricted Explosives Precursors (Upper limit value for the purpose of licensing under Article 5(3)):  
None of the ingredients are listed

Annex II – Reportable Explosives Precursors

None of the ingredients are listed

National regulations:

Other regulations, limitations and prohibitive regulations

Substances of very high concern (SVHC) according to REACH, Article 57

6786-83-0 Alpha,alpha-bis[4-(dimethylamino)phenyl]-4-(phenylamino)naphthalene-1-methanol

Chemical safety assessment: A chemical safety assessment has not been carried out

Section 16 – Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

H302 Harmful if swallowed

H312 Harmful in contact with skin

H315 Causes skin irritation

H317 May cause an allergic skin reaction

H319 Causes serious eye irritation

H332 Harmful if inhaled

H335 May cause respiratory irritation

H400 Very toxic to aquatic life

H410 Very toxic to aquatic life with long lasting effects

Contact:

Abbreviations and acronyms:

ADR: Accord relative au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

Red Ink

Section 1 – Identification of the substance

Trade name: R-87 Red

Registration number: All ingredients are registered

Relevant identified uses of the substance or mixture and uses advised against: No further relevant information available

Application of the substance/the mixture: Ball point pen ink – Writing ink

Section 2 – Hazards identification

Classification of the substance or mixture

## Classification according to Regulation (EC) No 1272/2008



GHS08 Health Hazard

Muta. 2 H341 Suspected of causing genetic defects



GHS09 Environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects



GHS07

Acute Tox. 4 H302 Harmful if swallowed  
Skin Irrit. 2 H315 Causes skin irritation  
Eye Irrit. 2 H319 Causes serious eye irritation

### Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation

### Hazard pictograms



GHS07



GHS08



GHS09

Signal word: Warning

### Hazard-determining components of labelling:

2-Phenoxyethanol

Chrysoidine

Benzyl alcohol

3',6'-bis(diethylamino)spiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3-one

### Hazard statements

H302 Harmful if swallowed

H315 Causes skin irritation

H319 Causes serious eye irritation

H341 Suspected of causing genetic defects

H411 Toxic to aquatic life with long lasting effects

### Precautionary statements

P101 If medical advice is needed, have product container or label at hand

P102 Keep out of reach of children

P103 Read label before use

P280 Wear protective gloves/protective clothing/eye protection/face protection

P301/P312 If swallowed: Call a poison centre/doctor if you feel unwell

P330 Rinse mouth

P305/P351/P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P405 Store locked up  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable

vPvB: Not applicable

Section 3 – Composition/information on ingredients

Chemical characterization: mixtures

Description: Mixture of substances listed below with non-hazardous additions

Dangerous Components:		
CAS: 122-99-6 EINECS: 204-589-7 Index number: 603-098-00-9	2-Phenoxyethanol Acute Tox. 4, H302; Eye Irrit. 2, H319	25-35%
CAS: 100-51-6 EINECS: 202-859-9 Index number: 603-057-00-5	Benzyl alcohol Acute Tox. 4, H302, Acute Tox. 4, H312, Acute Tox. 4, H332	10-20%
CAS: 112-80-1 EINECS: 204-007-1	Oleic acid, pure Skin Irrit. 2, H315, Eye Irrit 2, H319; STOT SE 3 H335	10%
CAS: 495-54-5 EINECS: 207-803-7 Index Number: 611-151-00-2	Chrysoidine Muta. 2, H341; STOT RE 2, H373; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302; Skin Irrit. 2, H315	≥2.5 - < 5%
CAS:509-34-2 EINECS: 208-096-8	3',6'-bis(diethylamino)spiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3-one Acute Tox. 4, H302	<3.0%

Additional information: For the wording of the listed hazard phrases refer to section 16

Section 4 – First Aid Measures

Description of first aid measures

General information:

Immediately remove any clothing soiled by the product

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident

After inhalation:

In case of unconsciousness, place patient stably in recovery position for transportation

After skin contact:

Immediately wash with water and soap and rinse thoroughly

After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor

After swallowing:

Call for a doctor immediately

Information for doctor:

Most important symptoms and effects, both acute and delayed: No further relevant information available

Indication of any immediate medical attention and special treatment needed: No further relevant information available

Section 5 – Firefighting measures

Extinguishing media

Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions

Special hazards arising from the substance or mixture: No further relevant information available

Advice for firefighters

Protective equipment: No special measures required

Section 6 – Accidental release measures

Personal precautions, protective equipment and emergency procedures: Not required

Environmental precautions:

Do not allow product to reach sewage system or any water course

Inform respective authorities in case of seepage into water course or sewage system

Do not allow to enter sewers/surface or ground water.

Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust)

Dispose contaminated material as waste according to item 13

Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protective equipment

See Section 13 for disposal information

Section 7 – Handling and Storage

Handling:

Precautions for safe handling

Open and handle receptacle with care

Information about fire- and explosion protection: Keep respiratory protective device available

Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: No special requirements

Information about storage in one common storage facility: Not required

Further information about storage conditions: Keep container tightly sealed

Specific end use(s): No further relevant information available

Section 8 – Exposure controls/Personal Protection

Additional information about design of technical facilities: No further data, see item 7

Control parameters

Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace

Additional information: The lists valid during the making were used as basis

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work

Avoid contact with the eyes and skin

Respiratory protection: Not required

Protection of hands:



Protective Gloves

The glove material has to be impermeable and resistant to the product/the substance/the preparation. Due to missing tests no recommendation to the glove material can be given for the product/the preparation/the chemical mixture.

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

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection



Tightly sealed goggles

## Section 9 – Physical and Chemical Properties

Information on basic physical and chemical properties

General Information

Appearance:

Form: Fluid

Colour: Red

Odour: Characteristic

Odour Threshold: Not determined

pH-value at 20°C: 4-7

Change in condition

Melting point/freezing point: Undetermined

Initial boiling point and boiling range: 205°C

Flash point:  $\geq 100^\circ\text{C}$

Flammability (solid, gas): Not applicable

Decomposition temperature: Not determined

Auto-ignition temperature: Product is not self-igniting

Explosive properties: product does not present an explosion hazard

Explosion limits:

Lower: 1.3 Vol %

Upper: 13 Vol %

Vapour pressure at 20°C: 0.1 hPa

Density at 20°C: 1.11 g/cm<sup>3</sup>

Relative density: Not determined

Vapour density: Not determined

Evaporate rate: Not determined

Solubility in/Miscibility with water: Not miscible or difficult to mix

Partition coefficient: N-octanol/water: Not determined

Viscosity:

Dynamic at 20°C: 10,625 mPas

Kinematic: Not determined

Solvent content:

Organic solvents: 35-65%

VOC (EC): 35-65%

Solids content: 40%

Other information: No further relevant information available

Section 10 – Stability and reactivity

Reactivity: No further relevant information available

Chemical stability

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

Possibility of hazardous reactions: No dangerous reactions known

Conditions to avoid: No further relevant information available

Incompatible materials: No further relevant information available

Hazardous decomposition products: No dangerous decomposition products known

Section 11 – Toxicological Information

Information on toxicological effects

Acute toxicity

Harmful if swallowed

LD/LC50 values relevant for classification:

ATE (Acute Toxicity Estimates)		
Oral	LD50	>1,563-2,502 mg/kg
Dermal	LD50	10,000-20,000 mg/kg
Inhalative	LC50/4h	55-110 mg/l

122-99-6 2-Phenoxyethanol		
Oral	LD50	1,260 mg/kg
Dermal	LD50	5,000 mg/kg

100-51-6 Benzyl alcohol		
Oral	LD50	1,230mg mg/kg
Dermal	LD50	2,000 mg/kg
Inhalative	LC50/4h	11 mg/l
112-80-1 oleic acid, pure		
Oral	LD50	74,000 mg/kg
495-54-5 chrysoidine		
Oral	LD50	500 mg/kg
509-34-2 3',6'-bis(diethylamino)spiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3-one		
Oral	LD50	500 mg/kg

Primary irritant effect:  
Skin corrosion/irritation  
Causes skin irritation

Serious eye damage/irritation  
Causes serious eye irritation

Respiratory or skin sensitisation  
Based on available data, the classification criteria are not met

Additional toxicological information:  
CMR effects (Carcinogenetic, mutagenicity and toxicity for reproduction)  
Germ cell mutagenicity  
Suspected of causing genetic defects  
Carcinogenicity: Based on available data, the classification criteria are not met  
Reproductive toxicity: Based on available data, the classification criteria are not met  
STOT-single exposure: Based on available data, the classification criteria are not met  
STOT-repeated exposure: Based on available data, the classification criteria are not met  
Aspiration hazard: Based on available, the classification criteria are not met

