

**MATERIAL SAFETY DATA SHEET**  
**According to 91/155/EEC**

**Product : BALL POINT BLACK 85-36-A**

Date: 12-1-2008  
Revision Date: 12-1-2008

---

**1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**PRODUCT NAME:** BALL POINT BLACK 85-36-A  
**SUPPLIER:**  
Name: NATIONAL INK L.L.C.  
Address: 10870 HARTLEY ROAD  
SANTEE, CA 92071 USA  
Telephone number: 619-449-1035

Recommended use: Writing pens containing less than 0.5 grams of ink.

---

**2 COMPOSITION / INFORMATION ON INGREDIENTS**

**PREPARATION:**

Chemical nature: Mixture based on glycols, fatty acids and organic dyes

**Hazardous Ingredients:**

2-phenoxy ethanol weight: > 20%  
CAS# 122-99-6 EINECS#:204-589-7  
REACH#: 05-2114673831-43-0000

Benzyl alcohol weight: < 10%  
CAS#: 100-51-6 EINECS#:202-859-9  
REACH#: 05-2114674181-51-0000

Glycol weight: <10%  
REACH#: 05-2114674842-39-0000

Fatty acid weight: < 10%  
REACH# 05-2114679730-41-0000

Polymeric resin weight : < 20%

orange dye weight : < 5%  
REACH# 05-2114680014-56-0000

violet dye weight: < 12 %  
REACH# 05-2117769083-39-0000

black dye weight: < 10%  
REACH# 05-2117768350-43-0000

black pigment weight: < 3%  
REACH# 05-2114679365-36-0000

Hazard Codes: Xi- Irritant, Xn- Harmful

**MATERIAL SAFETY DATA SHEET**  
**According to 91/155/EEC**

---

**3 HAZARDS IDENTIFICATION**

**MOST IMPORTANT HAZARDS:**

Adverse human health effects:

Environmental effects:           Contains hazardous substances(s) for the environment

Physical and chemical hazards:

-Fire or explosion:               Combustible paste.  
Burning and thermal decomposition may form toxic by products

Classification of the product:   According to European regulations, this product supplied as a bulk liquid is classified as:  
Xi- IRRITANT  
Xn- HARMFUL

Further information:             In a usual writing situation, quantities of ink laid down or vapors emitted by the pen are normally too small to occasion significant exposure and cause adverse effects on the user's health.

---

**4 FIRST AID MEASURES**

Inhalation:                        Move the affected person away from the contaminated area and into the fresh air

Skin contact:                     Immediately wash and rinse with plenty of water

Eye contact:                     Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 min. minimum)  
Always refer to an eye specialist, even if there are no immediate symptoms.

Ingestion:                         Never attempt to induce vomiting  
Call a doctor immediately

---

**5 FIRE FIGHTING MEASURES**

Suitable extinguishing media:   Carbon dioxide (CO2)  
Foam  
Powders

Not suitable extinguishing media: None to our knowledge. If there is a fire close by, using suitable extinguishing agents

Specific hazards:                 During combustion:  
Toxic Vapors may be released if product is heated to dryness.

Specific fire fighting methods:   Do not attempt to fight the fire without suitable protective equipment may intervene

Protection of fire-fighters:     Self-contained breathing apparatus  
Complete protective clothing

---

**MATERIAL SAFETY DATA SHEET**  
**According to 91/155/EEC**

**6 ACCIDENTAL RELEASE MEASURES**

Personal precautions:	Avoid contact with skin and eyes
Environmental precautions:	Do not discharge into drains and rivers
Methods for cleaning up:	
-Neutralization:	Absorb spillage with: - inert absorbent material - earth or sand
-Cleaning/decontamination:	Wash non-recoverable remainder with large amounts of water
-Disposal:	Dispose of contaminated materials in accordance with current regulations

