

---

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

<b>Name of product</b>	<b>alphaJET ink</b> Art-Nr 1006.8226
<b>Manufacturer/distributor</b>	MS Dyetech GmbH An der Steig 6, D-92348 Berg Phone +49 9189 414 92-0, Fax +49 9189 414 92-22  E-Mail info@dyetech.de
<b>Emergency advice</b>	Giftnotrufzentrale Erfurt Phone +49 361 730 730

---

## ! 2. HAZARDS IDENTIFICATION

### ! Classification

F; R11  
Xi; R36  
R52/53

### R-phrases

11 Highly flammable.  
36 Irritating to eyes.  
52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
66 Repeated exposure may cause skin dryness or cracking.  
67 Vapours may cause drowsiness and dizziness.

### Special hazards information for humans and environment

Highly flammable.  
In use, may form flammable/explosive vapour-air mixture.

---

## ! 3. COMPOSITION/INFORMATION ON INGREDIENTS

### ! Hazardous ingredients

CAS No	EC No	Name	[% weight]	Classification
78-93-3	201-159-0	butanone	50 - 70	F R11; Xi R36; R66; R67
117527-94-3	403-720-7	dye	2 - 6	N 51/53

---

## ! 4. FIRST AID MEASURES

### General information

Remove contaminated soaked clothing immediately.  
In the event of persistent symptoms receive medical treatment.  
Take affected person into fresh air.  
Take away from danger area and lay down affected person.

### In case of inhalation

Ensure of fresh air.  
In the event of symptoms refer for medical treatment.

**In case of skin contact**

In case of contact with skin wash off with soap and water.  
Consult a doctor if skin irritation persists.

**In case of eye contact**

In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice.

**In case of ingestion**

Refer to medical treatment.

**! Physician's information / possible symptoms**

In case of inhalation of plenty of solvent-containing fumes the following symptoms may occur:

Unconsciousness  
Depression of central nervous system  
Confusion

**Physician's information / possible dangers**

In case of severe poisoning depressions of central nervous system, hypotension, bradycardia and hypothermia may occur.

---

**5. FIRE-FIGHTING MEASURES**

**Suitable extinguishing media**

Alcohol-resistant foam  
Dry powder  
Carbon dioxide  
Water spray jet

**Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases**

Nitrogen oxides (NO<sub>x</sub>)  
Carbon monoxide (CO)  
Carbon dioxide (CO<sub>2</sub>)

**Special protective equipment for fire-fighters**

Use breathing apparatus with independent air supply.

**Additional information**

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

---

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions**

Ensure adequate ventilation.  
Use personal protective clothing.  
Keep away sources of ignition.

**Environmental precautions**

Do not discharge into the drains or bodies of water..  
Do not seep away runed out product into ground or body of water.  
Do not discharge into the subsoil/soil.

**Methods for cleaning up**

Take up with absorbent material (e.g. sand, kieselguhr, acid binder, general-purpose binder, sawdust).

**Additional Information**

Informations for disposal see chapter 13.

---

---

## 7. HANDLING AND STORAGE

### Advice on safe handling

Take measures against electrostatically charging.  
Provide good room ventilation even at ground level (vapours are heavier than air).  
Take the usual precautions when handling with chemicals.

### Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking  
The product is easy combustible.  
Take precautionary measures against static discharges.  
Formation of explosive gas mixtures in air.

### Requirements for storage rooms and vessels

Keep in closed original container.  
Ventilate store-rooms thoroughly.

### Advice on storage compatibility

Do not store together with food.  
Do not store together with oxidizing agents.  
Store at cool and aired place and at distance to acids and alkalies.

### Further information on storage conditions

Keep container tightly closed and store at cool and aired place.  
Protect from light.  
Do not keep long-term to heat.  
Storage temperature between 10°C to 30°C (=50°F to 86°F).  
Keep in a cool place, heat causes increase in pressure and risk of bursting.

---

## ! 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Indicative occupational exposure limit values (91/322/EEC, 2000/39/EC or 2006/15/EC)

CAS No	Name	Code	[mg/m <sup>3</sup> ]	[ppm]	Remark
78-93-3	butanone	8 hours	600	200	
		Short-term	900	300	

### Respiratory protection

Breathing apparatus in the event of high concentrations.