## Section 12 – Ecological information

### Toxicity

Aquatic toxicity: No further relevant information available

Persistence and degradability: No further relevant information available

Behaviours in environmental systems:

Bioaccumulative potential: No further relevant information available

Mobility in soil: No further relevant information available

Ecotoxicological effects:

Remark: Toxic for fish

Additional ecological information:

General notes:

Water hazard class 2 (German Regulation)(Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground

Also poisonous for fish and plankton in water bodies

Toxic for aquatic organisms

Results of PBT and vPvB assessment

PBT: Not applicable

vPvB: Not applicable

Other adverse effects: No further relevant information available

### Section 13 – Disposal considerations

Waste treatment methods

Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

European Waste Catalogue	
HP4	Irritant – skin irritation and eye damage
HP6	Acute Toxicity
HP11	Mutagenic
HP14	Ecotoxic

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations

### Section 14 – Transport Information

UN-Number

ADR,IMDG,IATA                      UN 3082

UN Proper Shipping Name

ADR                      3082 Environmentally Hazardous Substance, Liquid, N.O.S

IMDG                      Environmentally Hazardous Substance, Liquid, N.O.S, Marine Pollutant

IATA                      Environmentally hazardous substance, liquid, n.o.s

Transport hazard class(es)

ADR,IMDG,IATA



Class    9 Miscellaneous dangerous substances and articles

Label    9

Packaging group

ADR,IMDG,IATA                      III

Environmental hazards:

Marine pollutant: Symbol (fish and tree)

Special marking (ADR): Symbol (fish and tree)

Special marking (IATA): Symbol (fish and tree)

Special precautions for user              Warning: Miscellaneous dangerous substances and articles

Hazard identification number (Kemler code): 90

EMS Number: F-A, S-F

Stowage Category: A

Transport in bulk according to Annex II of Marpol and the IBC Code: Not applicable

Transport/additional information:

ADR

Limited quantities (LQ): 5L

Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging: 30ml

Maximum net quantity per outer packaging: 1000ml

Transport category: 3

Tunnel restriction code: N/A

IMDG

Limited quantities (LQ): 5L

Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging: 30ml

Maximum net quantity per outer packaging: 1000ml

UN "Model regulation": UN 3082 Environmentally Hazardous Substance, Liquid, N.O.S, 9, III

#### Section 15 – Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture  
Directive 2012/18/EU

Named dangerous substances – Annex I: None of the ingredients are listed

Seveso category: E2 Hazardous to the Aquatic environment

Qualifying quantity (tonnes) for the application of lower-tier requirements: 200 t

Qualifying quantity (tonnes) for the application of upper-tier requirements: 500 t

Regulation (EC) No 1907/2006 Annex XVII Conditions of restriction: 3

Directive: 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II: None of the ingredients are listed

Regulation (EU) 2019/1148

Annex I – Restricted Explosives Precursors (Upper limit value for the purpose of licensing under Article 5(3)):  
None of the ingredients are listed

Annex II – Reportable Explosives Precursors

None of the ingredients are listed

Chemical safety assessment: A chemical safety assessment has not been carried out

#### Section 16 – Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

#### Relevant phrases

H302 Harmful if swallowed

H312 Harmful in contact with skin

H315 Causes skin irritation

H319 Causes serious eye irritation

H332 Harmful if inhaled

H335 May cause respiratory irritation

H341 Suspected of causing genetic defects

H373 May cause damage to organs through prolonged or repeated exposure  
H400 Very toxic to aquatic life  
H410 Very toxic to aquatic life with long lasting effects

Contact:

Abbreviations and acronyms:

ADR: Accord relative au transport international des marchandises danereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

Green Ink

Section 1 – Identification of the substance

Trade name: Docufluidal BP 183 Green

Registration number: All ingredients are registered

Relevant identified uses of the substance or mixture and uses advised against: No further relevant information available

Application of the substance/the mixture: Ball point pen ink – Writing ink

Section 2 – Hazards identification

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



GHS05 Corrosion

Eye dam. 1

H318 Causes serious eye damage



GHS09 Environment

Aquatic Chronic 2

H411 Toxic to aquatic life with long lasting effects



GHS07

Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation

Hazard pictograms



GHS07      GHS08      GHS09

Signal word: Warning

Hazard-determining components of labelling:  
Phosphoric acid mono-bis-(2-ethylhexyl)-ester