---

**7 HANDLING AND STORAGE**

**HANDLING**

Technical measures:	Vapour extraction at source Material and equipment suitable for use with Strongly colored thick paste inks.
Precautions:	Avoid any direct contact with the product Work in a well-ventilated area Smoking is forbidden

**STORAGE**

Technical measures:	The floor of the depot must be impermeable, non-combustible and designed to form a basin, in order that stored liquids should not, under any circumstances, be released outside
Storage conditions:	
-Recommended:	Store: - in a cool, well-ventilated area - the container tightly closed - away from any source of ignition
Incompatible materials:	Strong oxidizing agents
Packaging materials:	
- Not suitable:	Can cause some metals to rust

---

**8 EXPOSURE CONTROLS / PERSONAL PROTECTION**

Engineering measures:	Ensure good ventilation of the work station
Occupational exposure limits:	
- France:	2-phenoxy ethanol
Personal protective equipment:	
- Respiratory protection:	not normally required
- Hand protection:	Impermeable protective gloves
- Eye protection:	Safety spectacles
- Skin and body protection:	Suitable clothing
Collective emergency equipment:	Eye fountain Safety shower
Hygiene measures:	Do not drink, eat or smoke in the workplace

---

**MATERIAL SAFETY DATA SHEET**  
**According to 91/155/EEC**

**9 PHYSICAL AND CHEMICAL PROPERTIES**

Physical state:	Viscous Liquid
Colour:	Black
Odour:	faint aromatic odor
pH:	6.0-7.0
Flammability characteristics:	combustible liquid
- Flash point:	121°C for 2-phenoxy ethanol in this product
- Auto-ignition temperature:	unknown
Explosive limits in air:	unknown
Vapour density (air=1):	greater than 1
Solubility:	
- In water:	not soluble
- In organic solvents:	soluble in alcohols

---

**10 PHYSICAL AND CHEMICAL PROPERTIES**

Stability:	Stable at ambient temperature and under normal conditions of use
Hazardous reactions:	
- Conditions to avoid:	May ignite on heating to temperatures higher than flashpoint
- Materials to avoid:	- Strong oxidizing agents
- Hazardous decomposition products:	On combustion or on thermal decomposition (pyrolysis) releases: Carbon oxides (CO, CO <sub>2</sub> )

---

**11 TOXICOLOGICAL INFORMATION**

Acute toxicity:	Vapours may cause drowsiness and dizziness
Acute symptoms:	On ingestion: Nausea Vomiting Central Nervous System depressant
Local effects:	On inhalation: dizziness, headaches At high concentrations, the vapours can be irritating to the eyes, nose and throat Repeated or prolonged contact may cause slight irritation to the skin Eye contact: May cause severe ocular lesions
Further information:	Above information is for the bulk ink. The ink will be contained in a plastic or metal tube containing 0.5 grams or less which will limit considerably the exposure possibilities for the user.

---

**MATERIAL SAFETY DATA SHEET**  
**According to 91/155/EEC**

**12 ECOLOGICAL INFORMATION**

Product as is: Avoid discharge of the product as is into the environment

**ECOTOXICITY:**

Effects on the aquatic environment: 2-phenoxy ethanol, benzyl alcohol  
May cause adverse effects to the aquatic environment.

**13 DISPOSAL CONSIDERATIONS**

**WASTE FROM PRODUCT:**

Destruction/Disposal: Dispose of in accordance with relevant local regulations

**CONTAMINATED PACKAGING:**

Destruction/disposal: Destroy at an authorized site

NOTE: The user's attention is drawn to the possible existence of specific European, national or local regulations regarding disposal

---

**14 TRANSPORT INFORMATION**

**INTERNATIONAL REGULATIONS:**

Not Regulated

---

**15 REGULATORY INFORMATION**

**EC LABELING:**

Ball Pen Refill: not applicable

Ink:

Mandatory labeling (self-classification) of hazardous preparations: applicable.

