

## **1. Identification of the substance/preparation and of the company/undertaking**

### **1.1 Identification of the substance or preparation**

Ink JP-B27 EU

#### **Use of the substance/preparation**

Printing Ink

### **1.2 Company/undertaking identification**

Hitachi Europe GmbH

Am Seestern 18

D-40547 Düsseldorf

Telephone : +49 (0) 211 52 83-0

Telefax : +49 (0) 211 52 83-649

Contact person :

Emergency telephone : ++49 (0) 6132 / 84463 GBK Gefahrgut Buero GmbH, Ingelheim

## **2. Composition/information on ingredients**

#### **Chemical characterization ( preparation )**

Ink Jet printing ink in organic solvents.

#### **Hazardous components**

EC-No.	CAS-No.	Chemical name	Quantity	Classification
200-659-6	67-56-1	Methanol	10-20 %	F, T R11-23/24/25-39/23/24/25
201-159-0	78-93-3	Butanone	55-65 %	F, Xi R11-36-66-67

Full text of each relevant R phrase can be found in heading 16.

## **3. Hazards identification**

#### **Classification**

Symbols : Highly flammable, Toxic, Harmful, Irritant

R-phrases :

Highly flammable.

Irritating to eyes.

Toxic by inhalation, in contact with skin and if swallowed.

Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

## **4. First aid measures**

#### **General information**

Remove contaminated soaked clothing immediately.

Keep warm and calm injured person.

Take away from danger area and lay down affected person.

#### **After inhalation**

Move to fresh air in case of accidental inhalation of vapours or decomposition products.

Refer for medical treatment.

#### **After contact with skin**

Wash off with soap and plenty of water.

Consult a doctor if skin irritation persists.

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**After contact with eyes**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.  
Seek medical treatment by eye specialist.

**After ingestion**

Induce vomiting only upon the advice of a physician.  
Immediately give plenty of water (if possible charcoal slurry).  
Do not induce vomiting.  
Summon a doctor immediately.

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**5. Fire-fighting measures**

**Suitable extinguishing media**

Alcohol-resistant foam, dry chemical, carbon dioxide (CO<sub>2</sub>), water-spray.

**Extinguishing media which must not be used for safety reasons**

Full water jet

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

Carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>).

**Special protective equipment for fire-fighters**

Use breathing apparatus with independent air supply.

**Additional information**

Vapours are heavier than air and spread along ground.  
The vapour/air mixture is explosive, even in empty, uncleaned receptacles.  
Risk of bursting of the receptacle.  
Cool containers at risk with water spray jet.

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**6. Accidental release measures**

**Personal precautions**

In case of vapour formation use respirator.  
Ensure adequate ventilation.  
Use personal protective clothing.  
Keep away sources of ignition.

**Environmental precautions**

Do not discharge into the drains/surface waters/groundwater.

**Methods for cleaning up/taking up**

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder).  
Shovel into suitable container for disposal.

**Additional information**

Clean contaminated surface thoroughly.

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**7. Handling and storage**

**7.1 Handling**

**Advice on safe handling**

Keep container tightly closed.  
Do not breathe vapours.  
Use only in thoroughly ventilated areas.  
Avoid contact with skin, eyes and clothing.

Ink JP-B27 EU  
00509-0030**Advice on protection against fire and explosion**

Do not smoke - volatile.  
Keep away from heat and sources of ignition.  
Take precautionary measures against static discharges.  
Use only explosion-proof equipment.

**7.2 Storage****Requirements for storage rooms and vessels**

Keep container tightly closed in a dry, cool and well-ventilated place.  
Pay attention to anti-explosion rules.

**Advice on storage compatibility**

Incompatible with oxidizing agents.

**Further information on storage conditions**

Keep away from food, drink and animal feeding stuffs.

**Storageclass (VCI) :** 3 A

**8. Exposure controls/personal protection****8.1 Exposure limit values****Exposure limits (EH40)**

CAS No.	Substance	ml/m <sup>3</sup>	mg/m <sup>3</sup>	F/ml	Category	Origin
78-93-3	Butan-2-one (methyl ethyl ketone)	200	600		TWA (8 h)	WEL
	Butan-2-one (methyl ethyl ketone)	300	899		STEL (15 min)	WEL
67-56-1	Methanol	200	266		TWA (8 h)	WEL
	Methanol	250	333		STEL (15 min)	WEL

**8.2 Exposure controls****Occupational exposure controls**

Ensure adequate ventilation, especially in confined areas.

**Protective and hygiene measures**

Do not inhale vapours.  
Avoid contact with eyes and skin.  
Wash hands before breaks and immediately after handling the product.  
When using, do not eat, drink or smoke.  
Take off immediately all contaminated clothing.

