

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

- **1.1 Product identifier**
- **Trade name:** NKS 87/2 black
- **Article number:** 100000002391
- **Registration number**
The ingredients of this product meet the criteria of the Regulation 1907/2006/EC (REACH).
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
Currently no such applications are identified.
- **Application of the substance / the mixture** Ball Pen Ink
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
DOKUMENTAL GmbH & Co KG
Woellnerstraße 26
D-67065 Ludwigshafen
Phone + 49(0)621/37702 321
Fax + 49(0)621/37702 391
www.dokumental.de
- **Further information obtainable from:**
Technical Service & Product Safety
Tel.: +49-621-37702 390
E-Mail: msds@dokumental.de
- **1.4 Emergency telephone number:**
GBK Gefahrgut Büro GmbH
+49 (0) 6132 / 84463
Ingelheim, Deutschland

SECTION 2: Hazards identification

- **2.1 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 Acute 1 H400 Very toxic to aquatic life.

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.



GHS07

Skin Sens. 1 H317 May cause an allergic skin reaction.

STOT SE 3 H335 May cause respiratory irritation.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS05



GHS07



GHS09

- **Signal word** Danger
- **Hazard-determining components of labelling:**
2-phenoxyethanol
C.I. Solvent Black 46
- **Hazard statements**
H318 Causes serious eye damage.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.
H410 Very toxic to aquatic life with long lasting effects.

(Contd. on page 2)

Trade name: NKS 87/2 black

(Contd. of page 1)

- **Precautionary statements**
 - P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
 - 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 CENTER/doctor.
 - P321 Specific treatment (see on this label).
 - P362+P364 Take off contaminated clothing and wash it before reuse.
 - P405 Store locked up.
 - P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 122-99-6 EINECS: 204-589-7 Reg.nr.: 01-2119488943-21	2-phenoxyethanol ☠ Eye Dam. 1, H318; ☠ Acute Tox. 4, H302; STOT SE 3, H335 ATE: LD50 oral: 1,394 mg/kg	25-<50%
CAS: 65113-55-5 EINECS: 265-449-9 Reg.nr.: 01-2119982974-17	C.I. Solvent Black 46 ☠ Eye Dam. 1, H318; ☠ Aquatic Acute 1, H400 (M=100); Aquatic Chronic 1, H410 (M=100); ☠ Skin Sens. 1B, H317; STOT SE 3, H335	25-<50%
CAS: 100-51-6 EINECS: 202-859-9 Reg.nr.: 01-2119492630-38	Benzyl alcohol ☠ Acute Tox. 4, H302; Acute Tox. 4, H332; Eye Irrit. 2, H319	10-<25%

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

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side 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. Then consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Wear protective clothing.
- **6.2 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.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

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Trade name: NKS 87/2 black

(Contd. of page 2)

SECTION 7: Handling and storage

- **7.1 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.
- **7.2 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.
- **Storage class:** 10
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 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.
- **8.2 Exposure controls**
- **Appropriate engineering controls** No further data; see item 7.
- **Individual protection measures, such as 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.
- **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.
- **Hand protection**



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 diffusion and the degradation
If only a short-term loading of the glove material by splashes is expected, tricoted gloves with higher wearability for the better acceptance of the users are recommended.

- **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.
Nitrile rubber, NBR
- **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/face protection**



Tightly sealed goggles

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Physical state** Fluid
- **Colour:** According to product specification
- **Odour:** Product specific
- **Odour threshold:** Not determined.

(Contd. on page 4)

Trade name: NKS 87/2 black

(Contd. of page 3)

<ul style="list-style-type: none"> • Melting point/freezing point: Undetermined. • Boiling point or initial boiling point and boiling range 205 °C (100-51-6 Benzyl alcohol) • Flammability Not applicable. • Lower and upper explosion limit • Lower: 1.3 Vol % (100-51-6 Benzyl alcohol) • Upper: 13 Vol % (100-51-6 Benzyl alcohol) • Flash point: 101 °C (100-51-6 Benzyl alcohol) • Ignition temperature: 435 °C (100-51-6 Benzyl alcohol) • Decomposition temperature: Not determined. • pH at 20 °C 6.5 • Viscosity: • Kinematic viscosity Not determined. • Dynamic at 20 °C: 16,000 mPas • Solubility • water: Not miscible or difficult to mix. • Partition coefficient n-octanol/water (log value) Not determined. • Vapour pressure at 20 °C: 0.07 hPa (100-51-6 Benzyl alcohol) • Density and/or relative density • Density at 20 °C: 1 g/cm³ • Relative density Not determined. • Vapour density Not determined. 	
<ul style="list-style-type: none"> • 9.2 Other information The physical and chemical properties given in Section 9.1 are rough data only, which are partially derived from the component's data of the mixture. These data are no binding product specifications. • Appearance: • Form: Fluid • Important information on protection of health and environment, and on safety. - • Auto-ignition temperature: Product is not selfigniting. • Explosive properties: Not determined. • Solvent content: • Organic solvents: 46.6 % • Solids content: 49.8 % • Change in condition • Evaporation rate Not determined. 	
<ul style="list-style-type: none"> • Information with regard to physical hazard classes • Explosives none • Flammable gases none • Aerosols none • Oxidising gases none • Gases under pressure none • Flammable liquids none • Flammable solids none • Self-reactive substances and mixtures none • Pyrophoric liquids none • Pyrophoric solids none • Self-heating substances and mixtures none • Substances and mixtures, which emit flammable gases in contact with water none • Oxidising liquids none • Oxidising solids none • Organic peroxides none • Corrosive to metals none • Desensitised explosives none 	

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

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(Contd. on page 5)

Trade name: NKS 87/2 black

(Contd. of page 4)

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Causes serious eye damage.
- **Respiratory or skin sensitisation** May cause an allergic skin reaction.
- **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** May cause respiratory irritation.
- **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.
- **11.2 Information on other hazards**

• Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

• 12.1 Toxicity

• Aquatic toxicity:

65113-55-5 C.I. Solvent Black 46

EC10 40 micro g/L (zebra fish)

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**

• **PBT:** Not applicable.

• **vPvB:** Not applicable.

• 12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

• 12.7 Other adverse effects

• **Remark:** Very 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.

Very toxic for aquatic organisms

SECTION 13: Disposal considerations

• 13.1 Waste treatment methods

• Recommendation

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

• Uncleaned packaging:

• **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

• 14.1 UN number or ID number

• **ADR, IMDG, IATA**

UN3082

• 14.2 UN proper shipping name

• **ADR**

3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (triarylmethane dye, black)

• **IMDG**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (triarylmethane dye, black), MARINE POLLUTANT

• **IATA**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (triarylmethane dye, black)

(Contd. on page 6)

Trade name: NKS 87/2 black

(Contd. of page 5)

· 14.3 Transport hazard class(es)

· ADR



· Class

9 (M6) Miscellaneous dangerous substances and articles.