Symbols and indications of danger: -

Xi -IRRITANT

Xn -HARMFUL

- R phrases:

R 22: Harmful if swallowed

R 36: Irritating to eyes

-S phrases:

S2 Keep out of reach of children

S 26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

S 37: Wear suitable gloves (to protect hands from staining)

S46 If swallowed, seek medical advice immediately and show this container or label.

**MATERIAL SAFETY DATA SHEET**  
**According to 91/155/EEC**

**FURTHER REGULATIONS:**

National prescriptions:

France:

Maladies professionnelles (tableaux (x) n° 84)  
concerné

NOTE:

The regulatory information given above only indicate the principal regulations specifically applicable to the product described in the MSDS

The cited basic community texts are being updated and transcribed in national law

Refer to all applicable international, national and local regulations or provisions

The user's attention is drawn to the possible existence of additional provisions which complete these regulations

---

**16 OTHER INFORMATION**

Restrictions on use:

This product must not be used for other applications than mentioned in §1

Safety data sheet established by:

Bruce Gindelberger, General Manager

This sheet completes the technical sheets but it does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the risks possibly incurred by using the product for any other purpose than that for which it was intended.

This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product.

The mandatory regulations mentioned are only intended to help the user to fulfill his obligations regarding the use of hazardous products.

This listing must not be considered exhaustive. It does not exonerate the user from ensuring that other legal obligations than those mentioned do not exist, relating to the use and storage of the product for which he solely is responsible.

Note: The supplying of a material safety data sheet is not mandatory for manufactured articles which contain dangerous substances or preparations, when these latter's are packaged so that they do not present any danger for the user.

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING**

**Product Name** : JOY RED LHF-34F  
**Product Description** : Red liquid and slight odor  
**Use of the Substance/Preparation** : For industrial use only  
**Supplier** : Mikuni Color Ltd.  
138-1 Kokubunji, Mikunino-Cho, Himeji, Japan  
**Emergency Telephone No.** : +(81)-792-52-0783

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

This product is a preparation.

**Hazardous Component(s)**

Component(s)	CAS No.	EU No.	%(W/W)	Symbol(s)	R-phrase(s)
Ethylene glycol	107-21-1	203-473-3	19-21	Xn	R22
Ammonia	7664-41-7	215-647-6	<0.5	T, C, N	R10, R23, R34, R50

**3. HAZARDOUS IDENTIFICATION**

**EC Classification** : HARMFUL  
**Risk Phrases** : R22: Harmful if swallowed.

**4. FIRST AID MEASURES**

**Inhalation** : Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Obtain medical attention.  
**Ingestion** : Induce vomiting immediately by medical personnel. Never give anything by mouth to an unconscious person. Obtain medical attention immediately.  
**Skin Contact** : Remove contaminated clothing. Wash skin with plenty of soap and water for at least 15 minutes. If symptoms develop, obtain medical attention.  
**Eye Contact** : Irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 15 minutes. Obtain medical attention.

**5. FIRE-FIGHTING MEASURES**

Clear fire area of all non-emergency personnel.

**Specific Hazards** : Containers may explode when involved in a fire.  
**Extinguishing Media** : Dry chemical, foam or carbon dioxide may be used.  
**Unsuitable Extinguishing media** : No information available.  
**Protective Equipment for Firefighters** : Wear full protective clothing and self-contained breathing apparatus complying with an approved standard with full facepiece operated in the pressure demand or other positive pressure mode.

**6. ACCIDENTAL RELEASE MEASURES**

Observe all relevant local and international regulations.

- Personal Protection** : Wear appropriate personal protective equipment.
- Cleaning up Methods** : Remove all sources of ignition. Use non-sparking tools and equipment. Avoid release to the environment. Absorb spillage with an inert material, then place in a chemical waste container for later safe disposal. Earth may be shovelled to contain spillage and to avoid contamination of sewers and watercourses.

