

BP N-01 S&P and BP N-01 S&P KTR Ball pen ink

Safety Data Sheet

according to Regulation (EC) No. 453/2010

Date: 10/12/2012

Supersedes: 26/10/2010

Version: 4.0

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

1.1. Product identifier

Substance or preparation : Mixture
Product name. : BP N-01 S&P and BP N-01 S&P KTR Ball pen ink

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

1.2.1. Relevant identified uses

Use of the substance/preparation : Ball point pen ink

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

SOCIETE BIC
14, Rue Jeanne d'Asnières
92611 CLICHY Cédex
T +33 01 45 19 52 00 - F +33 01 45 19 52 99
Bic.Contact@bicworld.com

1.4. Emergency telephone number

Country	Official advisory body	Address	Emergency number
UNITED KINGDOM	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	0870 243 2241

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Directive 67/548/EEC or 1999/45/EC

Xn; R22

Xi; R36

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

Harmful if swallowed. Irritating to eyes. Presents no particular risk to the environment, provided the disposal requirements (see section 13) and national or local regulations are complied with. Not classified as flammable according to EC criteria, but may present a risk in the event of a fire. In a usual writing situation, quantities of ink layed down by the pen are normally too small to occasion significant exposure and cause adverse effects on the user's health.

2.2. Label elements

Labelling according to Directive 67/548/EEC or 1999/45/EC

Symbol(s)



Xn - Harmful

Hazardous ingredients : 2-phenoxyethanol
R-phrases : R22 - Harmful if swallowed.
R36 - Irritating to eyes.
S-phrases : S2 - Keep out of the reach of children.
S13 - Keep away from food, drink and animal feeding stuffs
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S46 - If swallowed, seek medical advice immediately and show this container or label.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

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3.2. Mixtures

Name	Product identifier	%	Classification according to Directive 67/548/EEC
2-phenoxyethanol	(CAS No.) 000122-99-6 (EC no) 204-589-7 (EC index no) 603-098-00-9	20 - 30	Xn; R22 Xi; R36
1-Phenoxy-2-propanol	(CAS No.) 770-35-4 (EC no) 212-222-7	20 - 30	Xi; R36
2-Phenoxy-1-propanol	(CAS No.) 4169-04-4 (EC no) 224-027-4	1 - 10	Xi; R41

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2-phenoxyethanol	(CAS No.) 000122-99-6 (EC no) 204-589-7 (EC index no) 603-098-00-9	20 - 30	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319
1-Phenoxy-2-propanol	(CAS No.) 770-35-4 (EC no) 212-222-7	20 - 30	Eye Irrit. 2, H319
2-Phenoxy-1-propanol	(CAS No.) 4169-04-4 (EC no) 224-027-4	1 - 10	Eye Dam. 1, H318

Full text of R-, H- and EUH-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- inhalation : Move the affected person away from the contaminated area and into the fresh air. If irritation persists, consult a doctor.
- skin contact : Wash with soapy water. If case of redness or irritation, call a doctor.
- eye contact : Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). Always consult an eye specialist, even if there are no immediate symptoms.
- ingestion : Call medical assistance immediately and show a copy of the material safety data sheet.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after eye contact : Irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Carbon dioxide (CO2). Foam. Powder.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : During combustion : Toxic vapours may be released.
- Reactivity : To our knowledge, the product does not present any particular risk.

5.3. Advice for firefighters

Precautionary measures fire : Cool down the containers exposed to heat with a water spray. Contain the spilled material by bunding. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Avoid contact with skin and eyes. Do not breathe smoke. In case of important spillage : Only qualified personnel equipped with suitable protective equipment may intervene.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Contain the spilled material by bunding. Do not discharge into drains or rivers.

6.3. Methods and material for containment and cleaning up

- For containment : Absorb spillage with: inert absorbent material. Sand/earth.
- Methods for cleaning up : Wash non-recoverable remainder with large amounts of water. Dispose of contaminated materials in accordance with current regulations.

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6.4. Reference to other sections

For further information see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Does not require any specific or particular technical measures. Work in a well-ventilated area. Avoid any direct contact with the product.
- Hygiene measures : Do not drink, eat or smoke in the workplace. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : The floor of the depot should be impermeable and designed to form a tight basin.
- Storage conditions : Store in a cool, well-ventilated place. Keep container tightly closed. Avoid ignition sources.
- Incompatible materials : Strong oxidizing agents. Acids.
- Packaging materials : Recommendations: Ordinary steel. Avoid: Some plastics.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

- Technical measures : No specific measures are required provided the product is handled in accordance with the general rules of occupational hygiene and safety.
- Hand protection : Impermeable protective gloves. The protective gloves to be used must comply with the specifications of EC directive 89/686/EEC and the resultant standard EN 374. Breakthrough time : refer to the recommendations of the supplier.
- Eye protection : Sealed safety goggles.
- Respiratory protection : If the ventilation is suitable, it is not essential to wear respiratory equipment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Colour : Black.
- Odour : characteristic.
- Odour threshold : No data available
- pH : 4 - 5
- Relative evaporation rate (butylacetate=1) : No data available
- Melting point : No data available
- Freezing point : No data available
- Boiling point : 230 - 248 °C
- Flash point : > 105 °C
- Self ignition temperature : No data available
- Decomposition temperature : No data available
- Flammability (solid, gas) : No data available
- Vapour pressure : No data available
- Relative vapour density at 20 °C : No data available
- Relative density : ~ 1,1
- Solubility : insoluble in water.
- Log Pow : No data available
- Log Kow : No data available
- Viscosity, kinematic : No data available
- Viscosity, dynamic : No data available
- Explosive properties : No data available
- Oxidising properties : No data available
- Explosive limits : No data available

9.2. Other information

No additional information available

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SECTION 10: Stability and reactivity

10.1. Reactivity

To our knowledge, the product does not present any particular risk.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None under normal conditions.