· Label

9

· IMDG, IATA



· Class

9 Miscellaneous dangerous substances and articles.

· Label

9

· 14.4 Packing group

· ADR, IMDG, IATA

III

· 14.5 Environmental hazards:

· Marine pollutant:

· Special marking (ADR):

· Special marking (IATA):

Product contains environmentally hazardous substances: triarylmethane dye, black

Symbol (fish and tree)

Symbol (fish and tree)

Symbol (fish and tree)

· 14.6 Special precautions for user

· Hazard identification number (Kemler code):

· EMS Number:

· Stowage Category

Warning: Miscellaneous dangerous substances and articles.

90

F-A,S-F

A

· 14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

· Transport/Additional information:

· ADR

· Limited quantities (LQ)

· Excepted quantities (EQ)

5L

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

· Transport category

3

· Tunnel restriction code

(-)

· IMDG

· Limited quantities (LQ)

· Excepted quantities (EQ)

5L

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

· UN "Model Regulation":

UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TRIARYLMETHANE DYE, BLACK), 9, III

SECTION 15: Regulatory information

· 15.1 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 is listed.

· Seveso category E1 Hazardous to the Aquatic Environment

· Qualifying quantity (tonnes) for the application of lower-tier requirements 100 t

· Qualifying quantity (tonnes) for the application of upper-tier requirements 200 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 is 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 is listed.

(Contd. on page 7)

Trade name: NKS 87/2 black

(Contd. of page 6)

• **Annex II - REPORTABLE EXPLOSIVES PRECURSORS**

None of the ingredients is listed.

• **Regulation (EC) No 273/2004 on drug precursors**

None of the ingredients is listed.

• **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**

None of the ingredients is listed.

• **National regulations:**

• **Technical instructions (air):**

Class	Share in %
NK	25-<50

• **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.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
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.

• **Date of previous version:** 27.01.2023

• **Abbreviations and acronyms:**

ADR: Accord relatif 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 Harmonised 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)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 4: Acute toxicity - Category 4
Eye Dam. 1: Serious eye damage/eye irritation - Category 1
Eye Irrit. 2: Serious eye damage/eye irritation - Category 2
Skin Sens. 1: Skin sensitisation - Category 1
Skin Sens. 1B: Skin sensitisation - Category 1B
STOT SE 3: Specific target organ toxicity (single exposure) - Category 3
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard - Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard - Category 1

• *** Data compared to the previous version altered.**

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

- 1.1 Product identifier
- Trade name: 600 B-S violet blue
- Article number: 100000000571
- Registration number
The ingredients of this product meet the criteria of the Regulation 1907/2006/EC (REACH).
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
Currently no such applications are identified.
- Application of the substance / the mixture Ball Pen Ink
- 1.3 Details of the supplier of the safety data sheet
- Manufacturer/Supplier:
DOKUMENTAL GmbH & Co KG
Woellnerstraße 26
D-67065 Ludwigshafen
Phone + 49(0)621/37702 321
Fax + 49(0)621/37702 391
www.dokumental.de
- Further information obtainable from:
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E-Mail: msds@dokumental.de
- 1.4 Emergency telephone number:
GBK Gefahrgut Büro GmbH
+49 (0) 6132 / 84463
Ingelheim, Deutschland

SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008



GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.
STOT SE 3 H335 May cause respiratory irritation.

- 2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008
The product is classified and labelled according to the CLP regulation.
- Hazard pictograms



GHS05



GHS07

- Signal word Danger
- Hazard-determining components of labelling:
2-phenoxyethanol
C.I. Solvent Blue 4 < 0,1% Michler's Ketone
Phosphoric acid mono-bis-(2-ethylhexyl)-ester
- Hazard statements
H315 Causes skin irritation.
H318 Causes serious eye damage.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.
- Precautionary statements
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
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 CENTER/doctor.
P321 Specific treatment (see on this label).
P362+P364 Take off contaminated clothing and wash it before reuse.

(Contd. on page 2)

Trade name: 600 B-S violet blue

(Contd. of page 1)

P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

• **Dangerous components:**

CAS: 122-99-6 EINECS: 204-589-7 Reg.nr.: 01-2119488943-21	2-phenoxyethanol ☠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302; STOT SE 3, H335 ATE: LD50 oral: 1,394 mg/kg	25-<50%
CAS: 100-51-6 EINECS: 202-859-9 Reg.nr.: 01-2119492630-38	Benzyl alcohol ⚠ Acute Tox. 4, H302; Acute Tox. 4, H332; Eye Irrit. 2, H319	5-<10%
CAS: 107-41-5 EINECS: 203-489-0 Reg.nr.: 01-2119539582-35	2-methylpentane-2,4-diol ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319	5-<10%
CAS: 561-41-1 EINECS: 209-218-2 Reg.nr.: 01-2119979581-25	C.I. Solvent Violet 8 Alternative CAS number: 52080-58-7 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; Aquatic Chronic 3, H412	5-<10%
CAS: 6786-83-0 EINECS: 229-851-8 Reg.nr.: 01-2119950688-22	C.I. Solvent Blue 4 < 0,1% Michler's Ketone ☠ Eye Dam. 1, H318; ⚠ Skin Sens. 1B, H317	5-<10%
CAS: 12645-31-7 EINECS: 235-741-0 Reg.nr.: 01-2119896587-13	Phosphoric acid mono-bis-(2-ethylhexyl)-ester ☠ Skin Corr. 1B, H314	3-<5%

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

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side 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. Then consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Wear protective clothing.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

Trade name: 600 B-S violet blue

(Contd. of page 2)

SECTION 7: Handling and storage

- **7.1 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.
- **7.2 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.
- **Storage class:** 10
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 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.
- **8.2 Exposure controls**
- **Appropriate engineering controls** No further data; see item 7.
- **Individual protection measures, such as 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 skin.
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.
- **Hand protection**



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 diffusion and the degradation
If only a short-term loading of the glove material by splashes is expected, tricoted gloves with higher wearability for the better acceptance of the users are recommended.

- **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.
Nitrile rubber, NBR
- **Penetration time of glove material**
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye/face protection**



Tightly sealed goggles

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Physical state** Fluid
- **Colour:** According to product specification
- **Odour:** Product specific
- **Odour threshold:** Not determined.