**7. HANDLING AND STORING**

- Handling** : Avoid contact with eyes, skin and clothing. Keep container closed. Only use in well ventilated areas. Wash thoroughly after handling. Handling temperature: Below 30 and above 0 .
- Storing** : Keep container tightly closed until ready for use. Store in a cool, dry, well-ventilated place away from acids, and oxidizing materials. Storing temperature: Below 30 and above 0 .

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

- Engineering Measures** : Provide adequate ventilation. Local exhaust ventilation is recommended.
- Hand Protection** : Chemical resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products.
- Eye Protection** : Safety eyewear complying with an approved standard should be used to avoid exposure to liquid splashes, mists, gases, or dust.
- Protective Clothing** : Use protective clothing which is chemical resistant to this material. Safety shoes and boots should also be chemical resistant.

**Occupational Exposure Limits**

Component(s)	CAS No.	Type	Value(mg/m <sup>3</sup> )	Source
Ethylene glycol	107-21-1	STEL	100mg/m <sup>3</sup> (aerosol)(ceiling)	ACGIH TLV
Ammonia	7664-41-7	TWA	17mg/m <sup>3</sup>	ACGIH TLV

**9. PHYSICAL AND CHEMICAL PROPERTIES**

- Appearance** : Liquid
- Color** : Red
- Odor** : Slight odor
- Boiling point** : Not available
- Melting point** : Not available
- Flash point** : Not applicable
- Explosion limits** : Not available
- Vapor pressure** : Not available
- Water solubility** : Miscible at any rate
- Auto-ignition temperature** : Not available



**10. STABILITY AND REACTIVITY**

<b>Stability</b>	: Stable at room temperature in closed containers under normal storage and handling conditions.
<b>Conditions to Avoid</b>	: Heat, flames, ignition sources, and incompatibles.
<b>Materials to Avoid</b>	: Strong acids, bases, strong oxidizing agents.
<b>Hazardous Decomposition Products</b>	: Carbon dioxide and carbon monoxide may form when heated to decomposition.

**11. TOXICOLOGICAL INFORMATION**

<b>Acute Oral Toxicity</b>	: LD50: 4,700mg/kg, Rat (as Ethylene glycol ) LD50: 350mg/kg, Rat (as Ammonia ) Ingestion may cause central nervous system depression, vomiting, headaches, lowered blood pressure, stupor, collapse, and unconsciousness with convulsions.
<b>Acute Inhalation Toxicity</b>	: Vapor inhalation may cause nausea, vomiting, dizziness, drowsiness, pulmonary edema, and central nervous system depression.
<b>Acute Dermal Toxicity</b>	: LD50: 9,530mg/kg, Rabbit (as Ethylene glycol) Prolonged/repeated contact may cause defatting of the skin which can lead to dermatitis.
<b>Skin Irritation</b>	: May cause skin irritation. It can be absorbed through skin.
<b>Eye Irritation</b>	: May cause eye irritation.
<b>Respiratory Irritation</b>	: May cause respiratory irritation.
<b>Sensitisation</b>	: Not available
<b>Mutagenicity</b>	: Not available
<b>Carcinogenicity</b>	: Not available

**12. ECOLOGICAL INFORMATION**

<b>Further Information</b>	: There is no data available for this product.
----------------------------	--

**13. DISPOSAL CONSIDERATIONS**

<b>Product</b>	: Do not dump this material into sewers, on the ground or into any body of water. Comply with all relevant regulations. Contact an accredited disposal contractor for the special advice.
----------------	--

**14. TRANSPORT INFORMATION****Sea Transport**

<b>IMDG</b>	
<b>UN-No</b>	: Not applicable
<b>Class</b>	: Not applicable

**15. REGULATORY INFORMATION**

Please refer to any other national measures that may be relevant.

Hazard Symbol(s)	: Xn
EC Classification	: Harmful
Risk Phrases	: R22: Harmful if swallowed.
Safety Phrases	: S2: Keep out of reach of children.

**16. OTHER INFORMATION**

Uses and Restrictions	: Use only in industrial manufacturing processes.
Disclaimer	: The information in this document is based on our current knowledge and is intended to describe the product for the purposes of health, safety, and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.






