



## SAFETY DATA SHEET

## 22.095: Pelikan makeup solution for washable continuous jet ink

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

PRODUCT NAME	22.095: Pelikan makeup solution for washable continuous jet ink		
SUPPLIER	Pelikan Hardcopy European Logistics & Services GmbH Neue Strasse 19 D-52382 Niederrhein Germany +49 (0) 2428 830 olaf.lehmann@phiag.com	MANUFACTURER	Pelikan Hardcopy Scotland Ltd Markethill Road Turrieff Aberdeenshire AB53 4AW United Kingdom +44 (0) 1888 564200
EMERGENCY TELEPHONE	+44 (0) 1888 564200 (available only during office hours)		

## 2 HAZARDS IDENTIFICATION

Highly flammable.

## PHYSICAL AND CHEMICAL HAZARDS

The product is highly flammable, and explosive vapours/air mixtures may be formed even at normal room temperatures. Vapours are heavier than air and may travel along the floor and in the bottom of containers.

## 3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content	Classification
ETHANOL (denatured)	200-578-6	64-17-5	60-100%	F;R11.

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](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 if irritation persists after washing.

## 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. Continue to rinse.

## 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. Water spray should be used to cool containers. Keep run-off water out of sewers and water sources. Dike for water control.

## UNUSUAL FIRE &amp; EXPLOSION HAZARDS

Vapours may form explosive mixture with air at room temperature. Vapours are heavier than air and may spread near ground to sources of ignition.

**22.095: Pelikan makeup solution for washable continuous jet ink****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.

**ENVIRONMENTAL PRECAUTIONS**

Do not allow to enter drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

**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. Transfer to a container for disposal. For waste disposal, see section 13.

**7 HANDLING AND STORAGE****USAGE PRECAUTIONS**

Provide good ventilation. Keep away from heat, sparks and open flame. Static electricity and formation of sparks must be prevented. Avoid contact with skin and eyes. Do not eat, drink or smoke 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. Take precautionary measures against static discharges. Store away from Acids. Alkalies. Oxidising material.

**STORAGE CLASS**

Flammable liquid storage.

**8 EXPOSURE CONTROLS/PERSONAL PROTECTION**

Name	Std	TWA - 8 hrs		STEL - 15 min		Notes
ETHANOL (denatured)	WEL	1000 ppm	1920 mg/m <sup>3</sup>			

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. Provide eyewash station.

**HYGIENE MEASURES**

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

**9 PHYSICAL AND CHEMICAL PROPERTIES**

APPEARANCE	Liquid		
COLOUR	Grey		
ODOUR	Odour of alcohol		
PHYSICAL DATA COMMENTS	Information given concerns the major ingredient.		
VOLATILITY DESCRIPTION	Easily volatile.		
SOLUBILITY	Miscible with water. Organic solvents.		
BOILING POINT (°C)	ca 78	MELTING POINT (°C)	NA
RELATIVE DENSITY	ca 0.79 @ 20 °C	VAPOUR PRESSURE	ca 60 mm Hg @ 20 °C
pH-VALUE, CONC. SOLUTION	6.3	VISCOSITY	ND

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FLASH POINT (°C)	ca 15 CC (Closed cup).	AUTO IGNITION TEMPERATURE (°C)	> 350
FLAMMABILITY LIMIT - LOWER(%)	3.5	FLAMMABILITY LIMIT - UPPER(%)	19.0
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. In high concentrations, vapours are narcotic and may cause headache, fatigue, dizziness and nausea.

**INGESTION**

May cause stomach pain or vomiting. May cause liver and/or renal damage.

**SKIN CONTACT**

Acts as a defatting agent on skin. May cause cracking of skin, and eczema.

**EYE CONTACT**

May cause temporary eye irritation.

**12 ECOLOGICAL INFORMATION****ECOTOXICITY**

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. Volatile organic compounds (VOC): 75-100%.

**MOBILITY**

The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces. The product is partly miscible with water and may spread in the aquatic environment.

**BIOACCUMULATION**

The product does not contain any substances expected to be bioaccumulating.

**DEGRADABILITY**

The product is expected to be biodegradable.

**WATER HAZARD CLASSIFICATION**

WGK 1 (Slight 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): H3-A.

**14 TRANSPORT INFORMATION**

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UK ROAD CLASS	3		
PROPER SHIPPING NAME	PRINTING INK		
UN NO. ROAD	1210	UK ROAD PACK GR.	II
ADR CLASS NO.	3	ADR PACK GROUP	II
HAZARD No. (ADR)	33	HAZCHEM CODE	3[Y]E
CEPIC TEC(R) NO.	ND	RID CLASS NO.	3
RID PACK GROUP	II	UN NO. SEA	1210
IMDG CLASS	3	IMDG PACK GR.	II
MARINE POLLUTANT	No.	UN NO. AIR	1210
AIR CLASS	3	AIR PACK GR.	II

**15 REGULATORY INFORMATION**

## LABELLING



Highly Flammable

## RISK PHRASES

R11 Highly flammable.

## SAFETY PHRASES

S9 Keep container in a well-ventilated place.

S16 Keep away from sources of ignition - No smoking.

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**

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## 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): 1 3 15 16

REVISION DATE H / 10.06.09

SDS NO. 22.095

## RISK PHRASES IN FULL

R11 Highly flammable.

## 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.