(Contd. on page 4)

Trade name: 600 B-S violet blue

(Contd. of page 3)

• Melting point/freezing point:	Undetermined.
• Boiling point or initial boiling point and boiling range	198.5 °C (107-41-5 2-methylpentane-2,4-diol)
• Flammability	Not applicable.
• Lower and upper explosion limit	
• Lower:	1.4 Vol %
• Upper:	9 Vol %
• Flash point:	121 °C (122-99-6 2-phenoxyethanol)
• Ignition temperature:	260 °C (107-41-5 2-methylpentane-2,4-diol)
• Decomposition temperature:	Not determined.
• pH at 20 °C	5
• Viscosity:	
• Kinematic viscosity	Not determined.
• Dynamic at 20 °C:	18,500 mPas
• Solubility	
• water:	Not miscible or difficult to mix.
• Partition coefficient n-octanol/water (log value)	Not determined.
• Vapour pressure at 20 °C:	0.04 hPa (122-99-6 2-phenoxyethanol)
• Density and/or relative density	
• Density at 20 °C:	1.1 g/cm ³
• Relative density	Not determined.
• Vapour density	Not determined.

• 9.2 Other information	The physical and chemical properties given in Section 9.1 are rough data only, which are partially derived from the component's data of the mixture. These data are no binding product specifications.
• Appearance:	
• Form:	Fluid
• Important information on protection of health and environment, and on safety.	-
• Auto-ignition temperature:	Product is not selfigniting.
• Explosive properties:	Not determined.
• Solvent content:	
• Organic solvents:	45.0 %
• Solids content:	44.0 %
• Change in condition	
• Evaporation rate	Not determined.

• Information with regard to physical hazard classes	
• Explosives	none
• Flammable gases	none
• Aerosols	none
• Oxidising gases	none
• Gases under pressure	none
• Flammable liquids	none
• Flammable solids	none
• Self-reactive substances and mixtures	none
• Pyrophoric liquids	none
• Pyrophoric solids	none
• Self-heating substances and mixtures	none
• Substances and mixtures, which emit flammable gases in contact with water	none
• Oxidising liquids	none
• Oxidising solids	none
• Organic peroxides	none
• Corrosive to metals	none
• Desensitised explosives	none

SECTION 10: Stability and reactivity

- 10.1 Reactivity No further relevant information available.
- 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided:
No decomposition if used according to specifications.
- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products: No dangerous decomposition products known.

EU
(Contd. on page 5)

Trade name: 600 B-S violet blue

(Contd. of page 4)

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.

- **LD/LC50 values relevant for classification:**

100-51-6 Benzyl alcohol

Oral	LD50	1,620 mg/kg (rat)
Dermal	LD50	2,000 mg/kg (rbt)
Inhalative	LC50/4 h	>4.178 mg/l (rat)

- **Skin corrosion/irritation** Causes skin irritation.
- **Serious eye damage/irritation** Causes serious eye damage.
- **Respiratory or skin sensitisation** May cause an allergic skin reaction.
- **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** May cause respiratory irritation.
- **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.
- **Additional toxicological information:**
- **Acute effects (acute toxicity, irritation and corrosivity)**
Based on the guideline OECD 431 in vitro tests have been performed. These tests proved, that the ink does not show any corrosive effect to the human skin.
- **11.2 Information on other hazards**

- **Endocrine disrupting properties**

None of the ingredients is listed.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties**
The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
- **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.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- **14.1 UN number or ID number**
- **ADR, ADN, IMDG, IATA** not applicable
- **14.2 UN proper shipping name**
- **ADR, ADN, IMDG, IATA** not applicable
- **14.3 Transport hazard class(es)**
- **ADR, ADN, IMDG, IATA**
- **Class** not applicable
- **14.4 Packing group**
- **ADR, IMDG, IATA** not applicable
- **14.5 Environmental hazards:** Not applicable.

(Contd. on page 6)

Trade name: 600 B-S violet blue

(Contd. of page 5)

- | | |
|--|-----------------|
| • 14.6 Special precautions for user | Not applicable. |
| • 14.7 Maritime transport in bulk according to IMO instruments | Not applicable. |
| • UN "Model Regulation": | not applicable |

SECTION 15: Regulatory information

- 15.1 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 is listed.

• LIST OF SUBSTANCES SUBJECT TO AUTHORISATION (ANNEX XIV)

561-41-1	C.I. Solvent Violet 8	Sunset date: 2025-05-01
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- 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 is 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 is listed.

• Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

• Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

• Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

• National regulations:

• Technical instructions (air):

Class	Share in %
NK	25-<50

- Waterhazard class: Water hazard class 3 (Self-assessment): extremely 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.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H412 Harmful to aquatic life with long lasting effects.

• Date of previous version: 22.02.2021

• Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
 IATA: International Air Transport Association
 ICAO: International Civil Aviation Organisation
 ADR: Accord relatif 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 Harmonised 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)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative
 Acute Tox. 4: Acute toxicity - Category 4
 Skin Corr. 1B: Skin corrosion/irritation - Category 1B
 Skin Irrit. 2: Skin corrosion/irritation - Category 2
 Eye Dam. 1: Serious eye damage/eye irritation - Category 1
 Eye Irrit. 2: Serious eye damage/eye irritation - Category 2

(Contd. on page 7)

Trade name: 600 B-S violet blue

(Contd. of page 6)

Skin Sens. 1: Skin sensitisation - Category 1
Skin Sens. 1B: Skin sensitisation - Category 1B
STOT SE 3: Specific target organ toxicity (single exposure) - Category 3
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard - Category 3

· *** Data compared to the previous version altered.**

EU

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

- **1.1 Product identifier**
- **Trade name:** 0614 PG3 pink
- **Article number:** 100000000591
- **Registration number**
The ingredients of this product meet the criteria of the Regulation 1907/2006/EC (REACH).
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
Currently no such applications are identified.
- **Application of the substance / the mixture** Ball Pen Ink
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
DOKUMENTAL GmbH & Co KG
Woellnerstraße 26
D-67065 Ludwigshafen
Phone + 49(0)621/37702 321
Fax + 49(0)621/37702 391
www.dokumental.de
- **Further information obtainable from:**
Technical Service & Product Safety
Tel.: +49-621-37702 390
E-Mail: msds@dokumental.de
- **1.4 Emergency telephone number:**
GBK Gefahrgut Büro GmbH
+49 (0) 6132 / 84463
Ingelheim, Deutschland

SECTION 2: Hazards identification

- **2.1 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

Acute Tox. 4 H302 Harmful if swallowed.
Skin Irrit. 2 H315 Causes skin irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.
STOT SE 3 H335 May cause respiratory irritation.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS05



GHS07



GHS09

- **Signal word** Danger
- **Hazard-determining components of labelling:**
2-phenoxyethanol
C.I. Solvent Red 254
Phosphoric acid mono-bis-(2-ethylhexyl)-ester
butane-1,4-diol
- **Hazard statements**
H302 Harmful if swallowed.
H315 Causes skin irritation.
H318 Causes serious eye damage.

(Contd. on page 2)

Trade name: 0614 PG3 pink

(Contd. of page 1)

H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.
H411 Toxic to aquatic life with long lasting effects.

