

Safety data sheet

according to 91/155/EEC

Date of printing: 17.05.06

Date of revision: 08.05.06

EK Plotter Pen-D / disposable pen

1. Name of product and firm

Product name	EK Plotter Pen-D / disposable pen	
	EK Plotter Pen-D / disposable pen 0,18mm	Art.Nr.: 3500 3018
	EK Plotter Pen-D / disposable pen 0,25mm	Art.Nr.: 3500 3025
	EK Plotter Pen-D / disposable pen 0,35mm	Art.Nr.: 3500 3035
	EK Plotter Pen-D / disposable pen 0,50mm	Art.Nr.: 3500 3050
	EK Plotter Pen-D / disposable pen 0,70mm	Art.Nr.: 3500 3070
Firm	EK-TEAM Elektronik- u. Kunststofftechnik GmbH	
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Emergency information	Poison Center Göttingen	Tel.: +49 - (0)551 - 19240

2. Chemical characterization / information on ingredients

Chemical characterization: solution of synthetic resin and dyestuffs

Dangerous ingredients:	CARN	content / %	symbol	R-phrases
N,N-Dimethylformamid	68-12-2	ca. 30	T	61-20/21
Methylethylketon	78-93-3	ca. 20	F, Xi	11-36/37
Isophoron	78-59-1	ca. 15	Xi	36/37/38
Ethylamylketon	541-85-5	ca. 15	Xi	10-36/37

3. Possible hazards

Special risks concerning human beings and the environment: may cause harm to the unborn child / harmful by inhalation and in contact with skin / irritating to eyes, respiratory system and skin / highly flammable

4. First aid measures

General hints: -

Upon inhalation: on inhaling fumes take into fresh air

Upon skin contact: wash with water and soap immediately

Upon eye contact: rinse immediately under running water for at least 10 minutes

Upon ingestion: seek medical advice immediately

5. Fire-fighting measures

Suitable extinguishing media: water dust, powder, carbondioxide

Non-suitable media: water jet

Special hazards: -

Special protective clothing: wear artificial respiration equipment

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6. Measures in case of spillage

Protective measures, personal:	avoid contact with skin and eyes and inhaling fumes strictly
environmental:	do not empty into drains and waters
Proceedings for cleaning/taking up:	bind by means of absorbent material and dispose appropriately

7. Handling and storage

Handling:	make sure of sufficient ventilation, keep away from sources of ignition
Storage:	keep container tightly closed and store in a cool place

8. Threshold limits and personal protective equipment

Hints for the arrangement of
technical equipment: -

Ingredients with

threshold limit values:

	CARN	TLV / mg/m ³
N,N-Dimethylformamid	68-12-2	30
Methylethylketon	78-93-3	590
Isophoron	78-59-1	28

Personal protective equipment

General:	pay attention to usual precautions of handling chemicals
Respiratory protection:	do not inhale fumes
Hand protection:	protective gloves if risk of skin contact is to be expected
Eye protection:	protective goggles if risk of eye contact is to be expected
Body protection:	-

9. Physical and chemical data

Form:	liquid
Color:	black
Odor:	aromatic

Melting point:	no data	°C	
Boiling point:	ca. 80	°C	literature
Flash point:	15	°C	DIN EN 456
Ignition temperature:	>250	°C	literature
Danger of self-ignition:	-		
Fire-promoting properties:	-		
Explosion hazards:	formation of explosive vapour/air-mixtures possible		
Lower explosion limit:	ca. 0,8	Vol%	literature
Upper explosion limit:	ca. 16	Vol%	literature
Vapor pressure (20°C):	no data	hPa	
Density (20°C):	0,93	g/ml	
Solubility in water (20°C):	not miscible		
pH-value (20°C):	n.a.		
Viscosity (25°C):	no data	mPas	

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10. Stability und Reactivity

Conditions to avoid: avoid high temperatures
 Materials to avoid: avoid contact with strong oxidizers
 Dangerous decomposition products: in case of fire nitrous fumes and hypochloric acid are produced

11. Information on toxicity

Acute toxicity
 LD₅₀ (rat,oral,calculated): > 3200 mg/kg
 Primary Irritation: irritating to skin and eyes
 Sensibilisation: no data
 Subacute/chronic toxicity: no data
 Experience on human beings: contact with skin will cause swelling of the horn skin / inhaling fumes will cause indisposition

12. Information on ecology

Information on elimination: no data
 Behaviour in the environment: no data
 Ecotoxic effects: no data
 Further information: -

13. Information on waste-treatment

Product
 Recommendation: according to local regulations (combustion as special waste)
 Dirty packaging
 Recommendation: according to local regulations (deposit, combustion)

14. Information on transport

ADR/RID and GGVS/GGVE	name: flammable liquid	class: 3	UN No. 1993	PG II		
IMDG/GGVSee	name: flammable liquid	class: 3.2	UN No. 1993	PG.: II	EMS-No. F-S, S-E	marine pollutant: no
ICAO-TI and IATA/DGR	name: flammable liquid	class: 3	UN/ID-nr.: 1993	PG.: II	Passanger: 305	Cargo: 307

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15. Regulations

Labelling according to EEC-directives

Hazard-symbol: F, T
Component(s): contains N,N-Dimethylformamide

R-phrases: 61 may cause harm to the unborn child
11 highly flammable
20/21 harmful by inhalation and contact with skin
36/37/38 irritating to eyes, respiratory system and skin

S-phrases: 53 avoid exposure - obtain special instructions before use
45 in case of accident or if you feel unwell, seek medical advice immediately
2 keep out of reach of children
16 keep away from sources of ignition - no smoking

National regulations: VbF-Class: A I (Germany)

16. Further information

n.a. = not applicable n.o. = not observed

The foregoing information reflects our current knowledge and does not have the purpose of guaranteeing product properties.