



SAFETY DATA SHEET

22.259: Pelikan yellow ink for Siemens Piezograph

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

PRODUCT NAME	22.259: Pelikan yellow ink for Siemens Piezograph		
SUPPLIER	Pelikan Hardcopy European Logistics & Services GmbH Neue Strasse 19 D-52382 Niederzier 2 Germany +49 (0) 2428 830 olaf.lehmann@phiag.com	MANUFACTURER	Pelikan Hardcopy Production AG Gewerbestrasse 9 CH-8132 Egg/ZH Switzerland +41 (0) 44 986 1111
EMERGENCY TELEPHONE	+41 (0) 44 986 1111 (available only during office hours)		

2 HAZARDS IDENTIFICATION

Harmful if swallowed. May cause sensitisation by skin contact.

PHYSICAL AND CHEMICAL HAZARDS

Combustible.

HUMAN HEALTH

May be absorbed through the skin. The liquid may irritate the skin, the eyes and the respiratory tract.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content	Classification
1,2-BENZISOTHIAZOL-3(2H)-ONE	220-120-9	2634-33-5	< 1%	Xn;R22 R43 Xi;R38,R41 N;R50
DIETHYLENE GLYCOL	203-872-2	111-46-6	30-60%	Xn;R22
ETHYLENE GLYCOL	203-473-3	107-21-1	30-60%	Xn;R22

The Full Text for all R-Phrases are Displayed in Section 16

COMPOSITION COMMENTS

This ink does not contain: Substances of Very High Concern (SVHC). The current Candidate List of SVHC for Authorisation can be found (in English only) on the European Chemicals Agency (ECHA) website: http://echa.europa.eu/chem_data/candidate_list_table_en.asp.

4 FIRST-AID MEASURES

GENERAL INFORMATION

Never make an unconscious person vomit or drink fluids!

INHALATION

Remove victim immediately from source of exposure. Provide rest, warmth and fresh air. If respiratory problems, artificial respiration/oxygen. Get medical attention.

INGESTION

Immediately rinse mouth and drink plenty of water (200-300 ml). Get medical attention immediately!

SKIN CONTACT

Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention.

EYE CONTACT

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention immediately!

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

SPECIAL FIRE FIGHTING PROCEDURES

Avoid breathing fire vapours. Keep run-off water out of sewers and water sources. Dike for water control.

22.259: Pelikan yellow ink for Siemens Piezograph**UNUSUAL FIRE & EXPLOSION HAZARDS**

Combustible. May form explosive mixtures with air.

SPECIFIC HAZARDS

By heating and fire, toxic vapours/gases may be formed.

PROTECTIVE MEASURES IN FIRE

Use air-supplied respirator during fire fighting. Wear full protective clothing.

6 ACCIDENTAL RELEASE MEASURES**PERSONAL PRECAUTIONS**

Use protective gloves, goggles and suitable protective clothing. Do not breathe vapour. For personal protection, see section 8.

ENVIRONMENTAL PRECAUTIONS

Do not allow to enter drains, sewers or watercourses.

SPILL CLEAN UP METHODS

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Collect with non-combustible absorbent material.

Flush with water. Dike for large spills. For waste disposal, see section 13.

7 HANDLING AND STORAGE**USAGE PRECAUTIONS**

Provide good ventilation. Keep away from heat, sparks and open flame. Avoid inhalation of vapours/spray and contact with skin and eyes.

Avoid: Contact with combustibles. Avoid eating, drinking and smoking when using the product. Observe good industrial hygiene practices.

STORAGE PRECAUTIONS

Keep in a cool, dry, well-ventilated place. Keep containers tightly closed. Keep away from heat, sparks and open flame. Store away from Acids. Alkalies. Oxidising material.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Name	Std	TWA - 8 hrs		STEL - 15 min		Notes
DIETHYLENE GLYCOL	WEL	23 ppm	101 mg/m3			
ETHYLENE GLYCOL	WEL		52 mg/m3(Sk)		104 mg/m3(Sk)	

WEL = Workplace Exposure Limit.

ENGINEERING MEASURES

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined workplace exposure limit is not exceeded.

Observe Workplace Exposure Limits and minimise the risk of inhalation of vapours.

RESPIRATORY EQUIPMENT

No specific recommendation made, but respiratory protection must be used if the general level exceeds the Recommended Workplace Exposure Limit.

HAND PROTECTION

Nitrile gloves are recommended, but be aware that the liquid may penetrate the gloves. Frequent change is advisable. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

EYE PROTECTION

If risk of splashing, wear safety goggles or face shield.

OTHER PROTECTION

Wear suitable protective clothing as protection against splashing or contamination.

HYGIENE MEASURES

Wash promptly with soap & water if skin becomes contaminated. Wash contaminated clothing before reuse.

PERSONAL PROTECTION

May cause sensitisation by skin contact.