• **Precautionary statements**

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
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 CENTER/doctor.
P321 Specific treatment (see on this label).
P330 Rinse mouth.
P362+P364 Take off contaminated clothing and wash it before reuse.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

• **2.3 Other hazards**

• **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

• **3.2 Mixtures**

• **Description:** Mixture of substances listed below with nonhazardous additions.

• **Dangerous components:**

CAS: 122-99-6 EINECS: 204-589-7 Reg.nr.: 01-2119488943-21	2-phenoxyethanol ☠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302; STOT SE 3, H335 ATE: LD50 oral: 1,394 mg/kg	25-<50%
CAS: 110-63-4 EINECS: 203-786-5 Reg.nr.: 01-2119471849-20	butane-1,4-diol ⚠ Acute Tox. 4, H302; STOT SE 3, H336	10-<25%
CAS: 1625637-18-4 EC number: 940-448-2 Reg.nr.: 01-2120049491-58	C.I. Solvent Red 254 ☠ Acute Tox. 3, H301; ☠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Skin Sens. 1A, H317	5-<10%
CAS: 12645-31-7 EINECS: 235-741-0 Reg.nr.: 01-2119896587-13	Phosphoric acid mono-bis-(2-ethylhexyl)-ester ☠ Skin Corr. 1B, H314	1-<3%

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

SECTION 4: First aid measures

• **4.1 Description of first aid measures**

• **General information:**

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 to be sure call for a doctor.

In case of unconsciousness place patient stably in side 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. Then consult a doctor.

• **After swallowing:** Call for a doctor immediately.

• **4.2 Most important symptoms and effects, both acute and delayed**

No further relevant information available.

• **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

SECTION 5: Firefighting measures

• **5.1 Extinguishing media**

• **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.

• **5.2 Special hazards arising from the substance or mixture** No further relevant information available.

• **5.3 Advice for firefighters**

• **Protective equipment:** No special measures required.

SECTION 6: Accidental release measures

• **6.1 Personal precautions, protective equipment and emergency procedures** Wear protective clothing.

• **6.2 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.

• **6.3 Methods and material for containment and cleaning up:**

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

(Contd. on page 3)

Trade name: 0614 PG3 pink

(Contd. of page 2)

Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

• **6.4 Reference to other sections**

See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

• **7.1 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.

• **7.2 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.

• **Storage class:** 10

• **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

• **8.1 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.

• **8.2 Exposure controls**

• **Appropriate engineering controls** No further data; see item 7.

• **Individual protection measures, such as 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 skin.
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.

• **Hand protection**



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 diffusion and the degradation

If only a short-term loading of the glove material by splashes is expected, tricoted gloves with higher wearability for the better acceptance of the users are recommended.

• **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.

Nitrile rubber, NBR

• **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/face protection**



Tightly sealed goggles

EU
(Contd. on page 4)

Trade name: 0614 PG3 pink

(Contd. of page 3)

SECTION 9: Physical and chemical properties

<ul style="list-style-type: none"> • 9.1 Information on basic physical and chemical properties • General Information • Physical state Fluid • Colour: According to product specification • Odour: Product specific • Odour threshold: Not determined. • Melting point/freezing point: Undetermined. • Boiling point or initial boiling point and boiling range 185 °C (57-55-6 Propylene glycol) • Flammability Not applicable. • Lower and upper explosion limit • Lower: 2.6 Vol % (57-55-6 Propylene glycol) • Upper: 12.6 Vol % (57-55-6 Propylene glycol) • Flash point: >113 °C (57-55-6 Propylene glycol) • Ignition temperature: 371 °C (57-55-6 Propylene glycol) • Decomposition temperature: Not determined. • pH at 20 °C 6.5 • Viscosity: • Kinematic viscosity Not determined. • Dynamic at 20 °C: 16,000 mPas • Solubility • water: Not miscible or difficult to mix. • Partition coefficient n-octanol/water (log value) Not determined. • Vapour pressure at 20 °C: 0.11 hPa (57-55-6 Propylene glycol) • Density and/or relative density • Density at 20 °C: 1.1 g/cm³ • Relative density Not determined. • Vapour density Not determined. 	
<ul style="list-style-type: none"> • 9.2 Other information 	<p>The physical and chemical properties given in Section 9.1 are rough data only, which are partially derived from the component's data of the mixture. These data are no binding product specifications.</p> <ul style="list-style-type: none"> • Appearance: • Form: Fluid • Important information on protection of health and environment, and on safety. - • Auto-ignition temperature: Product is not selfigniting. • Explosive properties: Not determined. • Solvent content: • Organic solvents: 51.8 % • Solids content: 42.0 % • Change in condition • Evaporation rate Not determined.
<ul style="list-style-type: none"> • Information with regard to physical hazard classes • Explosives none • Flammable gases none • Aerosols none • Oxidising gases none • Gases under pressure none • Flammable liquids none • Flammable solids none • Self-reactive substances and mixtures none • Pyrophoric liquids none • Pyrophoric solids none • Self-heating substances and mixtures none • Substances and mixtures, which emit flammable gases in contact with water none • Oxidising liquids none • Oxidising solids none • Organic peroxides none • Corrosive to metals none • Desensitised explosives none 	

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.

(Contd. on page 5)

Trade name: 0614 PG3 pink

(Contd. of page 4)

- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Harmful if swallowed.

- **LD/LC50 values relevant for classification:**

1625637-18-4 C.I. Solvent Red 254

Oral	LD50	300 mg/kg (rat)
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- **Skin corrosion/irritation** Causes skin irritation.
- **Serious eye damage/irritation** Causes serious eye damage.
- **Respiratory or skin sensitisation** May cause an allergic skin reaction.
- **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** May cause respiratory irritation.
- **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.
- **11.2 Information on other hazards**

- **Endocrine disrupting properties**

None of the ingredients is listed.

SECTION 12: Ecological information

- **12.1 Toxicity**

- **Aquatic toxicity:**

1625637-18-4 C.I. Solvent Red 254

EC50 / 48h	0.037 mg/l (Daphnie)
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EC50 / 72h	0.046 mg/l (Pseudokirchneriella subcapitata)
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- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties**
The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse 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

SECTION 13: Disposal considerations

- **13.1 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 hazardous substances
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- **Uncleaned packaging:**

- **Recommendation:** Disposal must be made according to official regulations.