10.4. Conditions to avoid

High temperature.

10.5. Incompatible materials

Strong oxidizing agents. Acids.

10.6. Hazardous decomposition products

On combustion or on thermal decomposition (pyrolysis) releases : Carbon oxydes (CO, CO₂). Various hydrocarbon fragments.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Harmful if swallowed.

1-Phenoxy-2-propanol (770-35-4)	
LD50 oral rat	> 2000 mg/kg (published data)
LD50 dermal rabbit	> 2000 mg/kg (published data)
LC50 inhalation rat (mg/l)	> 5,4 mg/l/4h (published data)

2-phenoxyethanol (000122-99-6)	
LD50 oral rat	1260 mg/kg
LD50 dermal rabbit	> 2000 mg/kg

Irritation : Irritating to eyes.

pH: 4 - 5

Corrosivity : Not classified (Based on available data, the classification criteria are not met)

pH: 4 - 5

Sensitisation : Not classified (Based on available data, the classification criteria are not met)

Repeated dose toxicity : Not classified (Lack of data)

Carcinogenicity : Not classified (Lack of data)

Mutagenicity : Not classified (Lack of data)

Toxicity for reproduction : Not classified (Lack of data)

Other information : Above information is for the ink. The ink will be contained in the reservoir of a small capacity pen which will limit considerably the exposure possibilities for the user.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

1-Phenoxy-2-propanol (770-35-4)	
LC50 fish 1	280 mg/l/96h (Pimephales promelas)
EC50 Daphnia	370 mg/l/48h (Daphnia magna)

2-phenoxyethanol (000122-99-6)	
LC50 fish 1	220 - 460 mg/l/96h (Leuciscus idus)

12.2. Persistence and degradability

2-phenoxyethanol (000122-99-6)	
Persistence and degradability	82 % biodegradation /17 days. Readily biodegradable.

12.3. Bioaccumulative potential

2-phenoxyethanol (000122-99-6)	
Log Pow	1,16

12.4. Mobility in soil

No additional information available

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12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of in accordance with relevant local regulations. Destroy at an authorised site.
Additional information : The user's attention is drawn to the possible existence of specific european, national or local regulations regarding disposal.

SECTION 14: Transport information

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

14.1. UN number

No dangerous good in sense of transport regulations.

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

14.6.1. Overland transport

No additional information available

14.6.2. Transport by sea

No additional information available

14.6.3. Air transport

No additional information available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions
Contains no REACH candidate substance

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

This sheet was updated (refer to the date at the top of this page). (see section(s) : 2, 11, 12).

Data sources : ECHA (European Chemicals Agency). Joint Research Centre (JRC). RTECS (Registry of Toxic effects of Chemical Substances). MSDS of suppliers.

Other information : No experimental study is available on the mixture. Information hereunder are based on our knowledge on components, and classification of the mixture is determined with the calculation method .

Safety data sheet established by :
LISAM SERVICES - TELEGIS
Rue de la Couture F-60400 PASSEL
Safety Made Easy with www.lisam.com.

Full text of R-, H- and EUH-phrases::

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Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
H302	Harmful if swallowed.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
R22	Harmful if swallowed.
R36	Irritating to eyes.
R41	Risk of serious damage to eyes
Xi	Irritating
Xn	Harmful

SDS EU (REACH Annex II)

This information 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.

MATERIAL SAFETY DATA SHEET

BPB02 or 5684 LZ ball pen ink

Page : 1

Version : 3

Date : 11/9/2009

Supersedes : 16/6/2008

BIC

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : BPB02 or 5684 LZ ball pen ink
Recommended uses : Ball point pen ink
SUPPLIER :
Name : SOCIETE BIC
Address : 14, Rue Jeanne d'Asnières
92611 CLICHY Cédex
FRANCE
Telephone number : + 33 01 45 19 52 00
Telefax number : +33 01 45 19 52 99
E-mail : Bic.Contact@bicworld.com
EMERGENCY TELEPHONE NUMBER : ORFILA (France) : +33 01 45 42 59 59

2. HAZARDS IDENTIFICATION

MOST IMPORTANT HAZARDS :

Adverse human health effects : Limited evidence of a carcinogenic effect
Harmful if swallowed
Irritating to eyes

Environmental effects : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Physical and chemical hazards :
- Fire or explosion : Not classified as flammable by EC criteria but may present a hazard in the event of a fire
Burning and thermal decomposition may form toxic by-products

Classification of the product : According to European regulations, this product is classified as :
- CARCINOGEN - Category 3
- HARMFUL
- IRRITANT
- DANGEROUS FOR THE ENVIRONMENT

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

3. COMPOSITION / INFORMATION ON INGREDIENTS

MIXTURE :

Chemical nature : Mixture based on solvents and dyes

Hazardous constituents :

Substance name	Contents	CAS No / EC No / Index No	Symbol(s)	R-Phrase(s)
<u>2-(2-Ethoxyethoxy)ethanol</u>	: < 30 %	111-90-0 / 203-919-7 / -----	Xi	36
<u>C.I. Solvent blue 38</u>	: < 20 %	1328-51-4 / 215-523-1 / -----	Xn	22
<u>C.I. Solvent blue 37</u>	: < 20 %	71888-82-9 / 276-156-0 / -----	Xn	22
<u>C.I. Basic Violet 3</u>	: < 10 %	548-62-9 / 208-953-6 / 612-204-00-2	Xn N	22-40-41-50/53

4. FIRST AID MEASURES

Inhalation : Move the affected person away from the contaminated area and into the fresh air
If the person feels unwell :
Call a doctor

Skin contact : Immediately rinse with plenty of water.
In case of redness or irritation, call a doctor

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14, Rue Jeanne d'Asnières 92611 CLICHY FRANCE

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4. FIRST AID MEASURES (continued)

Eye contact : Rinse immediately and thoroughly with plenty of water whilst keeping the eyes wide open (at least 15 minutes)
Always refer to an eye specialist, even if there are no immediate symptoms.