### Hand protection

Gloves (solvent-resistant)

### Eye protection

tightly fitting goggles

### General protective measures

Do not inhale vapours.  
Avoid contact with the skin.

### Hygiene measures

Do not eat or drink when working.  
Remove soaked clothing immediately.  
After work wash thoroughly.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Form**  
liquid

**Colour**  
black

**Odour**  
like ketone

### Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
<b>pH value in delivery state</b>					not applicable
<b>starts to boil</b>	> 78 °C				
<b>Flash point</b>	-3.0 °C			ASTM D 93	
<b>Ignition temperature</b>	> 400 °C				information concern solvent
<b>Lower explosion limit</b>	1,8 Vol-%				information concern solvent
<b>Upper explosion limit</b>	15 Vol-%				information concern solvent
<b>Vapour pressure</b>	< 110 kPa	50 °C			
<b>Density</b>	0,84 - 0,87 g/cm <sup>3</sup>	20 °C			
<b>Solubility in water</b>					insoluble
<b>Viscosity 1 dynamic</b>	3 - 6 mPa*s	20 °C			

### Additional information

Vapours are heavier than air.  
flammable liquid

## 10. STABILITY AND REACTIVITY

### Conditions to avoid

Reactions with acids and strong oxidising agents.  
Reactions with alkalies.

### Hazardous decomposition products

carbon monoxide and carbon dioxide  
Nitrous oxides (NO<sub>x</sub>)

### Thermal decomposition

Remark No decomposition if used as directed.

## 11. TOXICOLOGICAL INFORMATION

### Experiences made from practice

May be absorbed through the skin.

Experiences at humans: may cause hypersensitivity reactions on skin in case of persons suffering from hypersensitivity.

Product discolours skin.

Sensitization through skin contact possible.

Has a degreasing effect on the skin.

Irritates respiratory tract.

Inhalation causes headache/nausea.

Irritates mucous membranes.

Inhalation causes narcotic effect/intoxication.

---

## 12. ECOLOGICAL INFORMATION

### General regulation

Product is not allowed to be discharged into the ground water or aquatic environment.

Product is not allowed to be discharged into aquatic environment, drains or sewage treatment plants.

Marine pollutant (according to IMDG-code)

---

## 13. DISPOSAL CONSIDERATIONS

### Waste code No.

08 03 12\*

### Name of waste

waste ink containing dangerous substances

Wastes marked with an asterisk are considered to be hazardous waste pursuant to Directive 91/689/EEC on hazardous waste.

### Recommendations for the product

Collect waste separated in suitable, labeled and lockable containers.

Product rests: send for disposal, e.g. special waste incineration.

### Recommendations for packaging

Totally emptied packaging may be treated as household waste.

---

## ! 14. TRANSPORT INFORMATION

### Land and inland navigation transport ADR/RID

UN 1210 PRINTING INK (butanone), 3, II, Special provisions 640D

### Marine transport IMDG

UN 1210 PRINTING INK (butanone), 3, II

### Air transport ICAO/IATA-DGR

UN 1210 Printing ink (butanone), 3, II

### Transport/further informations

Regulations concerning free quantities are to be observed.

## ! 15. REGULATORY INFORMATION

### Classification

**F** Highly flammable  
**Xi** Irritant

### R-phrases

11 Highly flammable.  
36 Irritating to eyes.  
52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
66 Repeated exposure may cause skin dryness or cracking.  
67 Vapours may cause drowsiness and dizziness.

### ! S-phrases

16 Keep away from sources of ignition - No smoking.  
24/25 Avoid contact with skin and eyes.  
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
33 Take precautionary measures against static discharges.  
7 Keep container tightly closed.

### VOC standard

VOC value =710 g/L

---

## 16. OTHER INFORMATION

### Recommendend uses and restrictions

National and local regulations concerning chemicals shall be observed.

### Further information

The information contained herein is based on the state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the poperties of the product.

### Wording of the R-phrases specified in chapter 3 (not the classification of the formulation!)

R 11 Highly flammable.  
R 36 Irritating to eyes.  
R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R 66 Repeated exposure may cause skin dryness or cracking.  
R 67 Vapours may cause drowsiness and dizziness.