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(Contd. on page 6)

Trade name: 0614 PG3 pink

(Contd. of page 5)

SECTION 14: Transport information

<ul style="list-style-type: none"> 14.1 UN number or ID number ADR, IMDG, IATA 	UN3082
<ul style="list-style-type: none"> 14.2 UN proper shipping name ADR IMDG IATA 	3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (xanthene dye, red) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (xanthene dye, red, xanthene dye, red), MARINE POLLUTANT ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (xanthene dye, red)
<ul style="list-style-type: none"> 14.3 Transport hazard class(es) ADR  	<ul style="list-style-type: none"> Class Label 9 (M6) Miscellaneous dangerous substances and articles. 9
<ul style="list-style-type: none"> IMDG, IATA  	<ul style="list-style-type: none"> Class Label 9 Miscellaneous dangerous substances and articles. 9
<ul style="list-style-type: none"> 14.4 Packing group ADR, IMDG, IATA 	III
<ul style="list-style-type: none"> 14.5 Environmental hazards: Marine pollutant: Special marking (ADR): Special marking (IATA): 	Product contains environmentally hazardous substances: xanthene dye, red Symbol (fish and tree) Symbol (fish and tree) Symbol (fish and tree)
<ul style="list-style-type: none"> 14.6 Special precautions for user Hazard identification number (Kemler code): EMS Number: Stowage Category 	Warning: Miscellaneous dangerous substances and articles. 90 F-A,S-F A
<ul style="list-style-type: none"> 14.7 Maritime transport in bulk according to IMO instruments 	Not applicable.
<ul style="list-style-type: none"> Transport/Additional information: ADR Limited quantities (LQ) Excepted quantities (EQ) Transport category Tunnel restriction code 	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml 3 (-)
<ul style="list-style-type: none"> IMDG Limited quantities (LQ) Excepted quantities (EQ) 	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
<ul style="list-style-type: none"> UN "Model Regulation": 	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (XANTHENE DYE, RED), 9, III

SECTION 15: Regulatory information

- 15.1 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 is listed.
- Seveso category E2 Hazardous to the Aquatic Environment
- Qualifying quantity (tonnes) for the application of lower-tier requirements 200 t

(Contd. on page 7)

Trade name: 0614 PG3 pink

(Contd. of page 6)

- **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 is 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 is listed.

- **Annex II - REPORTABLE EXPLOSIVES PRECURSORS**

None of the ingredients is listed.

- **Regulation (EC) No 273/2004 on drug precursors**

None of the ingredients is listed.

- **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**

None of the ingredients is listed.

- **National regulations:**

- **Technical instructions (air):**

Class	Share in %
NK	50-<75

- **Waterhazard class:** Water hazard class 3 (Self-assessment): extremely 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**

H301 Toxic if swallowed.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

- **Date of previous version:** 22.02.2021

- **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
ADR: Accord relatif 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 Harmonised 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)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 3: Acute toxicity - Category 3
Acute Tox. 4: Acute toxicity - Category 4
Skin Corr. 1B: Skin corrosion/irritation - Category 1B
Skin Irrit. 2: Skin corrosion/irritation - Category 2
Eye Dam. 1: Serious eye damage/eye irritation - Category 1
Skin Sens. 1: Skin sensitisation - Category 1
Skin Sens. 1A: Skin sensitisation - Category 1A
STOT SE 3: Specific target organ toxicity (single exposure) - Category 3
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard - Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard - Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2

- *** Data compared to the previous version altered.**

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

- **1.1 Product identifier**
- **Trade name:** ECO red N
- **Article number:** 100000000825
- **Registration number**
The ingredients of this product meet the criteria of the Regulation 1907/2006/EC (REACH).
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
Currently no such applications are identified.
- **Application of the substance / the mixture** Ball Pen Ink
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
DOKUMENTAL GmbH & Co KG
Woellnerstraße 26
D-67065 Ludwigshafen
Phone + 49(0)621/37702 321
Fax + 49(0)621/37702 391
www.dokumental.de
- **Further information obtainable from:**
Technical Service & Product Safety
Tel.: +49-621-37702 390
E-Mail: msds@dokumental.de
- **1.4 Emergency telephone number:**
GBK Gefahrgut Büro GmbH
+49 (0) 6132 / 84463
Ingelheim, Deutschland

SECTION 2: Hazards identification

- **2.1 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.



GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

STOT SE 3 H335 May cause respiratory irritation.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS05



GHS07



GHS08

- **Signal word** Danger
- **Hazard-determining components of labelling:**
2-phenoxyethanol
C.I. Solvent Orange 3
Phosphoric acid mono-bis-(2-ethylhexyl)-ester
- **Hazard statements**
H315 Causes skin irritation.
H318 Causes serious eye damage.
H341 Suspected of causing genetic defects.
H335 May cause respiratory irritation.
H412 Harmful to aquatic life with long lasting effects.

(Contd. on page 2)

Trade name: ECO red N

(Contd. of page 1)

- **Precautionary statements**
 - P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
 - 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 CENTER/doctor.
 - P321 Specific treatment (see on this label).
 - P362+P364 Take off contaminated clothing and wash it before reuse.
 - P405 Store locked up.
 - P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

• **Dangerous components:**

CAS: 122-99-6 EINECS: 204-589-7 Reg.nr.: 01-2119488943-21	2-phenoxyethanol ☠ Eye Dam. 1, H318; ☠ Acute Tox. 4, H302; STOT SE 3, H335 ATE: LD50 oral: 1,394 mg/kg	10-<25%
CAS: 107-41-5 EINECS: 203-489-0 Reg.nr.: 01-2119539582-35	2-methylpentane-2,4-diol ☠ Skin Irrit. 2, H315; Eye Irrit. 2, H319	10-<25%
CAS: 509-34-2 EINECS: 208-096-8 Reg.nr.: 01-2120756578-38	C.I. Solvent Red 49 ☠ Aquatic Chronic 2, H411; ☠ Acute Tox. 4, H302; Eye Irrit. 2, H319	3-<5%
CAS: 12645-31-7 EINECS: 235-741-0 Reg.nr.: 01-2119896587-13	Phosphoric acid mono-bis-(2-ethylhexyl)-ester ☠ Skin Corr. 1B, H314	3-<5%
CAS: 495-54-5 EINECS: 207-803-7 Reg.nr.: 01-2120754909-37	C.I. Solvent Orange 3 ☠ Muta. 2, H341; ☠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ☠ Acute Tox. 4, H302; Skin Irrit. 2, H315	1-<3%

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

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **After inhalation:**
In case of unconsciousness place patient stably in side 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. Then consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Wear protective clothing.
- **6.2 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.
- **6.3 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.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.

(Contd. on page 3)

Trade name: ECO red N

(Contd. of page 2)

See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 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.
- **7.2 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.
- **Storage class:** 10
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 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.
- **8.2 Exposure controls**
- **Appropriate engineering controls** No further data; see item 7.
- **Individual protection measures, such as 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 skin.
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.
- **Hand protection**



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 diffusion and the degradation
If only a short-term loading of the glove material by splashes is expected, tricoted gloves with higher wearability for the better acceptance of the users are recommended.

