

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

**Product name** : 70000-00180 Ink, black  
**Use of the substance/preparation:** Ink for industrial ink jet printers (CIJ-printers)  
**Supplier** : Paul Leibinger GmbH & Co. KG  
Daimlerstr. 14  
78532 Tuttlingen  
Germany  
Phone: +49 7461 92 86-0 Fax: +49 7461 92 86-199  
[www.leibinger-group.com](http://www.leibinger-group.com)  
**Emergency phone** : +44 (0) 1235 239 670 (24h service)  
(for Transport & Environment)

## 2. Hazards Identification

### 2.1 Classification of the substance or mixture:

This product is dangerous within the meaning of Regulation (EC) No 1272/2008.

### Classification according to Regulation (EC) No 1272/2008:

#### Hazard category:

Flam. Liq. 2 Flammable liquids, Hazard category 2  
Eye Irrit. 2 Eye irritation, Hazard category 2  
STOT SE 3 Specific target organ toxicity (single exposure), Hazard category 3

### 2.2. Label elements

#### Labelling according to Regulation (EC) No 1272/2008 [CLP/GHS]



**Signal word:** Danger

#### Hazard statements:

H225 Highly flammable liquid and vapour.  
H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.  
EUH066 Repeated exposure may cause skin dryness or cracking.

#### Precautionary statements:

P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.  
P243 Take precautionary measures against static discharge.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P403+P235 Store in a well-ventilated place. Keep cool.

### 2.3 Other hazards

Results of PBT and vPvB assessment

- PBT: Not applicable..
- vPvB: Not applicable.

### 3. Composition / information on ingredients

#### 3.1 Substances

This product is a mixture within the meaning of GHS regulation (EC) no. 1272/2008

#### 3.2 Mixtures

##### Description of the mixture:

Mixture(s) based on organic solvents, resins, cellulose nitrate and dyes

Information on ingredients / Hazardous components as per EU-CLP Regulation (EC) No. 1272/2008

Name of substance		
CAS-No.	EC-No.	REACH-No.
Hazard class	H-Phrase	Wt.- %
Butanone		
78-93-3	201-159-0	01-2119457290-43-000
Flam. Liq.2, Eye Irrit.2, STOT SE3	225, 319, 336, EUH066	<b>70-80</b>

Isopropyl acetate		
CAS-No.	EC-No.	REACH-No.
Hazard class	H-Phrase	Wt.- %
108-21-4	203-561-1	01-2119537214-46-000
Flam. Liq.2, Eye Irrit.2, STOT SE3	225, 319, 336, EUH066	<b>&lt;5</b>

Full text of H phrases see heading 16.

### 4. First aid measures

#### 4.1 Description of first aid measures

After contact with eyes: Rinse with water and seek medical care.

After contact with skin: Rinse with water and soap; do not use solvents.

After inhalation: Fresh air supply, seek medical attention if symptoms persist.

If swallowed: Rinse mouth with water and seek medical care.

#### 4.2 Most important symptoms and effects, both acute and delayed

Irritates skin, eyes and breathing organs, headaches, dizziness, nausea, vertigo, impaired balance, narcosis and loss of consciousness.

#### 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

### 5. Fire-fighting measures

#### 5.1 Extinguishing media:

Suitable extinguishing media: Powder, Carbon dioxide (CO<sub>2</sub>), water spray.

Fight larger fires with water spray or alcohol resistant foam.

Unsuitable extinguishing media: Water with full jet.

#### 5.2 Special hazards arising from the substance or mixture

The formation of explosive vapour /air mixtures possible. Carbon monoxide CO can exist with incomplete burning.

Vapours are heavier than air and spread on the ground.

Ignition over a large distance possible.

The following can be released in a fire: Organic decomposition products

### 5.3 Advice for fire-fighters

Wear self-contained respiratory protective device.

Additional information

Cool endangered receptacles with water spray.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

If without risk possible, move drums with material away from dangerous area.

## 6. Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Keep away from ignition sources.

Avoid contact with skin and eyes.