**Respiratory protection**

In case of insufficient ventilation wear suitable respiratory equipment (gas filter type A).

**Hand protection**

Protective gloves resistant to chemicals made off viton, Minimum coat thickness 0,7 mm, Permeation resistance (wear duration) approx. 10 minutes, i.e. protective glove <Vitoject 890> made by www.kcl.de. This recommendation refers exclusively to the chemical compatibility and the lab test conforming to EN 374 carried out under lab conditions.

Requirements can vary as a function of the use. Therefore it is necessary to adhere additionally to the recommendations given by the manufacturer of protective gloves.

**Eye protection**

Eye wash bottle with pure water.  
Tightly fitting goggles

**Skin protection**

Long sleeved clothing.

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## **9. Physical and chemical properties**

### **9.1 General information**

Physical state : Liquid  
Colour : Black  
Odour : Irritant

### **9.2 Important health, safety and environmental information**

	Test method
<b>Changes in the physical state</b>	
Flash point :	-6,3 °C Closed cup
Lower explosion limits :	1,8 vol. %
Upper explosion limits :	11,5 vol. %
Density (at 20 °C) :	0,90 g/cm <sup>3</sup>
Water solubility : at (20 °C)	Partially miscible

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## **10. Stability and reactivity**

### **Conditions to avoid**

Vapour/air mixtures are explosive at intensive warming.  
Heating can release vapours which can be ignited.

### **Materials to avoid**

Oxidizing agents (strong).

### **Hazardous decomposition products**

Carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>)

### **Additional information**

No decomposition if stored and applied as directed.

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## **11. Toxicological information**

### **Empirical data on effects on humans**

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.  
Irritating to eyes.  
Vapours may cause drowsiness and dizziness.  
Repeated exposure may cause skin dryness or cracking.

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## **12. Ecological information**

### **Additional information**

Do not flush into surface water or sanitary sewer system.  
Slightly water hazardous.

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## **13. Disposal considerations**

### **Advice on disposal**

Where possible recycling is preferred to disposal.  
Can be incinerated, when in compliance with local regulations.

**Waste disposal number of waste from residues/unused products :**

080312 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of printing inks; waste ink containing dangerous substances  
Classified as hazardous waste.

**Contaminated packaging**

Empty containers should be taken for local recycling, recovery or waste disposal.  
Contaminated packagings are to be treated like the product itself.

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**14. Transport information**

**Land transport (ADR/RID)**

ADR/RID class : 3  
Hazard-no. : 33  
UN number : 1210  
Hazard label : 3  
ADR/RID packing group : II

**Description of the goods**

Printing ink

**Remarks (land transport)**

LQ 6: combination packaging: 5 l / 30 kg (total gross mass); trays: 1 l / 20 kg (total gross mass).

**Inland waterways transport**

**Marine transport**

IMDG code : 3  
UN number : 1210  
Marine pollutant : No  
EmS : F-E, S-D  
IMDG packing group : II  
Hazard label : 3

**Description of the goods**

PRINTING INK

**Air transport**

ICAO/IATA-DGR : 3  
UN/ID number : 1210  
Hazard label : 3  
ICAO packing group : II

**Description of the goods**

PRINTING INK

**Remarks (air transport)**

PAC 305 (5 L), CAC 307 (60 L)

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**15. Regulatory information**

**15.1 Labelling**

Indication of danger : F - Highly flammable; T - Toxic

Labelling according to EC-guidelines : According to EC-regulations the product is to be labelled as follows:

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**Hazardous component(s) to be indicated on label**

Methanol

**R phrases :**

- 11 Highly flammable.  
36 Irritating to eyes.  
23/24/25 Toxic by inhalation, in contact with skin and if swallowed.  
39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

**S phrases :**

- 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).  
36/37 Wear suitable protective clothing and gloves.

**15.2 National regulations**

Water contaminating class : 1 - slightly water contaminating  
1999/13/EC (VOC) : < 85 %

**Additional information**

Content of RoHS Directive material Cd < 100ppm; Pb, Hg, Hexavalent Cr, PBB, PBDE < 1000ppm.

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**16. Other information**

**List of relevant R phrases**

- 11 Highly flammable.  
36 Irritating to eyes.  
66 Repeated exposure may cause skin dryness or cracking.  
67 Vapours may cause drowsiness and dizziness.  
23/24/25 Toxic by inhalation, in contact with skin and if swallowed.  
39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

**Other data**

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product (s) and is based on the present level of our knowledge.

The delivery specifications are contained in the corresponding product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

"(n.a. = not applicable; n.d. = not determined)"

**Changes**

Changes in chapter: 15

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*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*