Ingestion : Rinse mouth out with water
Never attempt to induce vomiting
Call a doctor immediately

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Water fog
Foam
Powders

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

Specific hazards : During combustion :
Toxic vapors may be released

Specific fire fighting methods : Contain the extinguishing fluids by bunding (the product is hazardous for the environment)
Do not attempt to fight the fire without suitable protective equipment

Protection of fire-fighters : Self-contained breathing apparatus
Impermeable protective equipment

6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Avoid contact with skin and eyes
Do not breathe vapours
In case of important spillage :
Only qualified personnel equipped with appropriate protective equipment may intervene

Environmental precautions : Contain the spilled material by bunding (product is hazardous for the environment)
Do not discharge into drains and rivers

Methods for cleaning up :

- Recovery : Recover the product by mechanical means.
Collect up the product and place it in a spare container suitably labelled
- Neutralization : Absorb non-recoverable liquid with:
- inert absorbent material
- Cleaning/decontamination : Wash the floor with plenty of water
- Disposal : Dispose of contaminated materials in accordance with current regulations

7. HANDLING AND STORAGE

HANDLING

Technical measures : Vapour extraction at source

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 should be impermeable and designed to form a water-tight basin.

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

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7. HANDLING AND STORAGE (continued)

Packaging materials : Acids
- Recommended : Stainless steel
- Not suitable : Certain plastic materials

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures : Ensure good ventilation of the work station
Extraction to remove vapours at their source

Personal protective equipment :
- Respiratory protection : If vapour is released:
Self-contained breathing apparatus

- Hand protection : Impermeable protective gloves
The protective gloves to be used must comply with the specifications of EC directive 89/686/EEC and the resultant standard EN 374
Breakthrough time : refer to the recommendations of the supplier

- Eye protection : Safety goggles

Hygiene measures : Do not drink, eat or smoke in the workplace
Always wash your hands after handling the product

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : Liquid
Colour : blue
Odour : solvent.
pH : 5.5 - 6.5
Specific temperatures :
- Boiling : > 200 °C
Flammability characteristics :
- Flash point : 90 °C (Closed cup).
Relative density (water = 1) : 1.1
Solubility :
- in water : Insoluble

10. STABILITY AND REACTIVITY

Stability : Stable under normal conditions of use

Hazardous reactions :
- Materials to avoid : - acids
- strong oxidizing agents
- alkali metals

- Hazardous decomposition products : On combustion or on thermal decomposition (pyrolysis) releases :
Carbon oxides (CO, CO₂)
Nitrogen oxides

11. TOXICOLOGICAL INFORMATION

Acute toxicity : Harmful if swallowed
Local effects : Irritating to eyes
Specific effects :
- Carcinogenicity : Limited evidence of a carcinogenic effect
Further information : Above information is for the ink. The ink will be contained in the reservoir of a small

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11. TOXICOLOGICAL INFORMATION (continued)

capacity pen which will limit considerably the exposure possibilities for the user

12. ECOLOGICAL INFORMATION

BIOACCUMULATION :

Octanol/water partition coefficient : C.I. Basic violet 3 : log POW = 0.51
Not potentially bioaccumulable

ECOTOXICITY :

Effects on the aquatic environment : Toxic to aquatic organisms
May cause long-term adverse effects in the aquatic environment.
C.I. Basic violet 3 :
LC 50 (Fish : *Oryzias latipes*) / 48 h = 0.1 mg/l
LC 50 (Fish : *S. gairdnerii*) / 96 h = 0.7 mg/l
(published data)

13. DISPOSAL CONSIDERATIONS

WASTE FROM PRODUCT :

Prohibition : Discharging waste into rivers and drains is prohibited
Destruction/Disposal : Dispose of in accordance with relevant local regulations

CONTAMINATED PACKAGING :

Destruction/disposal : Destroy at an authorised 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 :

- * - UN No. 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CI Basic Violet 3)
- Land transportation :
 - * - Rail/road (RID/ADR) : Class : 9
Classification code : M6
Packing group : III
Labelling : 9
Hazard identification number : 90
Additional marking : "Environmentally hazardous substance"
- * Sea (IMO/IMDG) :
 - Class : 9
Emergency schedule (EmS) : F-A, S-F
Packing group : III
Labelling : 9
Additional marking : "Environmentally hazardous substance"
- * Air (ICAO-IATA) :
 - Class : 9
Packing group : III
Labelling : Miscellaneous
Additional marking : "Environmentally hazardous substance"

NOTE : The above regulatory prescriptions are those valid on the date of publication of this sheet

Given the possible evolution of transport regulations for hazardous materials, in case the date of issue is older than 12 months, compared to the current one, it would be advisable to check their validity with your commercial agency

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15. REGULATORY INFORMATION

EC LABELLING :

Identification of the hazardous product : Contains : CI Basic Violet 3

- Symbols and indications of danger :



- R phrases :

- HARMFUL (Xn) - DANGEROUS FOR THE ENVIRONMENT (N)

R22 : Harmful if swallowed.

R36 : Irritating to eyes.

R40 : Limited evidence of a carcinogenic effect.

R51/53 : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

- S phrases :

S2 : Keep out of the reach of children.

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

S36/37 : Wear suitable protective clothing and gloves.

S61 : Avoid release to the environment. Refer to special instructions/Safety data sheets.

- Further data :

Reduced labelling allowed for small packaging

The regulatory information given above only indicate the principal regulations specifically applicable to the product described in the MSDS. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable international, national and local regulations or provisions.

16. OTHER INFORMATION

R phrases text of § 3 :

R22 : Harmful if swallowed.