- **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.
Nitrile rubber, NBR
- **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/face protection**



Tightly sealed goggles

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Physical state**

Fluid

(Contd. on page 4)

Trade name: ECO red N

(Contd. of page 4)

- 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

- 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- Acute toxicity Based on available data, the classification criteria are not met.

- LD/LC50 values relevant for classification:

509-34-2 C.I. Solvent Red 49

Oral	LD50	1,830 mg/kg (rat)
------	------	-------------------

- Skin corrosion/irritation Causes skin irritation.
- Serious eye damage/irritation Causes serious eye damage.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- 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 May cause respiratory irritation.
- 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.
- 11.2 Information on other hazards

- Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

- 12.1 Toxicity
- Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- 12.5 Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.
- 12.6 Endocrine disrupting properties
The product does not contain substances with endocrine disrupting properties.
- 12.7 Other adverse effects
- Remark: Harmful to 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.
Harmful to aquatic organisms

SECTION 13: Disposal considerations

- 13.1 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 hazardous substances

- Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

- 14.1 UN number or ID number
- ADR, ADN, IMDG, IATA not applicable
- 14.2 UN proper shipping name
- ADR, ADN, IMDG, IATA not applicable
- 14.3 Transport hazard class(es)
- ADR, ADN, IMDG, IATA
- Class not applicable

(Contd. on page 6)

Trade name: ECO red N

(Contd. of page 5)

- | | |
|--|-----------------|
| · 14.4 Packing group
· ADR, IMDG, IATA | not applicable |
| · 14.5 Environmental hazards: | Not applicable. |
| · 14.6 Special precautions for user | Not applicable. |
| · 14.7 Maritime transport in bulk according to IMO instruments | Not applicable. |
| · UN "Model Regulation": | not applicable |

SECTION 15: Regulatory information

- 15.1 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 is listed.
- 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 is 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 is listed.
- Annex II - REPORTABLE EXPLOSIVES PRECURSORS
None of the ingredients is listed.
- Regulation (EC) No 273/2004 on drug precursors
None of the ingredients is listed.
- Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors
None of the ingredients is listed.
- National regulations:
- Technical instructions (air):

Class	Share in %
NK	50-<75
- 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.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H341 Suspected of causing genetic defects.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.
- Date of previous version: 12.04.2022
- Abbreviations and acronyms:
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organisation
ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)
ADR: Accord relatif 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 Harmonised 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)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative

(Contd. on page 7)

Trade name: ECO red N

(Contd. of page 6)

Acute Tox. 4: Acute toxicity - Category 4
Skin Corr. 1B: Skin corrosion/irritation - Category 1B
Skin Irrit. 2: Skin corrosion/irritation - Category 2
Eye Dam. 1: Serious eye damage/eye irritation - Category 1
Eye Irrit. 2: Serious eye damage/eye irritation - Category 2
Muta. 2: Germ cell mutagenicity - Category 2
STOT SE 3: Specific target organ toxicity (single exposure) - Category 3
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard - Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard - Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard - Category 3

· *** Data compared to the previous version altered.**

EU

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

- **1.1 Product identifier**
- **Trade name:** 2070 PG3 red violet
- **Article number:** 100000000530
- **Registration number**
The ingredients of this product meet the criteria of the Regulation 1907/2006/EC (REACH).
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
Currently no such applications are identified.
- **Application of the substance / the mixture** Ball Pen Ink
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
DOKUMENTAL GmbH & Co KG
Woellnerstraße 26
D-67065 Ludwigshafen
Phone + 49(0)621/37702 321
Fax + 49(0)621/37702 391
www.dokumental.de
- **Further information obtainable from:**
Technical Service & Product Safety
Tel.: +49-621-37702 390
E-Mail: msds@dokumental.de
- **1.4 Emergency telephone number:**
GBK Gefahrgut Büro GmbH
+49 (0) 6132 / 84463
Ingelheim, Deutschland

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.
STOT SE 3 H335 May cause respiratory irritation.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS05



GHS07

- **Signal word** Danger
- **Hazard-determining components of labelling:**
2-phenoxyethanol
Oleoylsarcosinic acid
- **Hazard statements**
H315 Causes skin irritation.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.
H412 Harmful to aquatic life with long lasting effects.
- **Precautionary statements**
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
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 CENTER/doctor.
P321 Specific treatment (see on this label).
P362+P364 Take off contaminated clothing and wash it before reuse.

Trade name: 2070 PG3 red violet

(Contd. of page 1)

P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

• **Dangerous components:**

CAS: 122-99-6 EINECS: 204-589-7 Reg.nr.: 01-2119488943-21	2-phenoxyethanol ☠ Eye Dam. 1, H318; ☠ Acute Tox. 4, H302; STOT SE 3, H335 ATE: LD50 oral: 1,394 mg/kg	10-<25%
CAS: 107-41-5 EINECS: 203-489-0 Reg.nr.: 01-2119539582-35	2-methylpentane-2,4-diol ☠ Skin Irrit. 2, H315; Eye Irrit. 2, H319	10-<25%
CAS: 509-34-2 EINECS: 208-096-8 Reg.nr.: 01-2120756578-38	C.I. Solvent Red 49 ☠ Aquatic Chronic 2, H411; ☠ Acute Tox. 4, H302; Eye Irrit. 2, H319	5-<10%
CAS: 110-25-8 EINECS: 203-749-3 Reg.nr.: 01-2119488991-20	Oleoylsarcosinic acid ☠ Eye Dam. 1, H318; ☠ Aquatic Acute 1, H400; ☠ Acute Tox. 4, H332; Skin Irrit. 2, H315	3-<5%
CAS: 561-41-1 EINECS: 209-218-2 Reg.nr.: 01-2119979581-25	C.I. Solvent Violet 8 Alternative CAS number: 52080-58-7 ☠ Acute Tox. 4, H302; Eye Irrit. 2, H319; Aquatic Chronic 3, H412	1-<3%

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

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **After inhalation:**
In case of unconsciousness place patient stably in side 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. Then consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Wear protective clothing.
- **6.2 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.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

EU
(Contd. on page 3)

Trade name: 2070 PG3 red violet

(Contd. of page 2)

SECTION 7: Handling and storage

- **7.1 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.
- **7.2 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.
- **Storage class:** 10
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 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.
- **8.2 Exposure controls**
- **Appropriate engineering controls** No further data; see item 7.
- **Individual protection measures, such as 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 skin.
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.
- **Hand protection**



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 diffusion and the degradation
If only a short-term loading of the glove material by splashes is expected, tricoted gloves with higher wearability for the better acceptance of the users are recommended.

- **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.
Nitrile rubber, NBR
- **Penetration time of glove material**
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye/face protection**



Tightly sealed goggles

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Physical state** Fluid
- **Colour:** According to product specification
- **Odour:** Product specific
- **Odour threshold:** Not determined.

