

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

### **1.1 Commercial product name**

TH-Type F

### **1.2 Information manufacturer/supplier**

Hitachi Europe GmbH  
Am Seestern 18  
D40547 Düsseldorf  
Telephone : +49 (0) 211 52 83-0  
Telefax : +49 (0) 211 52 83-649  
Inquiry office : GBK Gefahrgutbüro GmbH  
Emergency telephone number : ++49 (0) 6132-84463

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

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

Makeup for printing ink

### **Hazardous components**

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

EC No.	CAS No.	Components	Value	Symbols	R-phrases
200-578-6	64-17-5	ethanol	< 90 %	F R11	
200-661-7	67-63-0	propan-2-ol	< 5 %	F, Xi	R11-36-67
200-746-9	71-23-8	propan-1-ol	10 - 20 %	F, Xi	R11-41-67

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## **3. Hazards identification**

Symbols : Highly flammable, Irritant

R-phrases :

Highly flammable.

Irritating to eyes.

Repeated exposure may cause skin dryness or cracking.

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## **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 that must not be used for safety reasons**

Full water jet

**Special exposure hazards arising from the 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 firefighters**

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.

#### 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

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## 8. Exposure controls/personal protection

### 8.1 Exposure limit values

#### Exposure limits (EH40)

Components CAS No.	Exposure limit ml/m <sup>3</sup>	mg/m <sup>3</sup>	F/ml	Category	Origin
Ethanol 64-17-5	1000	1920		TWA (8 h)	OES
	-	-		STEL (15 min)	OES
Propan-2-ol 67-63-0	400	999		TWA (8 h)	OES
	500	1250		STEL (15 min)	OES
Propan-1-ol 71-23-8	200	500		TWA (8 h)	OES
	250	625		STEL (15 min)	OES

### 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

## Body protection

Long sleeved clothing.

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## 9. Physical and chemical properties

### 9.1 Appearance

Form: liquid

Colour: clear

Odour: irritant

### 9.2 Important health, safety and environmental information

#### Test method

#### Changes in the physical state

Flash point: < 14 °C  
Flammability: closed cup

Lower Explosion limit: 3,3 vol. %  
Upper Explosion limit: 19 vol. %

Density: 0,79 g/ml  
(at 20 °C)  
Water solubility: insoluble g/l  
(at 20 °C)

#### Solvent content

< 90 %

#### Further information

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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.

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**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>)  
Chlorine compounds

**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. Advice on disposal**

**Dispose**

Where possible recycling is preferred to disposal.

Can be incinerated, when in compliance with local regulations.

**Waste disposal number of Waste from residues / unused product : 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**

**14.1 Land transport (ADR/RID)**

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

**Description of the goods:**

PRINTING INK

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**Remarks**

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

**14.2 Inland waterways transport**

**14.3 Marine transport**

IMDG-Code: 3  
UN number: 1210  
EMS: F-E, S-D  
Packaging group: II  
Marine pollutant: No

**Description of the goods**

PRINTING INK

Hazard label: 3

**14.4 Air transport**

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

ICAO-packaging group: II

**Description of the goods**

PRINTING INK

**Remarks**

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

**14.5 Further Information**

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**15. Regulatory information**

**15.1 Labelling**

**Indication of danger**

F - Highly flammable; Xi - Irritant

**Labelling according to EC-guidelines**

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

**R phrases**

11-36-66  
Highly flammable.  
Irritating to eyes.  
Repeated exposure may cause skin dryness or cracking.

**S phrases**

02  
Keep out of the reach of children.

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**15.2 National regulations**

Water contaminating class: 1 - slightly water contaminating  
1999/13/EC (VOC): < 75 %

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**16. Other information**

**List of relevant R phrases**

11 Highly flammable.  
36 Irritating to eyes.  
41 Risk of serious damage to eyes.  
66 Repeated exposure may cause skin dryness or cracking.  
67 Vapours may cause drowsiness and dizziness.

**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**

This data sheet contains changes from the previous version in section(s) 8.1, 15.2

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