R36 : Irritating to eyes.

R40 : Limited evidence of a carcinogenic effect.

R41 : Risk of serious damage to eyes.

R50/53 : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Restrictions on use :

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

Bibliography references :

Joint Research Centre (JRC)

MSDS of suppliers

* Update :

This sheet was updated (refer to the date at the top of this page)

Texts which have been modified since the previous version are marked with an asterisk (*)

Safety data sheet established by :

LISAM SERVICES - TELEGIS

6 rue des Boucheries F-60400 NOYON

www.reachelp.com

Safety Made Easy with www.lisam.com

This sheet complements the technical sheets but does not replace them. The information given is based on our knowledge of the product, at the time of publication. It is given in good faith.

Besides, the attention of the user is drawn to the possible risk incurred by using the product for any other use than that for which it was intended.

In no way does this exempt the user from knowing and applying all the regulations controlling his activity. He alone will take on the responsibility for taking the precautions involved by the use of the product.

The aim of all the mandatory regulations mentioned is just to help the user to fulfil his obligations regarding the use of hazardous products.

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This information must not be considered exhaustive. It does not exempt the user from ensuring that other obligations than those mentioned could apply, related to the storage and use of the product, this being his sole responsibility.

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Red 2079 IS Brazil Ink	Date : 19/2/2009
	Supersedes : 8/11/2007
	BIC

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : Red 2079 IS Brazil Ink
 Recommended uses : Ink
 SUPPLIER :
 Name : SOCIETE BIC
 Address : 14, Rue Jeanne d'Asnières
 92611 CLICHY Cédex
 FRANCE
 Telephone number : + 33 01 45 19 52 00
 Telefax number : +33 01 45 19 52 99
 * E-mail : Bic.Contact@bicworld.com
 EMERGENCY TELEPHONE NUMBER : ORFILA (France) : +33 01 45 42 59 59

2. HAZARDS IDENTIFICATION

MOST IMPORTANT HAZARDS :
 Adverse human health effects : Harmful by inhalation and if swallowed
 Environmental effects : Presents no particular risk to the environment, provided the recommendations concerning disposal (see section 13) and any applicable national or local regulations are complied with
 Physical and chemical hazards :
 - Fire or explosion : Not classified as flammable by EC criteria but may present a hazard in the event of a fire
 Burning and thermal decomposition may form toxic by-products
 Classification of the product : According to European regulations, this product is classified as :
 - HARMFUL
 Further information : In a usual writing situation, quantities of ink layed down by the pen are normally too small to occasion significant exposure and cause adverse effects on the user's health

3. COMPOSITION / INFORMATION ON INGREDIENTS

MIXTURE :

Chemical nature : Mixture based on solvents and dyes

Hazardous constituents :

Substance name	Contents	CAS No / EC No / Index No	Symbol(s)	R-Phrase(s)
<u>Benzyl alcohol</u>	: < 30 %	100-51-6 / 202-859-9 / 603-057-00-5	Xn	20/22
<u>CI Solvent red 49</u>	: < 10 %	509-34-2 / 208-096-8 / -----	Xn	22-36-52/53
<u>CI solvent orange 25</u>	: < 20 %	74665-04-6 / 277-959-9 / -----	Xn	22

4. FIRST AID MEASURES

Inhalation : Move the affected person away from the contaminated area and into the fresh air
 If the person feels unwell :
 Call a doctor
 Skin contact : Wash with soap and water
 Eye contact : Rinse immediately and thoroughly with plenty of water whilst keeping the eyes wide open (at least 15 minutes)
 If irritation persists, consult an eye specialist
 Ingestion : Rinse mouth out with water
 Never attempt to induce vomiting
 Call a doctor immediately

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5. FIRE-FIGHTING MEASURES

Suitable extinguishing media :	Water spray Foam Powders
Specific hazards :	During combustion : Toxic vapors may be released
Specific fire fighting methods :	Contain the extinguishing fluids by bunding Do not attempt to fight the fire without suitable protective equipment
Protection of fire-fighters :	Self-contained breathing apparatus Impermeable protective equipment

6. ACCIDENTAL RELEASE MEASURES

Personal precautions :	Avoid contact with skin and eyes Do not breathe vapours In case of important spillage : Only qualified personnel equipped with appropriate protective equipment may intervene
Environmental precautions :	Contain the spilled material by bunding Do not discharge into drains and rivers
Methods for cleaning up :	
- Recovery :	Recover the product by mechanical means. Collect up the product and place it in a spare container suitably labelled
- Neutralization :	Absorb non-recoverable liquid with: - inert absorbent material
- Cleaning/decontamination :	Wash the floor with plenty of water
- Disposal :	Dispose of contaminated materials in accordance with current regulations

7. HANDLING AND STORAGE

HANDLING

Technical measures :	Vapour extraction at source
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 should be impermeable and designed to form a water-tight basin.
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 Acids
Packaging materials :	
- Recommended :	Original packaging

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures :	Ensure good ventilation of the work station Extraction to remove vapours at their source
Personal protective equipment :	
- Respiratory protection :	Self-contained breathing apparatus

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION (continued)

- Hand protection : Butyl-rubber protective gloves
The protective gloves to be used must comply with the specifications of EC directive 89/686/EEC and the resultant standard EN 374
Breakthrough time : refer to the recommendations of the supplier
- Eye protection : Safety spectacles
- Hygiene measures : Do not drink, eat or smoke in the workplace
Always wash your hands after handling the product

9. PHYSICAL AND CHEMICAL PROPERTIES

- Physical state : Viscous liquid
- Colour : red
- Odour : slight , solvent.
- pH : 6-7
- Specific temperatures :
 - Boiling : > 200 °C
- Flammability characteristics :
 - Flash point : 90 °C (Closed cup).
- Relative density (water = 1) : 1.1
- Solubility :
 - in water : Insoluble