(Contd. on page 4)

Trade name: 2070 PG3 red violet

(Contd. of page 3)

• Melting point/freezing point:	Undetermined.
• Boiling point or initial boiling point and boiling range	185 °C (57-55-6 Propylene glycol)
• Flammability	Not applicable.
• Lower and upper explosion limit	
• Lower:	1 Vol % (107-41-5 2-methylpentane-2,4-diol)
• Upper:	12.6 Vol % (57-55-6 Propylene glycol)
• Flash point:	94 °C (107-41-5 2-methylpentane-2,4-diol)
• Ignition temperature:	260 °C (107-41-5 2-methylpentane-2,4-diol)
• Decomposition temperature:	Not determined.
• pH at 20 °C	6.5
• Viscosity:	
• Kinematic viscosity	Not determined.
• Dynamic at 20 °C:	16,000 mPas
• Solubility	
• water:	Not miscible or difficult to mix.
• Partition coefficient n-octanol/water (log value)	Not determined.
• Vapour pressure at 20 °C:	0.11 hPa (57-55-6 Propylene glycol)
• Density and/or relative density	
• Density at 20 °C:	1.1 g/cm ³
• Relative density	Not determined.
• Vapour density	Not determined.

• 9.2 Other information	The physical and chemical properties given in Section 9.1 are rough data only, which are partially derived from the component's data of the mixture. These data are no binding product specifications.
• Appearance:	
• Form:	Fluid
• Important information on protection of health and environment, and on safety.	-
• Auto-ignition temperature:	Product is not selfigniting.
• Explosive properties:	Not determined.
• Solvent content:	
• Organic solvents:	50.5 %
• Solids content:	44.0 %
• Change in condition	
• Evaporation rate	Not determined.

• Information with regard to physical hazard classes	
• Explosives	none
• Flammable gases	none
• Aerosols	none
• Oxidising gases	none
• Gases under pressure	none
• Flammable liquids	none
• Flammable solids	none
• Self-reactive substances and mixtures	none
• Pyrophoric liquids	none
• Pyrophoric solids	none
• Self-heating substances and mixtures	none
• Substances and mixtures, which emit flammable gases in contact with water	none
• Oxidising liquids	none
• Oxidising solids	none
• Organic peroxides	none
• Corrosive to metals	none
• Desensitised explosives	none

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

EU
(Contd. on page 5)

Trade name: 2070 PG3 red violet

(Contd. of page 4)

SECTION 11: Toxicological information

- 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- Acute toxicity Based on available data, the classification criteria are not met.

LD/LC50 values relevant for classification:

509-34-2 C.I. Solvent Red 49

Oral	LD50	1,830 mg/kg (rat)
------	------	-------------------

110-25-8 Oleoylsarcosinic acid

Oral	LD50	9,200 mg/kg (rat)
------	------	-------------------

- Skin corrosion/irritation Causes skin irritation.
- Serious eye damage/irritation Causes serious eye damage.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- 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 May cause respiratory irritation.
- 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.

11.2 Information on other hazards

Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

- 12.1 Toxicity
- Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- 12.5 Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.
- 12.6 Endocrine disrupting properties
The product does not contain substances with endocrine disrupting properties.
- 12.7 Other adverse effects
- Remark: Harmful to 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.
Harmful to aquatic organisms

SECTION 13: Disposal considerations

- 13.1 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 hazardous substances

- Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

- 14.1 UN number or ID number
ADR, ADN, IMDG, IATA not applicable
- 14.2 UN proper shipping name
ADR, ADN, IMDG, IATA not applicable
- 14.3 Transport hazard class(es)
ADR, ADN, IMDG, IATA
Class not applicable

(Contd. on page 6)

Trade name: 2070 PG3 red violet

(Contd. of page 5)

- | | |
|--|-----------------|
| · 14.4 Packing group | |
| · ADR, IMDG, IATA | not applicable |
| · 14.5 Environmental hazards: | Not applicable. |
| · 14.6 Special precautions for user | Not applicable. |
| · 14.7 Maritime transport in bulk according to IMO instruments | Not applicable. |
| · UN "Model Regulation": | not applicable |

SECTION 15: Regulatory information

- 15.1 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 is listed.
- 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 is 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 is listed.
- Annex II - REPORTABLE EXPLOSIVES PRECURSORS
None of the ingredients is listed.
- Regulation (EC) No 273/2004 on drug precursors
None of the ingredients is listed.
- Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors
None of the ingredients is listed.
- National regulations:
- Technical instructions (air):

Class	Share in %
NK	50-<75
- 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.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H400 Very toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.
- Date of previous version: 22.02.2021
- Version number of previous version: 1
- Abbreviations and acronyms:
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
ADR: Accord relatif 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 Harmonised 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)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 4: Acute toxicity - Category 4
Skin Irrit. 2: Skin corrosion/irritation - Category 2

(Contd. on page 7)

Trade name: 2070 PG3 red violet

(Contd. of page 6)

Eye Dam. 1: Serious eye damage/eye irritation - Category 1
Eye Irrit. 2: Serious eye damage/eye irritation - Category 2
STOT SE 3: Specific target organ toxicity (single exposure) - Category 3
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard - Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard - Category 3
• *** Data compared to the previous version altered.**

EU

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

- 1.1 Product identifier
- Trade name: **ECO green N**
- Article number: 10000001227
- Registration number
The ingredients of this product meet the criteria of the Regulation 1907/2006/EC (REACH).
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
Currently no such applications are identified.
- Application of the substance / the mixture Ball Pen Ink
- 1.3 Details of the supplier of the safety data sheet
- Manufacturer/Supplier:
DOKUMENTAL GmbH & Co KG
Woellnerstraße 26
D-67065 Ludwigshafen
Phone + 49(0)621/37702 321
Fax + 49(0)621/37702 391
www.dokumental.de
- Further information obtainable from:
Technical Service & Product Safety
Tel.: +49-621-37702 390
E-Mail: msds@dokumental.de
- 1.4 Emergency telephone number:
GBK Gefahrgut Büro GmbH
+49 (0) 6132 / 84463
Ingelheim, Deutschland

SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008



GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.
STOT SE 3 H335 May cause respiratory irritation.

- 2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008
The product is classified and labelled according to the CLP regulation.
- Hazard pictograms



GHS05



GHS07

- Signal word **Danger**
- Hazard-determining components of labelling:
2-phenoxyethanol
C.I. Solvent Yellow 82
Oleoylsarcosinic acid
- Hazard statements
H315 Causes skin irritation.
H318 Causes serious eye damage.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.
- Precautionary statements
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
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 CENTER/doctor.
P321 Specific treatment (see on this label).
P362+P364 Take off contaminated clothing and wash it before reuse.