SKIN PROTECTION

Protective gloves must be used if there is a risk of direct contact or splash.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Liquid
COLOUR	Yellow
ODOUR	Noticeable.

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SOLUBILITY	Miscible with water.		
BOILING POINT (°C)	ca 240	MELTING POINT (°C)	ND
RELATIVE DENSITY	1.13 @ 25 °C	VAPOUR PRESSURE	< 0.01 mbar @ 25 °C
pH-VALUE, CONC. SOLUTION	9.1	VISCOSITY	40.1 cSt @ 25 °C
FLASH POINT (°C)	ca 140 CC (Closed cup).	PARTITION COEFFICIENT (N-Octanol/Water)	ND

10 STABILITY AND REACTIVITY**STABILITY**

Stable under normal temperature conditions and recommended use.

CONDITIONS TO AVOID

Avoid heat, flames and other sources of ignition.

MATERIALS TO AVOID

Strong acids. Strong alkalis. Strong oxidising substances.

HAZARDOUS DECOMPOSITION PRODUCTS

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

11 TOXICOLOGICAL INFORMATION**INHALATION**

May cause irritation to the respiratory system. Inhalation of vapour or mist may cause lung oedema.

INGESTION

Harmful if swallowed. Gastrointestinal symptoms, including upset stomach. May cause nausea, headache, dizziness and intoxication.

SKIN CONTACT

May be absorbed through the skin. Prolonged or repeated exposure to this chemical may cause: Skin irritation. May cause sensitisation by skin contact.

EYE CONTACT

May cause temporary eye irritation.

12 ECOLOGICAL INFORMATION**ECOTOXICITY**

The product may have adverse effects on organisms in soil and water. Volatile organic compounds (VOC): 75-100%.

MOBILITY

The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces. The product is miscible with water. May spread in water systems.

BIOACCUMULATION

No data available on bioaccumulation.

DEGRADABILITY

The product is expected to be slowly biodegradable.

WATER HAZARD CLASSIFICATION

WGK 2 (Medium hazard)(Self-classification)

13 DISPOSAL CONSIDERATIONS**GENERAL INFORMATION**

Waste is classified as hazardous waste. Disposal should be in accordance with local, state or national legislation.

DISPOSAL METHODS

Contact specialist disposal companies. Incineration by an approved method could be considered.

WASTE CLASS

List of Wastes (ref: Decision 2000/532/EC): 08 03 12*. Properties of wastes which render them hazardous (ref: Dir 91/689/EEC Ann III): H5.

14 TRANSPORT INFORMATION**GENERAL**

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

15 REGULATORY INFORMATION

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LABELLING



Harmful

CONTAINS

1,2-BENZISOTHIAZOL-3(2H)-ONE
DIETHYLENE GLYCOL
ETHYLENE GLYCOL

RISK PHRASES

R22 Harmful if swallowed.
R43 May cause sensitisation by skin contact.

SAFETY PHRASES

S24 Avoid contact with skin.
S37 Wear suitable gloves.
S60 This material and its container must be disposed of as hazardous waste.

UK REGULATORY REFERENCES

Health and Safety at Work Act 1974.

ENVIRONMENTAL LISTING

Environmental Protection Act 1990. Pollution Prevention and Control Act 1999.

EU DIRECTIVES

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

STATUTORY INSTRUMENTS

Chemicals (Hazard Information and Packaging) Regulations. Control of Substances Hazardous to Health.

APPROVED CODE OF PRACTICE

Safety Data Sheets for Substances and Preparations.

GUIDANCE NOTES

Classification and Labelling of Substances and Preparations Dangerous for Supply.

NATIONAL REGULATIONS

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002. No. 1689. Workplace Exposure Limits EH40. Hazardous Waste Regulations 2005. List of Wastes Regulations 2005. The Solvent Emissions Regulations 2004.

16 OTHER INFORMATION

GENERAL INFORMATION

NA = not applicable. NC = not classified. ND = no data. TWA = time-weighted average. All components are pre-registered at the European Chemicals Agency (ECHA). This Safety Data Sheet satisfies the requirements of the REACH Regulation (EC): No 1907/2006, as corrected. Article 31. The information provided about the product on this Safety Data Sheet has been compiled from knowledge of the individual constituents. The precise composition of this product is proprietary information. More details will be supplied in confidence to qualified medical personnel if specific treatment is necessary. All brand names and trademarks are the property of their respective holders and are used here for descriptive purposes only.

REVISION COMMENTS

Changes to Section(s): 2 3 15 16

REVISION DATE G / 16.04.09

SDS NO. 22.259

RISK PHRASES IN FULL

R22 Harmful if swallowed.
R38 Irritating to skin.
R43 May cause sensitisation by skin contact.
R41 Risk of serious damage to eyes.
R50 Very toxic to aquatic organisms.

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DISCLAIMER

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.