

SAFETY DATA SHEET ⁽¹⁾
for
DRAWING AND WRITING INSTRUMENTS
FOR DISTRIBUTORS

317-9CD
LUMOCOLOR M, PERMANENT
BLACK
QUICK IDENTIFIER ⁽²⁾

SECTION I - GENERAL INFORMATION

Manufacturer's name STAEDTLER MARS GMBH & Co.	Telephone no. for further information (Area code + ..) 0049-911-3080-319
Address D-90427 Nürnberg, Moosäckerstr. 3 Germany	Telex no. 62311550 ma d Telefax no. 0049-911-3080-400
	Date 04-15-93 Prepared by KIMPEL D3

SECTION II - HAZARDOUS INGREDIENTS (SPECIFY COMPONENT)

Hazardous ingredients (chemical or common name(s)) ⁽³⁾	CAS No.	TLV ppm;mg/m ³	wt %	Component
Ethanol	64-17-5	1000 ppm TWA	74	INK
Lactic Acid Ethyl Ester	687-47-8	--	8.2	INK
Basic Blue 8; LD50 rat oral: 1,500 mg/kg	--	--	1.6	INK
Basic Red 28	--	--	5	INK
Basic Green 1; LD50 rat oral: 380 mg/kg	633-03-4	--	5	INK

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

Appearance and odor: Fibre tip pen, containing solvent based ink, alcoholic odor.	Component: Ink
Boiling point (°C): > 78	Density (g/cm³): ⁽³⁾ 0.88
Vapour density (air = 1): n.d.	Melting point (°C): n.d.
Solubility in water: 88 %	Evaporation rate (butyl acetate = 1): n.d.
Pressurized yes <input type="checkbox"/> no <input checked="" type="checkbox"/>	% Volatile:⁽⁴⁾ approx. 82
Other characteristics: Flammable liquid	

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash point (°C): 14.5 Method used: Closed cup	Explosion limits (Vol-%)	LEL: 1	UEL: 17
Extinguishing media: Water spray jet, dry powder, carbon dioxide, foam			
Special fire fighting precautions: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.		Autoignition temp (°C): > 400	
List hazardous products of decomposition: Carbon dioxide, carbon monoxide			
Other advice: None			

IMPORTANT

(1) Do not leave any blank spaces. If required information is unavailable, unknown, or does not apply, so indicate as follows: not applicable = n.a.; not determined = n.d.
(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, adhesives and similar products.
(4) Part of the mixture which evaporates

SECTION V - STORAGE HAZARDS

Stability ^{unstable} Conditions
^{stable} to avoid: Excessive heat

Incompatibility (materials to avoid): Strong oxidizers

List hazardous products of decomposition: Carbon dioxide, carbon monoxide if burning.

Hazardous polymerization ^{May occur} Conditions
^{Will not occur} to avoid:

SECTION VI - HEALTH HAZARDS

1. Acute: ^(a) May be harmful by inhalation, ingestion or skin absorption. ^(b) None if used as directed.
2. Chronic:

Signs and symptoms of overexposure: Damage to the eyes. Nausea, dizziness and headache.

Medical conditions generally aggravated by exposure: Not known

Chemical listed as carcinogen: None

Emergency and first aid procedures

Routes of entry	Emergency procedures	Seek medical advice
Inhalation	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.	<input checked="" type="checkbox"/>
Eyes	Rinse with copious amounts of water for at least 15 minutes.	<input checked="" type="checkbox"/>
Skin	Wash with water and soap. Do not use solvents.	<input type="checkbox"/>
Ingestion	Wash out mouth with water provided person is conscious.	<input checked="" type="checkbox"/>

SECTION VII - SPECIAL PRECAUTIONS

Special precautions to be taken in handling: Store in a cool, dry place. Keep away from sources of ignition.

Other precautions: None

Steps to be taken in case materials is released or spilled: Cover with absorbent material and collect. Ventilate area.

Waste disposal methods: Incineration. Observe all federal, state and local laws.

SECTION VIII - SPECIAL PROTECTION INFORMATION/CONTROL MEASURES

Respiratory protection (specify type): Any chemical cartridge respirator with organic vapors cartridge, if required.

Ventilation: In small rooms ^{Local exhaust:} None ^{Mechanical (general):} None ^{Other:} None

Skin and eye protection: No special protection required in normal use. Avoid contact with ink.

Work/hygiene practices: Avoid breathing vapors.

- (S) LD50 shall be noted if known not applicable - n.a. not determined - n.d.
- (S) health hazard by ingestion or inhalation shall be noted if known.