

MSDS<sup>(2)</sup>  
MATERIAL SAFETY DATA SHEET

PRODUCERS  
SUPPLIERS  
WAREHOUSERS

X

Ballpen Ink

ECO black S-N

QUICK IDENTIFIER<sup>(2)</sup>

## SECTION I - GENERAL INFORMATION

MANUFACTURER NAME: **Dokumental GmbH & Co. Schreibfarben**

## Factory Ludwigshafen

Woellnerstraße 26, D-67065 Ludwigshafen  
Telephone: +49-621-5402-322  
Telefax : +49-621-5402-422 (or -394)  
e-mail : b.polzin@dokumental.de

## Factory Mittenwald

Innsbrucker Str. 35, D-82481 Mittenwald  
Telephone: +49-8823-9202-0  
Telefax : +49-8823-3820

Date: 03.06.02 Prepared by Dr. Polzin (Factory Ludwigshafen)

SECTION II - HAZARDOUS INGREDIENTS<sup>(3)</sup>

(Specify components)

CAS-no.	substance	conc. range %	classification <sup>(8)</sup>	(European Union)
107-41-5	2-methylpentane-2,4-diol	2.5 - 10	Xi	36/38
000495-54-5	CI Solvent Orange 3	2.5 - 10	Xn	22
000122-99-6	2-Phenoxyethanol	10 - 25	Xn	22-36
52080-58-7	CI Solvent Violet 8	2.5 - 10	Xn	22-36-40

Transport Info: UN-No.: n.a. Prop. Shipping Name: No Dangerous Goods

IMDG-CODE Class: n.a. MFAG: n.a. EMS No.: n.a.

ICAO/IATA Class: n.a. Packaging Group: n.a.

## SECTION III PHYS./CHEM. CHARACTERISTICS (SPECIFY COMPONENT)

Appearance: liquid

Odor: typical

Boiling Point (°C): 186

Density (g/ml):

1.088

Vapor Density (Air = 1): &gt; 1

Melting Point (°C):

&lt; 0

Solubility in Water: insoluble

Evaporation Rate (Butylacetate= 1)

&gt; 1

Pressurized:

yes

no

X

% Volatile<sup>(4)</sup>

45

Other Characteristics: mixture of polyhydric alcohols, dye

stuffs, resin, and additives

## SECTION IV - FIRE AND EXPLOSION HAZARDS

Flashp.°C (Method used): &gt; 100

Explosion Limits (Vol%)

LEL 1.0

UEL 12.

Extinguishing Media: alcohol resistant foam, CO<sub>2</sub>, powders, water spray

Special Fire Fighting Precautions: cool containers exposed to fire with water

do not use waterjet

Autoignition temperature (°C): 200

List of Hazardous Decomp. Products: carbon monoxide and dioxide, smoke, and oxides  
of nitrogene

Other Advice: none

SECTION V - STORAGE HAZARDS

Stability: Unstable: | | Stable: | X | Conditions to Avoid: avoid heating above 60°C

Incompatibility (Material to avoid): concentrated oxidizing or reducing agents

Hazardous Decomposition Products: no hazardous decomposition products known

Hazardous Polymerisation May Occur

Will Not Occur

X

Conditions To Avoid: none

SECTION VI - HEALTH HAZARDS

Signs and Symptoms of Overexposure(6): not known

Medical Cond. Generally Aggravated: n.d.

Chem. Listed as Carcinogenes: none of the used chemicals are known to be carcinogenes

Emergency and First Aid Procedures

Routes of Entry	First Aid Procedures	Seek Medical Advice
Inhalation	remove for fresh air, keep patient warm an at rest; if breathing is irregular or stopped, administer artificial respiration If unconscious place in recovery position and seek for medical advice	<input type="checkbox"/>
Eyes	rinse with plenty of clean and fresh water in case of remaining irritation seek for medical advice	<input checked="" type="checkbox"/>
Skin	remove moistened clothing, wash with soap and water, <b>do not use solvents or thinners !!</b>	<input type="checkbox"/>
Ingestion	if accidentally swallowed obtain immediate medical attention. Keep at rest <b>Do not induce vomating</b>	<input checked="" type="checkbox"/>

-----  
SECTION VII - SPECIAL PRECAUTIONS

**Special Precautions to be Taken in Handling:** keep containers tightly closed.

protect drums from the influence of weather.

**Other Precautions:** product should not get untreated into waters

**Steps to be Taken in Case Material is Released or Spilled:** absorb with appropriate

liquid binding material and dispose of according to local regulations

**Waste Disposal Methods:** burn in a licensed incinerator, treat in a biological

clarification plant; product may not get untreated into waters

-----  
SECTION VIII - SPECIAL PROTECTION INFORMATION/CONTROL MEASURES

**Respiratory Protection:** not necessary, good room ventilation is sufficient

**Ventilation:**                      **Local Exhaust:**                      **Mechanical:** not necessary      **Other:**

**Skin and Eye Protection:** rubber or plastic gloves, protective glasses

**Work/Hygenic Practices:** pay attention to the usual rules for handling chemicals

**Note:** The information given in this MSDS is based on our present state of knowledge and is no assurance of properties of our products. Existing laws and regulations have to be obeyed by the purchaser himself. The product shall not be used for purposes other than it is assigned for without the consent of the producer.

**Important:** (1) Do not leave any blank spaces. If required information is unavailable, unknown, or does not apply, so indicate as follows: n.a. = not applicable  
n.d. = not determined  
n.n. = not necessary

(2) Product type and common name (used on label and list).

(3) Cited in any national regulations on the classification, packaging and labelling of dangerous substances, preparations, paints, varnishes, printing inks, and similar similar product.

(4) Part of the mixture which evaporates.

(5) LD<sub>50</sub> shall be noted if known

(6) Health hazard by ingestion and inhalation shall be noted if known.

(7) Calculated from the components

(8) T - toxic  
Xn - harmful if swallowed  
Xi - irritant  
C - corrosive  
F - flammable