Hazard statements

H315 Causes skin irritation

H318 Causes serious eye damage

H411 Toxic to aquatic life with long lasting effects

Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection

P305/P351/P338 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 centre/doctor

P321 Specific treatment (see on this label)

P362 Take off contaminated clothing and wash before reuse

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable

vPvB: Not applicable

Section 3 – Composition/information on ingredients

Chemical characterization: mixtures

Description: Mixture of substances listed below with non-hazardous additions

Dangerous Components:		
CAS: 122-99-6 EINECS: 204-589-7 Index number: 603-098-00-9	2-Phenoxyethanol Acute Tox. 4, H302; Eye Irrit. 2, H319	25-35%
CAS: 100-51-6 EINECS: 202-859-9 Index number: 603-057-00-5	Benzyl alcohol Acute Tox. 4, H302, Acute Tox. 4, H312, Acute Tox. 4, H332	10-20%
CAS: 85029-58-9 EINECS: 285-083-3	C.I. Solvent Yellow 82 Aquatic Acute 1, H400: Aquatic Chronic 1, H410	2.5 – 10%
CAS: 12645-31-7 EINECS: 235-741-0	Phosphoric acid mono-bis-(2-ethylhexyl)-ester Skin Corr. 1B, H314	2.5 – 10%

Additional information: For the wording of the listed hazard phrases refer to section 16

Section 4 – First Aid Measures

Description of first aid measures

After inhalation:

Supply fresh air and call for a doctor

In case of unconsciousness, place patient stably in recovery position for transportation

After skin contact:

Immediately wash with water and soap and rinse thoroughly

After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor

After swallowing:

If symptoms persist, call a doctor

Information for doctor:

Most important symptoms and effects, both acute and delayed: No further relevant information available

Indication of any immediate medical attention and special treatment needed: No further relevant information available

Section 5 – Firefighting measures

Extinguishing media

Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions

Special hazards arising from the substance or mixture: No further relevant information available

Advice for firefighters

Protective equipment: No special measures required

Section 6 – Accidental release measures

Personal precautions, protective equipment and emergency procedures: Wear protective clothing

Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system

Do not allow to enter sewers/surface or ground water.

Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust)

Ensure adequate ventilation

Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protective equipment

See Section 13 for disposal information

Section 7 – Handling and Storage

Handling:

Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace

Prevent formation of aerosols

Information about fire- and explosion protection: No special measures required

Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: No special requirements

Information about storage in one common storage facility: Not required

Further information about storage conditions: None

Specific end use(s): No further relevant information available

## Section 8 – Exposure controls/Personal Protection

Additional information about design of technical facilities: No further data, see item 7

### Control parameters

Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace

Additional information: The lists valid during the making were used as basis

### Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work

Avoid contact with the eyes and skin

### Respiratory protection

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

### Protection of hands:



Protective Gloves

The glove material has to be impermeable and resistant to the product/the substance/the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/the preparation/the chemical mixture.

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

### Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application

### Penetration time of glove material

The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.

### Eye protection



Tightly sealed goggles

## Section 9 – Physical and Chemical Properties

Information on basic physical and chemical properties

### General Information

Appearance:

Form: Fluid

Colour: Red

Odour: Product specific

Odour Threshold: Not determined

pH-value at 20°C: 5.3

Change in condition

Melting point/freezing point: Undetermined

Initial boiling point and boiling range: 205°C

Flash point:  $\geq 100^\circ\text{C}$

Flammability (solid, gas): Not applicable

Auto-ignition temperature: 435°C

Explosive properties: Not determined

Explosion limits:

Lower: 1.3 Vol %

Upper: 13 Vol %

Vapour pressure at 20°C: 0.1 hPa

Density at 20°C: Not determined

Relative density: Not determined

Vapour density: Not determined

Evaporate rate: Not determined

Solubility in/Miscibility with water: Not miscible or difficult to mix

Partition coefficient: N-octanol/water: Not determined

Viscosity:

Dynamic at 20°C: 8500 mPas

Kinematic: Not determined

Solvent content:

Organic solvents: 55%

Solids content: 39.5%

Other information: No further relevant information available

Section 10 – Stability and reactivity

Reactivity: No further relevant information available

Chemical stability

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

Possibility of hazardous reactions: No dangerous reactions known

Conditions to avoid: No further relevant information available

Incompatible materials: No further relevant information available

Hazardous decomposition products: No dangerous decomposition products known

Section 11 – Toxicological Information

Information on toxicological effects

Acute toxicity

LD/LC50 values relevant for classification:

122-99-6 2-Phenoxyethanol		
Oral	LD50	1,260 mg/kg
Dermal	LD50	5,000 mg/kg

Primary irritant effect:  
Skin corrosion/irritation  
Causes skin irritation

Serious eye damage/irritation  
Causes serious eye irritation

Respiratory or skin sensitisation  
May cause an allergic skin reaction

Additional toxicological information:  
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Irritant:

Section 12 – Ecological information  
Toxicity

Aquatic toxicity: No further relevant information available

Persistence and degradability: No further relevant information available

Behaviour in environmental systems:

Bioaccumulative potential: No further relevant information available

Mobility in soil: No further relevant information available

Ecotoxicological effects:

Remark: Toxic for fish

Additional ecological information:

General notes:

Water hazard class 2 (German Regulation)(Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground

Also poisonous for fish and plankton in water bodies

Toxic for aquatic organisms

Results of PBT and vPvB assessment

PBT: Not applicable

vPvB: Not applicable

Other adverse effects: No further relevant information available

Section 13 – Disposal considerations

Waste treatment methods

Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

European Waste Catalogue	
08 00 00	Wastes from the manufacture, formulation, supply and use (MFSU) of coatings (Paints, Varnishes and vitreous enamels), Adhesives, Sealants and Printing Inks
08 01 00	Wastes from MFSU and removal of paint and varnish
08 01 13	Sludges from paint or varnish containing organic solvents or other dangerous substances

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations

#### Section 14 – Transport Information

UN-Number

ADR,IMDG,IATA                    UN 3082

UN Proper Shipping Name

ADR                    3082 Environmentally Hazardous Substance, Liquid, N.O.S (metal complex dye, yellow)

IMDG                    Environmentally Hazardous Substance, Liquid, N.O.S, Marine Pollutant (metal complex dye, yellow)

IATA                    Environmentally hazardous substance, liquid, n.o.s (metal complex dye, yellow)

Transport hazard class(es)

ADR,IMDG,IATA



Class    9 Miscellaneous dangerous substances and articles

Label    9

Packaging group

ADR,IMDG,IATA                    III

Environmental hazards:

Marine pollutant: Symbol (fish and tree)

Special marking (ADR): Symbol (fish and tree)

Special marking (IATA): Symbol (fish and tree)

Special precautions for user            Warning: Miscellaneous dangerous substances and articles

Hazard identification number (Kemler code): 90

EMS Number: F-A, S-F

Stowage Category: A

Transport in bulk according to Annex II of Marpol and the IBC Code: Not applicable

Transport/additional information:

ADR

Limited quantities (LQ): 5L

Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging: 30ml

Maximum net quantity per outer packaging: 1000ml

Transport category: 3  
Tunnel restriction code: N/A

#### IMDG

Limited quantities (LQ): 5L  
Excepted quantities (EQ)  
Code: E1  
Maximum net quantity per inner packaging: 30ml  
Maximum net quantity per outer packaging: 1000ml

UN "Model regulation": UN 3082 Environmentally Hazardous Substance, Liquid, N.O.S, 9, III

#### Section 15 – Regulatory Information

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

National regulations

Technical Instructions (air):

Class	Share in %
NK	50-100

Waterhazard class: Water hazard class 2 (self assessment): hazardous for water

15.2 Chemical safety assessment: a chemical safety assessment has not been carried out

#### Section 16 – Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

#### Relevant phrases

H302 Harmful if swallowed  
H314 Causes severe skin burns and eye damage  
H319 Causes serious eye irritation  
H332 Harmful if inhaled  
H400 Very toxic to aquatic life  
H410 Very toxic to aquatic life with long lasting effects

#### Contact:

##### Abbreviations and acronyms:

ADR: Accord relative au transport international des marchandises danereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

*\*No warranty is given or implied with respect to this information or patent infringement. Detectamet Ltd do not accept liability for loss or damage arising from the use of this information. Results are based on a test sample, our general experience and information from suppliers. Data and results may be confirmed by the buyer by testing for its intended conditions of use.\**

Safety You Detect

[detectamet.global](http://detectamet.global)