10. STABILITY AND REACTIVITY

- Stability : Stable under normal conditions of use
- Hazardous reactions :
 - Materials to avoid :
 - strong oxidizing agents
 - acids
 - Hazardous decomposition products : On combustion or on thermal decomposition (pyrolysis) releases :
Carbon oxides (CO, CO2)

11. TOXICOLOGICAL INFORMATION

- Acute toxicity : Harmful by inhalation and if swallowed.
Benzyl alcohol :
LC 50 inhalation (rat) / 8h : 1000 ppm
LD 50 oral (rat) : 1230 mg/kg
(published data)
- Acute symptoms : Benzyl alcohol :
On inhalation :
Cough
Drowsiness
On ingestion :
Vomiting
Diarrhoea
Headaches
Central Nervous System depressant
- * Further information : Above information is for the ink. The ink will be contained in the reservoir of a small capacity pen which will limit considerably the exposure possibilities for the user

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12. ECOLOGICAL INFORMATION

Product as is : No data available
Avoid discharge of the product as is into the environment

BIOACCUMULATION :

Octanol/water partition coefficient : Benzyl alcohol : -1.1 (log POW)
Not potentially bioaccumulable
(published data)

ECOTOXICITY :

Effects on the aquatic environment : No information available, however this product is not considered to present any particular risk for the aquatic environment.
Benzyl alcohol :
LC 50 (Fish : Lepomis macrochirus) / 96 h 10 mg/l
EC 50 (Daphnia : Daphnia magna) / 24 h : 400 mg/l
(published data)

13. DISPOSAL CONSIDERATIONS

WASTE FROM PRODUCT :

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

CONTAMINATED PACKAGING :

Destruction/disposal : Destroy at an authorised 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 :

RID/ADR/IMDG/IATA : Not restricted

NOTE : The above regulatory prescriptions are those valid on the date of publication of this sheet
Given the possible evolution of transport regulations for hazardous materials, in case the present sheet is dating back to more than 12 months ago, it would be advisable to check their validity with your commercial agency

15. REGULATORY INFORMATION

EC LABELLING : Regulatory provisions on labeling don't apply to the marker. Only ink in cans is concerned

- Symbols and indications of danger :



- HARMFUL (Xn)

- R phrases : R20/22 : Harmful by inhalation and if swallowed.

- S phrases : S2 : Keep out of the reach of children.
S46 : If swallowed seek medical advice immediately and show this container or label.

- Further data : Reduced labelling allowed for small packaging

The regulatory information given above only indicate the principal regulations specifically applicable to the product described in the MSDS The user's attention is drawn to the possible existence of additional provisions which complete these regulations Refer to all applicable international, national and local regulations or provisions

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16. OTHER INFORMATION

Restrictions on use :	This product must not be used for other applications that mentioned in §1.
R phrases text of § 3 :	R20/22 : Harmful by inhalation and if swallowed. R22 : Harmful if swallowed. R36 : Irritating to eyes. R52/53 : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Bibliography references :	European Chemicals Bureau (ECB) HSDB (Hazardous Substances Data Bank) (National Library of Medicine) MSDS of suppliers
* Update :	This sheet was updated (refer to the date at the top of this page) Texts which have been modified since the previous version are marked with an asterisk (*)
Safety data sheet established by :	LISAM SERVICES - TELEGIS 6 rue des Boucheries F-60400 NOYON www.reachelp.com Safety Made Easy with www.lisam.com

This sheet complements the technical sheets but does not replace them. The information given is based on our knowledge of the product, at the time of publication. It is given in good faith.

Besides, the attention of the user is drawn to the possible risk incurred by using the product for any other use than that for which it was intended.

In no way does this exempt the user from knowing and applying all the regulations controlling his activity. He alone will take on the responsibility for taking the precautions involved by the use of the product.

The aim of all the mandatory regulations mentioned is just to help the user to fulfil his obligations regarding the use of hazardous products.

This information must not be considered exhaustive. It does not exempt the user from ensuring that other obligations than those mentioned could apply, related to the storage and use of the product, this being his sole responsibility.

End of document

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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : Green 5570 ISB Brazil Ink
 Recommended uses : Ink
 SUPPLIER :
 Name : SOCIETE BIC
 Address : 14, Rue Jeanne d'Asnières
 92611 CLICHY Cédex
 FRANCE
 Telephone number : + 33 01 45 19 52 00
 Telefax number : +33 01 45 19 52 99
 * E-mail : Bic.Contact@bicworld.com
 EMERGENCY TELEPHONE NUMBER : ORFILA (France) : +33 01 45 42 59 59

2. HAZARDS IDENTIFICATION

MOST IMPORTANT HAZARDS :
 Adverse human health effects : Harmful if swallowed
 Irritating to eyes
 Environmental effects : Presents no particular risk to the environment, provided the recommendations concerning disposal (see section 13) and any applicable national or local regulations are complied with
 Physical and chemical hazards :
 - Fire or explosion : Not classified as flammable by EC criteria but may present a hazard in the event of a fire
 Burning and thermal decomposition may form toxic by-products
 Classification of the product : According to European regulations, this product is classified as :
 - HARMFUL
 - IRRITANT
 Further information : In a usual writing situation, quantities of ink layed down by the pen are normally too small to occasion significant exposure and cause adverse effects on the user's health

3. COMPOSITION / INFORMATION ON INGREDIENTS

MIXTURE :

Chemical nature : Mixture based on solvents and dyes

Hazardous constituents :

Substance name	Contents	CAS No / EC No / Index No	Symbol(s)	R-Phrase(s)
<u>2-(2-Ethoxyethoxy)ethanol</u>	: < 30 %	111-90-0 / 203-919-7 / -----	Xi	36
<u>C.I. Solvent yellow 47</u>	: < 20 %	71077-14-0 / 275-170-4 / -----	Xn	22
<u>C.I. Solvent blue 38</u>	: < 30 %	1328-51-4 / 215-523-1 / -----	Xn	22