**1 Identification of the substance/preparation and of the company/undertaking**

- **Product details**
- **Trade name:** DOCU green / grün
- **Manufacturer/Supplier:**  
DOKUMENTAL GmbH & Co KG Schreibfarben  
Woellnerstraße 26  
D-67065 Ludwigshafen  
Phone + 49 (0) 6 21 /54 02 - 227  
Fax + 49 (0) 6 21 /54 02 394  
www. dokumental.de
- **Further information obtainable from:**  
Technical Service, Dr. B. Polzin  
Tel.: +49-621-5402322  
Mobile +49-1726204412
- **Information in case of emergency:**  
GBK Gefahrgut Büro GmbH, Ingelheim  
++49 (0) 6132 / 84463

**2 Composition/information on ingredients**

- **Chemical characterization**  
Mixture of the following substances, containing non-hazardous substances and colouring agents.
- **Description:** Mixture of substances listed below with nonhazardous additions.

• **Dangerous components:**

122-99-6	2-Phenoxyethanol	 Xn; R 22-36	25-50%
100-51-6	Benzyl alcohol	 Xn; R 20/22	10-25%
107-41-5	2-methylpentane-2,4-diol	 Xi; R 36/38	10-25%
90506-69-7	Ethylhexyl phosphoric acid ester.	 C; R 34	2,5-10%
495-54-5	C. I. Solvent Orange 3	 Xn; R 22	≤ 2,5%

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

**3 Hazards identification**

- **Hazard description:**



Xn Harmful

- **Information concerning particular hazards for human and environment:**  
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.  
R 22 Harmful if swallowed.  
R 36/38 Irritating to eyes and skin.
- **Classification system:**  
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

**4 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:**  
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. If symptoms persist, consult a doctor.
- **After swallowing:** Call for a doctor immediately.

**5 Fire-fighting measures**

- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **Protective equipment:** No special measures required.

**6 Accidental release measures**

- **Person-related safety precautions:** Not required.
- **Measures for environmental protection:** Do not allow to enter sewers/ surface or ground water.

(Contd. on page 2)

Trade name: DOCU green / grün

(Contd. of page 1)

- **Measures for cleaning/collecting:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.

## 7 Handling and storage

- **Handling:**
- **Information for safe handling:**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **Information about fire - and explosion protection:** No special measures required.
- **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.

## 8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **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.
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes and skin.
- **Respiratory protection:**  
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **Protection of hands:**



Protective gloves

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

- **Material of gloves**  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:**



Tightly sealed goggles

## 9 Physical and chemical properties

### • General Information

<b>Form:</b>	Fluid
<b>Colour:</b>	According to product specification
<b>Odour:</b>	Characteristic

### • Change in condition

<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	244°C

<b>Flash point:</b>	121°C
---------------------	-------

(Contd. on page 3)

Trade name: DOCU green / grün

(Contd. of page 2)

· Ignition temperature:	260°C
· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	1,0 Vol %
Upper:	13,0 Vol %
· Vapour pressure at 20°C:	0,1 hPa
· Density:	Not determined.
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
· Solvent content:	
Organic solvents:	31,4 %

## 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

- Acute toxicity:

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

122-99-6 2-Phenoxyethanol

Oral LD50 1980 mg/kg (Ratte)

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.

- **Additional toxicological information:**

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

Harmful  
Irritant

## 12 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.

## 13 Disposal considerations

- **Product:**
- **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.

## 14 Transport information

- **Land transport ADR/RID (cross-border)**
- **ADR/RID class:** -
- **Maritime transport IMDG:**
- **IMDG Class:** -
- **Marine pollutant:** No
- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** -
- **Packaging group:** Not applicable

EU  
(Contd. on page 4)

Trade name: DOCU green / grün

(Contd. of page 3)

## 15 Regulatory information

• **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

• **Code letter and hazard designation of product:**



Xn Harmful

• **Hazard-determining components of labelling:**

2-Phenoxyethanol

• **Risk phrases:**

22 Harmful if swallowed.  
36/38 Irritating to eyes and skin.

• **Safety phrases:**

23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).  
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
36/37 Wear suitable protective clothing and gloves.  
60 This material and its container must be disposed of as hazardous waste.

