

1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

- Product details
- Trade name: PF 6140 pink / pink
- Registration number

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

- Relevant identified uses of the substance or mixture and uses advised against
 Currently no such applications are identified
- Application of the substance / the preparation Highlighter Ink for textmarkers
- Details of the supplier of the safety data sheet
- 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

Emergency information:

GBK Gefahrgut Büro GmbH

++49 (0) 6132 / 84463

Ingelheim, Deutschland

24-hour-Emergency-Telephone-Number (GBK Contract ID: 94050); (001) 352 323 3500

2 HAZARDS IDENTIFICATION

- Classification of the substance or mixture
- Classification according to Directive 67/548/EEC or Directive 1999/45/EC

R52/53:

Harmful to aquatic organisms may cause long-term adverse effects

in the aquatic environment.

• Information pertaining to particular dangers for man and environment:

The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification system:

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

- Label elements
- Labelling according to EU guidelines:

Observe the general safety regulations when handling chemicals.

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The product is not subject to identification regulations according to directives on hazardous materials.

Risk phrases:

52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases:

60 This material and its container must be disposed of as hazardous waste. 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

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

3 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization

Mixture of the following substances, containing non-hazardous substances and coloring agents.

Description: Mixture of the substances listed below with nonhazardous additions.

Dangerous components:				
CAS: 107-21-1 EINECS: 203-473-3	Ethanediol Xn R22	10 – 25 %		
	♦ Acute Tox 4, H302			
CAS: 989-38-8	C.I. Basic Red 1	≤1,0%		
EINECS: 213-584-9	X Xn R22, Xi R41; XN R51/53			
	♦ Acute Tox. 3, ♦ H301, Eye Dam.1, H318;			
	Aquatic Acute 1, H400; Aquatic Chronic 1, H410			

Additional information:

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

4 FIRST AID MEASURES

- Description of first aid measures
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: If symptoms persist consult doctor.
- Information for doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- Indication of any immediate medical attention and special treatment needed
 No further relevant information available.

5 FIRE FIGHTING MEASURES

- Extinguishing media
- Suitable extinguishing agents:

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CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- Special hazards arising from the substance or mixture
- No further relevant information available.
- Advice for firefighters
- Protective equipment: No special measures required.

6 ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- Environmental precautions:

Dilute with plenty of water.

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).

Additional information: No dangerous substances are released.

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 HANDLING AND STORAGE

- Handling:
- Information for safe handling: No special measures required.

Ensure good ventilation/exhaustion at the workplace.

- Information about protection against explosions and fires: 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.
- Specific end use(s) No further relevant information available.

8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Additional information about design of technical systems:

No further data; see item 7.

Control parameters

Ingredients with limit values that require monitoring at the workplace:				
107-21-1 ethanediol (10-25%)				
IOELV	Short-term value: 104 mg/m³, 40 ppm			
	Long-term value: 52 mg/m³, 20 ppm			
	Skin			

Additional information:

The lists that were valid during the creation were used as basis.

Exposure controls



- Personal protective equipment:
- General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

- Respiratory protection: Not required.
- Protection of hands:

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 cannot be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

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

• Eye protection: Goggles recommended during refilling.

9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

General Information

Form: Fluid

Color: According to product specification

Odor: Product specific
Odour threshold: Not determined.

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

Not applicable

pH-value at 20°C: > 5

Change in condition

Melting point/Melting range: Undetermined.
 Boiling point/Boiling range: 100°C (212°F)

Flash point: 60°C
 Flammability (solid, gaseous): 410°C

Ignition temperature:

Decomposition temperature: Not determined.

Auto igniting: Product is not selfigniting.

Danger of explosion:
 Product does not present an explosion hazard.

Explosion limits:

Lower: 3,2 Vol %.
 Upper: 53,0 Vol %
 Vapor pressure at 20°C (68°F): 23 hPa

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Density at 20°C (68°F): 1,05 g/cm³.
 Solubility in / Miscibility with Water: Fully miscible.

Segregation coefficient (n-octonol/water): Not determined.

Viscosity:

Dynamic: Not determined.
 Kinematic at 20°C: 5 s (DIN 53211/4)

Solvent content:

Organic solvents: 0.0 %
 Water 29,6%

Other information
 No further relevant information available.

10 STABILITY AND REACTIVITY

- Reactivity
- Chemical stability
- Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

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

11 TOXICOLOGICAL INFORMATION

- Information on toxicological effects
- Acute toxicity:

LD/LC50 values relevant for classification:					
989-38-8 C.I. Basic Red 1					
Oral	LD50	250 mg / kg (rat)			

- Primary irritant effect:
- On the skin: No irritant effect.
- On the eye: No irritating effect.
- Sensitization: No sensitizing effects known.

12 ECOLOGICAL INFORMATION

Toxicity

Acquatic toxicity:				
989-38-8 C.I. Basic Red 1				
EC50 / 48h	0,1-0,5 mg/l (Daphnie)			
LC50 / 96h	1-5 mg/l (fish)			

- Persistence and degradability: No further relevant information available.
- Behavior in environmental systems:
- Bioaccumulative potential No further relevant information available.
- Mobility in soil No further relevant information available.
- Ecotoxical effects:
- Remark: Harmful to fish

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- Additional ecological information:
- General notes:

Water hazard class 1 (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.

Harmful to aquatic organisms

- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.
- Other adverse effects No further relevant information available.

13 DISPOSAL CONSIDERATIONS

- Waste treatment methods
- Recommendation: Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- Uncleaned packagings:
- Recommendation: Disposal must be made according to official regulations.
- Recommended cleansing agent: Water, if necessary with cleansing agents.

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:
- CAO/IATA Class: -
- Packaging group: n.a.
- Special precautions for user: Not applicable.
- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable.

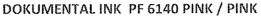
15 REGULATORY INFORMATION

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- National regulations:
- Technical instructions (air):

Class	Share in %
NK	10-25

- Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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16 OTHER INFORMATION

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

Relevant phrases

- H301 Toxic if swallowed.
- H302 Harmful if swallowed.
- H318 Causes serious eye damage.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- R22 Harmful if swallowed.
- R41 Risk of serious damage to eyes.
- R51/53 Toxic to aquatic organisms may cause long-term adverse effects in the aquatic environment.