(Contd. on page 2)

Trade name: ECO green N

(Contd. of page 1)

P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

• **Dangerous components:**

CAS: 122-99-6 EINECS: 204-589-7 Reg.nr.: 01-2119488943-21	2-phenoxyethanol ☠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302; STOT SE 3, H335 ATE: LD50 oral: 1,394 mg/kg	25-<50%
CAS: 107-41-5 EINECS: 203-489-0 Reg.nr.: 01-2119539582-35	2-methylpentane-2,4-diol ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319	5-<10%
CAS: 68411-04-1 EINECS: 270-096-9 Reg.nr.: 01-2119979101-41	C.I. Solvent Blue 51 Aquatic Chronic 3, H412	3-<5%
CAS: 110-25-8 EINECS: 203-749-3 Reg.nr.: 01-2119488991-20	Oleoylsarcosinic acid ☠ Eye Dam. 1, H318; ☠ Aquatic Acute 1, H400; ⚠ Acute Tox. 4, H332; ⚠ Skin Irrit. 2, H315	3-<5%
CAS: 85029-58-9 EINECS: 285-083-3 Reg.nr.: 01-2120756276-48	C.I. Solvent Yellow 82 Alternative CAS number: 12227-67-7 ☠ Aquatic Chronic 2, H411; ⚠ Skin Sens. 1B, H317	1-<3%

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

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side 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. Then consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Wear protective clothing.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.

(Contd. on page 3)

Trade name: ECO green N

(Contd. of page 2)

- **Information about fire - and explosion protection:** No special measures required.
- **7.2 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.
- **Storage class:** 10
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 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.
- **8.2 Exposure controls**
- **Appropriate engineering controls** No further data; see item 7.
- **Individual protection measures, such as 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 skin.
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.
- **Hand protection**



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 diffusion and the degradation
If only a short-term loading of the glove material by splashes is expected, tricoted gloves with higher wearability for the better acceptance of the users are recommended.
- **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.
Nitrile rubber, NBR
 - **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/face protection**



Tightly sealed goggles

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Physical state** Fluid
- **Colour:** According to product specification
- **Odour:** Product specific
- **Odour threshold:** Not determined.
- **Melting point/freezing point:** Undetermined.
- **Boiling point or initial boiling point and boiling range** 185 °C (57-55-6 Propylene glycol)
- **Flammability** Not applicable.

(Contd. on page 4)

Trade name: ECO green N

(Contd. of page 3)

· Lower and upper explosion limit	
· Lower:	1.4 Vol %
· Upper:	9 Vol %
· Flash point:	121 °C (122-99-6 2-phenoxyethanol)
· Ignition temperature:	260 °C (107-41-5 2-methylpentane-2,4-diol)
· Decomposition temperature:	Not determined.
· pH at 20 °C	6.5
· Viscosity:	
· Kinematic viscosity	Not determined.
· Dynamic at 20 °C:	16,000 mPas
· Solubility	
· water:	Not miscible or difficult to mix.
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure at 20 °C:	0.04 hPa (122-99-6 2-phenoxyethanol)
· Density and/or relative density	
· Density at 20 °C:	1.1 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.

· 9.2 Other information	The physical and chemical properties given in Section 9.1 are rough data only, which are partially derived from the component's data of the mixture. These data are no binding product specifications.
· Appearance:	
· Form:	Liquid
· Important information on protection of health and environment, and on safety.	-
· Auto-ignition temperature:	Product is not selfigniting.
· Explosive properties:	Not determined.
· Solvent content:	
· Organic solvents:	46.8 %
· Solids content:	48.6 %
· Change in condition	
· Evaporation rate	Not determined.

· Information with regard to physical hazard classes	
· Explosives	none
· Flammable gases	none
· Aerosols	none
· Oxidising gases	none
· Gases under pressure	none
· Flammable liquids	none
· Flammable solids	none
· Self-reactive substances and mixtures	none
· Pyrophoric liquids	none
· Pyrophoric solids	none
· Self-heating substances and mixtures	none
· Substances and mixtures, which emit flammable gases in contact with water	none
· Oxidising liquids	none
· Oxidising solids	none
· Organic peroxides	none
· Corrosive to metals	none
· Desensitised explosives	none

SECTION 10: Stability and reactivity

- 10.1 Reactivity No further relevant information available.
- 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided:
No decomposition if used according to specifications.
- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

- 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- Acute toxicity Based on available data, the classification criteria are not met.

(Contd. on page 5)

Trade name: ECO green N

(Contd. of page 4)

· **LD/LC50 values relevant for classification:**

110-25-8 Oleoylsarcosinic acid

Oral LD50 9,200 mg/kg (rat)

85029-58-9 C.I. Solvent Yellow 82

Oral LD50 >5,000 mg/kg (rat)

Dermal LD50 >2,500 mg/kg (rat)

- **Skin corrosion/irritation** Causes skin irritation.
- **Serious eye damage/irritation** Causes serious eye damage.
- **Respiratory or skin sensitisation** May cause an allergic skin reaction.
- **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** May cause respiratory irritation.
- **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.
- **11.2 Information on other hazards**

· **Endocrine disrupting properties**

None of the ingredients is listed.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties**
The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- | | |
|---|-----------------|
| · 14.1 UN number or ID number | |
| · ADR, ADN, IMDG, IATA | not applicable |
| · 14.2 UN proper shipping name | |
| · ADR, ADN, IMDG, IATA | not applicable |
| · 14.3 Transport hazard class(es) | |
| · ADR, ADN, IMDG, IATA | |
| · Class | not applicable |
| · 14.4 Packing group | |
| · ADR, IMDG, IATA | not applicable |
| · 14.5 Environmental hazards: | Not applicable. |
| · 14.6 Special precautions for user | Not applicable. |
| · 14.7 Maritime transport in bulk according to IMO instruments | Not applicable. |
| · UN "Model Regulation": | not applicable |

EU
(Contd. on page 6)

Trade name: ECO green N

(Contd. of page 5)

SECTION 15: Regulatory information

- 15.1 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 is listed.
- 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 is 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 is listed.

- Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

- Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

- Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

- National regulations:

- Technical instructions (air):

Class	Share in %
NK	25-<50

- Waterhazard class: Water hazard class 1 (Self-assessment): slightly 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.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H400 Very toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

- Date of previous version: 26.01.2023

- Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organisation
ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
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LC50: Lethal concentration, 50 percent
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PBT: Persistent, Bioaccumulative and Toxic
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Acute Tox. 4: Acute toxicity - Category 4
Skin Irrit. 2: Skin corrosion/irritation - Category 2
Eye Dam. 1: Serious eye damage/eye irritation - Category 1
Eye Irrit. 2: Serious eye damage/eye irritation - Category 2
Skin Sens. 1: Skin sensitisation - Category 1
Skin Sens. 1B: Skin sensitisation - Category 1B
STOT SE 3: Specific target organ toxicity (single exposure) - Category 3
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard - Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard - Category 3

- * Data compared to the previous version altered.