• **National regulations:**

• **Technical instructions (air):**

Class	Share in %
NK	31,4

• **Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

## 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.

• \* Data compared to the previous version altered.

## 1 Identification of the substance/preparation and of the company/undertaking

- **Product details**
- **Trade name:** ECO violet blue N / violett- blau N
- **Application of the substance / the preparation** Ball Pen Ink
- **Manufacturer/Supplier:**  
DOKUMENTAL GmbH & Co KG Schreibfarben  
Woellnerstraße 26  
D-67065 Ludwigshafen  
Phone + 49(0)621/5402321  
Fax + 49(0)621/5402391  
www. dokumental.de
- **Further information obtainable from:**  
Technical Service, Dr. B. Polzin  
Tel.: +49-621-5402322  
Mobile +49-1726204412  
E-Mail: bernd.polzin@dokumental.de
- **Information in case of emergency:**  
GBK Gefahrgut Büro GmbH  
++49 (0) 6132 / 84463  
Ingelheim, Deutschland

## 2 Hazards identification

- **Hazard description:**



Xn Harmful  
N Dangerous for the environment

- **Information concerning particular hazards for human and environment:**  
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.  
R 22 Harmful if swallowed.  
R 38 Irritating to skin.  
R 41 Risk of serious damage to eyes.  
R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- **Classification system:**  
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

## 3 Composition/information on ingredients

- **Chemical characterization**  
Mixture of the following substances, containing non-hazardous substances and colouring agents.
- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 122-99-6 EINECS: 204-589-7	2-Phenoxyethanol	☒ Xn, ☒ Xi; R 22-36	10-25%
CAS: 107-41-5 EINECS: 203-489-0	2-methylpentane-2,4-diol	☒ Xi; R 36/38	2,5-10%
CAS: 110-25-8 EINECS: 203-749-3	Oleoylsarcosinic acid	☒ Xi, ☒ N; R 38-41-50/53	2,5-10%
CAS: 52080-58-7 EINECS: 282-630-8	C. I. Solvent Violet 8	☒ Xn, ☒ Xi, ☒ N; R 22-41-50/53	2,5-10%
CAS: 6786-83-0 EINECS: 229-851-8	C. I. Solvent Blue 4	☒ Xn, ☒ N; R 22-50/53	£ 2,5%

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

## 4 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:**  
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

(Contd. on page 2)

Trade name: ECO violet blue N / violett- blau N

(Contd. of page 1)

- **After eye contact:**  
Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Call for a doctor immediately.

## 5 Fire-fighting measures

- **Suitable extinguishing agents:**  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:** No special measures required.

## 6 Accidental release measures

- **Person-related safety precautions:** Not required.
- **Measures for environmental protection:**  
Do not allow product to reach sewage system or any water course.  
Inform respective authorities in case of seepage into water course or sewage system.  
Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.

## 7 Handling and storage

- **Handling:**
- **Information for safe handling:**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **Information about fire - and explosion protection:** No special measures required.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.

## 8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **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.
- **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.
- **Protection of hands:**



Protective gloves

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

(Contd. on page 3)



Trade name: ECO violet blue N / violett- blau N

(Contd. of page 2)

- **Material of gloves**  
 The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**  
 The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:**