4. FIRST AID MEASURES

Inhalation : Move the affected person away from the contaminated area and into the fresh air
 Skin contact : Wash with soap and water
 Eye contact : Rinse immediately and thoroughly with plenty of water whilst keeping the eyes wide open (at least 15 minutes)
 Always refer to an eye specialist, even if there are no immediate symptoms.
 Ingestion : Rinse mouth out with water
 Never attempt to induce vomiting
 Call a doctor immediately

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5. FIRE-FIGHTING MEASURES

Suitable extinguishing media :	Water spray Foam Powders
Specific hazards :	During combustion : Toxic vapors may be released
Specific fire fighting methods :	Contain the extinguishing fluids by bunding Do not attempt to fight the fire without suitable protective equipment
Protection of fire-fighters :	Self-contained breathing apparatus Impermeable protective equipment

6. ACCIDENTAL RELEASE MEASURES

Personal precautions :	Avoid contact with skin and eyes Do not breathe vapours In case of important spillage : Only qualified personnel equipped with appropriate protective equipment may intervene
Environmental precautions :	Contain the spilled material by bunding Do not discharge into drains and rivers
Methods for cleaning up :	
- Recovery :	Recover the product by mechanical means. Collect up the product and place it in a spare container suitably labelled
- Neutralization :	Absorb non-recoverable liquid with: - inert absorbent material
- Cleaning/decontamination :	Wash the floor with plenty of water
- Disposal :	Dispose of contaminated materials in accordance with current regulations

7. HANDLING AND STORAGE

HANDLING

Technical measures :	Vapour extraction at source
Precautions :	Avoid any direct contact with the product

STORAGE

Technical measures :	The floor of the depot should be impermeable and designed to form a water-tight basin.
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 Acids Alkali metals
Packaging materials :	
- Recommended :	Original packaging

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures :	Ensure good ventilation of the work station
Personal protective equipment :	
- Respiratory protection :	If the ventilation is suitable, it is not essential to wear respiratory equipment
- Hand protection :	Butyl-rubber protective gloves The protective gloves to be used must comply with the specifications of EC

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION (continued)

	directive 89/686/EEC and the resultant standard EN 374
	Breakthrough time : refer to the recommendations of the supplier
- Eye protection :	Goggles
Hygiene measures :	Do not drink, eat or smoke in the workplace Always wash your hands after handling the product

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state :	Viscous liquid
Colour :	green
Odour :	slight , solvent.
pH :	7-8
Specific temperatures :	
- Boiling :	> 200 °C
Flammability characteristics :	
- Flash point :	90 °C (Closed cup).
Relative density (water = 1) :	1.1
Solubility :	
- in water :	Insoluble

10. STABILITY AND REACTIVITY

Stability :	Stable under normal conditions of use
Hazardous reactions :	
- Materials to avoid :	- strong oxidizing agents - acids - alkali metals
- Hazardous decomposition products :	On combustion or on thermal decomposition (pyrolysis) releases : Carbon oxides (CO, CO2)

11. TOXICOLOGICAL INFORMATION

Acute toxicity :	Harmful if swallowed
Local effects :	Irritating to eyes
* Further information :	Above information is for the ink. The ink will be contained in the reservoir of a small capacity pen which will limit considerably the exposure possibilities for the user

12. ECOLOGICAL INFORMATION

Product as is :	No data available Avoid discharge of the product as is into the environment
BIOACCUMULATION :	
Octanol/water partition coefficient :	2-(2-ethoxyethoxy)éthanol : -0.54 (log POW) Not potentially bioaccumulable (published data)
ECOTOXICITY :	
Effects on the aquatic environment :	No information available, however this product is not considered to present any particular risk for the aquatic environment. 2-(2-ethoxyethoxy)éthanol : LC 50 (Fish : Salmo gairderi) / 96 h : 13400 mg/l EC 50 (Daphnia : Daphnia magna) / 48h : 3940-4670 mg/l (published data)

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13. DISPOSAL CONSIDERATIONS

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

CONTAMINATED PACKAGING :
Destruction/disposal : Destroy at an authorised 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 :
RID/ADR/IMDG/IATA : Not restricted

NOTE : The above regulatory prescriptions are those valid on the date of publication of this sheet
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15. REGULATORY INFORMATION

EC LABELLING : Regulatory provisions on labeling don't apply to the marker. Only ink in cans is concerned

- Symbols and indications of danger : 

- R phrases :
- HARMFUL (Xn)
R22 : Harmful if swallowed.
R36 : Irritating to eyes.

- S phrases :
S2 : Keep out of the reach of children.
S26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S46 : If swallowed seek medical advice immediately and show this container or label.

- Further data : Reduced labelling allowed for small packaging

The regulatory information given above only indicate the principal regulations specifically applicable to the product described in the MSDS The user's attention is drawn to the possible existence of additional provisions which complete these regulations Refer to all applicable international, national and local regulations or provisions

16. OTHER INFORMATION

Restrictions on use : This product must not be used for other applications that mentioned in §1.

R phrases text of § 3 :
R22 : Harmful if swallowed.
R36 : Irritating to eyes.

Bibliography references :
European Chemicals Bureau (ECB)
HSDB (Hazardous Substances Data Bank) (National Library of Medicine)
MSDS of suppliers

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This sheet complements the technical sheets but does not replace them. The information given is based on our knowledge of the product, at the time of publication. It is given in good faith.

