
1. Identification of the substance/preparation and company

1.1 Commercial product name

Makeup Ink TH-70

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

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
201-159-0	78-93-3	butanone	80 - 90 %	F, Xi	R11-36-66-67
200-578-6	64-17-5	ethanol	10 - 20 %	F	R11

3. Hazards identification

Symbols : Highly flammable, Irritant

R-phrases :

Highly flammable.

Irritating to eyes.

Repeated exposure may cause skin dryness or cracking.

Vapours may cause drowsiness and dizziness.

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.

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.

5. Fire-fighting measures

Suitable extinguishing media

Alcohol-resistant foam, dry chemical, carbon dioxide (CO₂), 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 (CO₂) and nitrogen oxides (NO_x)

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.
Cool containers at risk with water spray jet.
Risk of bursting of the receptacle.

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.

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

8. Exposure controls/personal protection

8.1 Exposure limit values

Exposure limits (EH40)

Components CAS No.	Exposure limit ml/m ³	mg/m ³	F/ml	Category	Origin
Butanone (methyl ethyl ketone)					
78-93-3	200	-		TWA (8 h)	OES
	300	-		STEL (15 min)	OES
Ethanol					
64-17-5	1000	1920		TWA (8 h)	OES
	-	-		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.

9. Physical and chemical properties

9.1 Appearance

Form: liquid

Colour: clear

Odour: irritant

9.2 Important health, safety and environmental information

Changes in the physical state

Flash point:
Flammability

< -4 °C

closed cup

Ignition temperature:

> 404 °C

Lower Explosion limit:

1,7 vol. %

Upper Explosion limit:

19 vol. %

Vapour pressure:

< 95 hPa

(at 20 °C)

Density:

0,8 - 0,81 g/ml

(at 20 °C)

Test method

Further information

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

Vapour/air mixtures are explosive at intensive warming.

Heating can release vapours which can be ignited.

Oxidizing agents (strong).

Hazardous decomposition products

Carbon monoxide (CO), carbon dioxide (CO₂) and nitrogen oxides (NO_x)

Additional information

No decomposition if stored and applied as directed.

11. Toxicological information

Acute toxicity

LD50/oral/rat butanone : 4 050 mg/kg

Irritancy and corrosiveness

Irritating to eyes.

Empirical data on effects on humans

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Vapours may cause drowsiness and dizziness.

Repeated exposure may cause skin dryness or cracking.

12. Ecological information

Additional information

Do not flush into surface water or sanitary sewer system.

Slightly water hazardous.

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.

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

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

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

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

11-36-66-67

Highly flammable.

Irritating to eyes.

Repeated exposure may cause skin dryness or cracking.

Vapours may cause drowsiness and dizziness.

S phrases

02

Keep out of the reach of children.

15.2 National regulations

Water contaminating class: 1 - slightly water contaminating

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. |

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)"