Tightly sealed goggles

## 9 Physical and chemical properties

### • General Information

<b>Form:</b>	Fluid
<b>Colour:</b>	According to product specification
<b>Odour:</b>	Characteristic
<b>Important information on protection of health and environment, and on safety.</b>	
	Not applicable
	Not applicable
<b>• Change in condition</b>	
<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	185°C
<b>• Flash point:</b>	93°C
<b>• Ignition temperature:</b>	260°C
<b>• Self-igniting:</b>	Product is not selfigniting.
<b>• Danger of explosion:</b>	Product does not present an explosion hazard.
<b>• Explosion limits:</b>	
<b>Lower:</b>	1,4 Vol %
<b>Upper:</b>	12,6 Vol %
<b>• Vapour pressure at 20°C:</b>	0,1 hPa
<b>• Density:</b>	Not determined.
<b>• Solubility in / Miscibility with water:</b>	Not miscible or difficult to mix.
<b>• pH-value at 20°C:</b>	6,3
<b>• Viscosity:</b>	
<b>Dynamic at 20°C:</b>	16000 mPas
<b>• Solvent content:</b>	
<b>Organic solvents:</b>	50,4 %
<b>• Solids content:</b>	17,0 %

## 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**  
 No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

### • Acute toxicity:

<b>• LD/LC50 values relevant for classification:</b>		
<b>110-25-8 Oleoylsarcosinic acid</b>		
Oral	LD50	9200 mg/kg (Ratte)
<b>52080-58-7 C. I. Solvent Violet 8</b>		
Oral	LD50	700 mg/kg (Ratte)

(Contd. on page 4)

Trade name: ECO violet blue N / violett- blau N

(Contd. of page 3)

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Strong irritant with the danger of severe eye injury.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**  
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Harmful  
Irritant

## 12 Ecological information

- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **General notes:**  
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water  
Do not allow product to reach ground water, water course or sewage system.  
Danger to drinking water if even small quantities leak into the ground.  
Also poisonous for fish and plankton in water bodies.  
Toxic for aquatic organisms

## 13 Disposal considerations

- **Product:**
- **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- **European waste catalogue**

08 00 00	WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS
08 01 00	wastes from MFSU and removal of paint and varnish
08 01 13	sludges from paint or varnish containing organic solvents or other dangerous substances

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

## 14 Transport information

- **Land transport ADR/RID (cross-border)**



- **ADR/RID class:** 9 (M6) Miscellaneous dangerous substances and articles.
- **Danger code (Kemler):** 90
- **UN-Number:** 3082
- **Packaging group:** III
- **Hazard label:** 9
- **Description of goods:** 3082 UMWELTGEFÄHRDENDER STOFF, FLÜSSIG, N.A.G. (Oleoylsarkosinsäure, Farbstoff C.I. Solvent Violet 8)

- **Maritime transport IMDG:**



- **IMDG Class:** 9
- **UN Number:** 3082
- **Label:** 9
- **Packaging group:** III
- **Marine pollutant:** No

(Contd. on page 5)

Trade name: ECO violet blue N / violett- blau N

(Contd. of page 4)

• **Proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Oleoylsarcosinic acid, C. I. Solvent Violet 8)

• **Air transport ICAO-TI and IATA-DGR:**



• **ICAO/IATA Class:** 9  
• **UN/ID Number:** 3082  
• **Label:** 9  
• **Packaging group:** III  
• **Proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Oleoylsarcosinic acid, C. I. Solvent Violet 8)

## 15 Regulatory information

• **Labelling according to EU guidelines:**  
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

• **Code letter and hazard designation of product:**



Xn Harmful  
N Dangerous for the environment

• **Hazard-determining components of labelling:**  
2-Phenoxyethanol

• **Risk phrases:**

22 Harmful if swallowed.  
38 Irritating to skin.  
41 Risk of serious damage to eyes.  
51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

• **Safety phrases:**

2 Keep out of the reach of children.  
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.  
36/37/39 Wear suitable protective clothing, gloves and eye/face protection.  
46 If swallowed, seek medical advice immediately and show this container or label.

• **National regulations:**

• **Technical instructions (air):**

Class	Share in %
NK	50-100

• **Waterhazard class:** Water hazard class 2 (Self-assessment): hazardous for water.

## 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.

• \* Data compared to the previous version altered.