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End of document

Safety Data Sheet

according to 1907/2006/EC, Article 31

Page 1/6

Printing date: 05.03.2009
Revision: 05.03.2009

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

- Product details
- Trade name: _____ yellow green
- Registration number
The ingredients of this ink have been pre-registered according to 1907/2006/EC (REACH)
- Application of the substance / the preparation Ball Pen Ink
- Manufacturer/Supplier:

- Further information obtainable from:

- Information in case of emergency:

2 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.
R 43 May cause sensitisation by skin contact.
R 52/53 Harmful 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	2-Phenoxyethanol	25-50%
EINECS: 204-589-7	<input checked="" type="checkbox"/> Xn, <input checked="" type="checkbox"/> Xi; R 22-36	
CAS: 100-51-6	Benzyl alcohol	10-25%
EINECS: 202-859-9	<input checked="" type="checkbox"/> Xn; R 20/22	

(Contd. on page 2)

EU

Safety Data Sheet

according to 1907/2006/EC, Article 31

Page 2/6

Printing date 05.03.2009
Revision: 05.03.2005

Trade name: yellow green

(Contd. of page 1)

CAS: 94279-65-9	C. I. Solvent Yellow 146 Xi, N; R 36-43-51/53	2,5-10%
CAS: 1328-51-4	C. I. Solvent Blue 38 Xn; R 22	2,5-10%
CAS: 90506-69-7 EINECS: 291-933-4	Ethylhexyl phosphoric acid ester. C, Xn; R 22-34	2,5-10%

Additional information:

All ingredients of this ink have been pre-registered according to 1907/2006/EC (REACH).

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:

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.

Immediately rinse with water.

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:

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.

(Contd. on page 3)

EU

Trade name: yellow green

(Contd. of page 2)

- 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

Form:	Fluid
Colour:	According to product specification

(Contd. on page 4)
EU

Safety Data Sheet

according to 1907/2006/EC, Article 31

Page 4/6

Printing date 05.03.2009
Revision: 05.03.2009

Trade name: yellow green

(Contd. of page 3)

Odour:	Characteristic
Important information on protection of health and environment, and on safety.	
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	205 °C
· Flash point:	101 °C
· Ignition temperature:	310 °C
· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	1,3 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.
· pH-value at 20 °C:	6,5
· Viscosity:	
Dynamic at 20 °C:	16000 mPas
· Solvent content:	
Organic solvents:	32,3 %
· Solids content:	40,5 %

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: Sensitization possible through skin contact.
- 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

(Contd. on page 5)

EU

Trade name: yellow green

(Contd. of page 4)

Irritant

- Sensitisation May cause sensitisation by skin contact.

12 Ecological information

- Ecotoxicological effects:
- Remark: Harmful to 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.
Harmful to 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: -
- Maritime transport IMDG:
- IMDG Class: -
- Marine pollutant: No
- Air transport ICAO-TI and IATA-DGR:
- ICAO/IATA Class: -
- Packaging group: Not applicable

15 Regulatory information

- Labelling according to EU guidelines:
Observe the general safety regulations when handling chemicals.
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

(Contd. on page 6)
EU

Safety Data Sheet

according to 1907/2006/EC, Article 31

Page 6/6

Printing date 05.03.2009
Revision: 05.03.2009

Trade name: yellow greer

(Contd. of page 5)

- **Hazard-determining components of labelling:**
 - C. I. Solvent Yellow 146
 - 2-Phenoxyethanol
- **Risk phrases:**
 - 22 Harmful if swallowed.
 - 36/38 Irritating to eyes and skin.
 - 43 May cause sensitisation by skin contact.
 - 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- **Safety phrases:**
 - 9 Keep container in a well-ventilated place.
 - 24/25 Avoid contact with skin and eyes.
 - 37/39 Wear suitable gloves and eye/face protection.
 - 61 Avoid release to the environment. Refer to special instructions/safety data sheets.
- **National regulations:**
- **Technical instructions (air):**

Class	Share in %
NK	25-50
- **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.

- **Relevant R-phrases**
 - 20/22 Harmful by inhalation and if swallowed.
 - 22 Harmful if swallowed.
 - 34 Causes burns.
 - 36 Irritating to eyes.
 - 43 May cause sensitisation by skin contact.
 - 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- * Data compared to the previous version altered.

EU

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

- Product details
- Trade name: turquoise
- Registration number
The ingredients of this ink have been pre-registered according to 1907/2006/EC (REACH)
- Application of the substance / the preparation Ball Pen Ink
- Manufacturer/Supplier:
I
I
- Further information obtainable from:
- Information in case of emergency:

2 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.

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	25-50%
CAS: 100-51-6 EINECS: 202-859-9	Benzyl alcohol ☒ Xn; R 20/22	10-25%
CAS: 90506-69-7 EINECS: 291-933-4	Ethylhexyl phosphoric acid ester. ☒ C, ☒ Xn; R 22-34	2,5-10%
CAS: 7173-62-8 EINECS: 230-528-9	(Z)-N-9-octadecenylpropane-1,3-diamine ☒ C, ☒ Xn, ☒ N; R 22-35-50	≤1,0%

(Contd. on page 2)

EU

Safety Data Sheet

according to 1907/2006/EC, Article 31

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Printing date 05.03.2009
Revision: 05.03.2009

Trade name: turquoise

(Contd. of page 1)

· **Additional information:**

All ingredients of this ink have been pre-registered according to 1907/2006/EC (REACH).

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.

Immediately rinse with water.

· **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.

· **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.

(Contd. on page 3)

EU

Safety Data Sheet

according to 1907/2006/EC, Article 31

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Printing date 05.03.2009
Revision: 05.03.2009

Trade name: turquoise

(Contd. of page 2)

- **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

Form:	Fluid
Colour:	According to product specification
Odour:	Characteristic

Important information on protection of health and environment, and on safety. n.a.
n.a.

• Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	205 °C

• Flash point:	101 °C
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(Contd. on page 4)

EU

Trade name: turquoise

(Contd. of page 3)

· Ignition temperature:	435°C
· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	1,3 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.
· pH-value at 20°C:	5,3
· Viscosity:	
Dynamic at 20°C:	18500 mPas
· Solvent content:	
Organic solvents:	36,0 %
· Solids content:	10,5 %

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

(Contd. on page 5)
EU

Trade name: turquoise

(Contd. of page 4)

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.

- **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:** -
- **Maritime transport IMDG:**
- **IMDG Class:** -
- **Marine pollutant:** No
- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** -
- **Packaging group:** Not applicable

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:**
9 Keep container in a well-ventilated place.
23 Do not breathe vapour.
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

(Contd. on page 6)

Trade name: turquoise

(Contd. of page 5)

60 This material and its container must be disposed of as hazardous waste.

- National regulations:
- Technical instructions (air):

Class	Share in %
NK	25-50

- 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.

- Relevant R-phrases
20/22 Harmful by inhalation and if swallowed.
22 Harmful if swallowed.
34 Causes burns.
35 Causes severe burns.
36 Irritating to eyes.
50 Very toxic to aquatic organisms.
- * Data compared to the previous version altered.

EU

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

- Product details
- Trade name: violet
- Application of the substance / the preparation Ball Pen Ink
- Manufacturer/Supplier:

Further information obtainable from:

Information in case of emergency:

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.

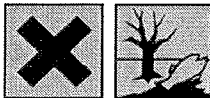
Dangerous components:

122-99-6	2-Phenoxyethanol	Xn, Xi; R 22-36	10-25%
107-41-5	2-methylpentane-2,4-diol	Xi; R 36/38	10-25%
509-34-2	C. I. Solvent Red 49	Xn, Xi; R 22-36-52/53	2,5-10%
110-25-8	Oleoylsarcosinic acid	Xi, N; R 38-41-50/53	2,5-10%
52080-58-7	C. I. Solvent Violet 8	Xn, Xi, N; R 22-41-50/53	≤ 2,5%

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

3 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 36/38 Irritating to eyes and skin.
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.

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:
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Protective equipment: No special measures required.

Trade name: violet

(Contd. of page 1)

6 Accidental release measures

- **Person-related safety precautions:** Not required.
- **Measures for environmental protection:**
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:** 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**

Form:	Fluid
Colour:	According to product specification
Odour:	Characteristic

(Contd. on page 3)

Trade name: violet

(Contd. of page 2)

· Change in condition Melting point/Melting range: Undetermined. Boiling point/Boiling range: 185°C	
· Flash point:	Not applicable.
· Ignition temperature:	260°C
· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits: Lower: Upper:	1,0 Vol % 12,6 Vol %
· Vapour pressure at 20°C:	0,1 hPa
· Density:	Not determined.
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
· pH-value at 20°C:	6,3
· Viscosity: Dynamic at 20°C:	16000 mPas
· Solvent content: Organic solvents:	40,8 %
· Solids content:	32,6 %

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:		
110-25-8 Oleoylsarcosinic acid		
Oral	LD50	9200 mg/kg (Ratte)
52080-58-7 C. I. Solvent Violet 8		
Oral	LD50	700 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

- Ecotoxicological effects:
- Remark: Toxic for fish
- 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.
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.

(Contd. on page 4)

Trade name: violet

(Contd. of page 3)

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. (Farbstoff C.I. Solvent Violet 8, Oleoilsarkosinsäure)

- Maritime transport IMDG:



- IMDG Class: 9
- UN Number: 3082
- Label: 9
- Packaging group: III
- Marine pollutant: No
- Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (C. I. Solvent Violet 8, Oleoilsarcosinic acid)

- 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. (C. I. Solvent Violet 8, Oleoilsarcosinic acid)

15 Regulatory information

- Labelling according to EU guidelines:

Observe the general safety regulations when handling chemicals.

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

- Risk phrases:

22 Harmful if swallowed.
36/38 Irritating to eyes and skin.
51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

- Safety phrases:

23 Do not breathe vapour.
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.

(Contd. on page 5)

Material Safety Data Sheet
According to 91/155 EEC

Page 5/5
Printing date 15.12.2006
Reviewed on 15.12.2006

Trade name: violet

57 Use appropriate container to avoid environmental contamination.

(Contd. of page 4)

· National regulations:

· Technical instructions (air):

Class	Share in %
NK	40,8

· 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.

EU

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

- Product details
- Trade name: pink
- Application of the substance / the preparation Ball Pen Ink
- Manufacturer/Supplier:
- Further information obtainable from:
- Information in case of emergency:

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, Xi; R 22-36	25-50%
26694-69-9	C. I. Basic Red 1	Xn; R 22	2,5-10%
90506-69-7	Ethylhexyl phosphoric acid ester.	C, Xn; R 22-34	2,5-10%
509-34-2	C. I. Solvent Red 49	Xn, Xi; R 22-36-52/53	≤ 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.

Trade name: pink

(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

Form:	Fluid
Colour:	According to product specification
Odour:	Characteristic

· Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	244°C

· Flash point:	121°C
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(Contd. on page 3)

Trade name: pink

(Contd. of page 2)

· Ignition temperature:	535°C
· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	1,4 Vol %
Upper:	9,0 Vol %
· Vapour pressure at 20°C:	0 hPa
· Density:	Not determined.
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
· pH-value at 20°C:	6,5
· Viscosity:	
Dynamic at 20°C:	16000 mPas
· Solvent content:	
Organic solvents:	49,9 %
· Solids content:	9,0 %

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:

- LD/LC50 values relevant for classification:

122-99-6 2-Phenoxyethanol

Oral	Ld50	1980 mg/kg (Ratte)
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- 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.

- 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.

Trade name: pink

(Contd. of page 3)

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

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 vapour.
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	49,9

- 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.