Use respiratory protective device against the effects of fumes/dust/aerosol.

Wear protective equipment. Keep unprotected persons away.

Take precautionary measures against static discharge.

### 6.2 Environmental precautions:

Suppress gases/fumes/haze with water spray.

Do not allow to enter sewers/ surface or ground water.

Do not allow to penetrate the ground/soil.

### 6.3 Methods and material for containment and cleaning up:

Ensure adequate ventilation.

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Send for recovery or disposal in suitable receptacles.

Dispose of the material collected according to regulations.

### 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

Explosion risk in case of fire.

## 7. Handling and storage

### 7.1 Precautions for safe handling

Keep container tightly closed.

Do not handle until all safety precautions have been read and understood.

Provides for good ventilation/extraction in the workspace.

### Information about fire - and explosion protection:

Take precautionary measures against static discharge.

Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

Use only non-sparking tools.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Storage:

Keep away from direct sunlight and other sources of heat and ignition.

Do not store in the open air, unlabelled or incorrectly labelled containers.

Observe laws and regulations for the storage and use of water-polluting materials.

#### Information on storage with other products:

Do not store together with flammable and self-igniting materials or with highly valuable solids.

#### Further information on the storage conditions:

Observe regulations/technical rules on the storage of flammable liquids.

**Storage class:**

LGK 3, flammable liquid substance (TRGS 510, storage of hazardous materials in the mobile containers)

**7.3 Specific use(s)**

Ink for industrial InkJet Printers

**8. Exposure controls / personal protection****8.1 Control parameters****8.1 Occupational exposure limits:**

CAS-No.	Name of substance	Kind of TLV	Value	Year	Country
78-93-3	Butanone	AGW	200 ml/m <sup>3</sup>	2006	EU
108-21-4	Isopropyl acetate	MAK	100 [ml/m <sup>3</sup> ]	2015	D

**8.1.2 Biological limit values:**

DNELs: No Data available

PNECs: No Data available

Additional information: The lists valid during the making were used as basis.

**8.1.3 Exposure limits at intended use:**

No Data available

**8.2 Exposure controls****8.2.1 Appropriate engineering controls:**

No Data available.

**8.2.2 Personal protective equipment****General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Do not eat, drink, smoke or sniff while working.

Wash hands before breaks and at the end of the working day.

**Respiratory protection:**

In case of inadequate ventilation/extraction, respiratory protection required. Breathing filter with short-term or slight exposure. Recommended filtering unit for short-term use: Filter A2

**Protection of hands:**

Selection of glove material under consideration of the penetration times. The selection of a suitable glove is not only dependent on the material, but also on other quality properties and from manufacturer to manufacturer.

Recommended material for gloves: Isobutene-isoprene (butyl) rubber, layer strength: > 0.5 mm#  
breakthrough time: ≥ 60 min

**Eye protection:** Safety glasses with side-shields (frame goggles) (e.g. EN 166)

**Body protection:**

Solvent resistant protective clothing.

Protective clothing should be selected specifically for the working place.

**Boots:** antistatic

**Protective suit:** antistatic

**8.2.3 Environmental exposure controls:**

No Data available.

## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state:	liquid
Colour:	black
Odour:	ketone-like
Boiling range:	> 77 °C
Melting range:	n.d.
Relative density:	~0,87 g/cm <sup>3</sup>
Vapour pressure:	< 105 hPa
Viscosity:	5,5 mPas
pH:	n.a.
Flash point:	- 8 °C
Autoignition temperature:	>=425 °C
Explosion limit, lower:	1,8 %vol
Explosion limit, upper:	15 %vol
Water solubility:	partially miscible

### 9.2 Other information:

Explosion limits, vapour pressure and the auto-ignition temperature refer to the solvents contained.  
Viscosity at 20 degrees.

## 10. Stability and reactivity

### 10.1 Reactivity

See 10.3

### 10.2 Chemical stability

Thermal decomposition / conditions to be avoided:  
Avoid impact, friction, heat, sparks, electrostatic charges.

### 10.3 Possibility of hazardous reactions

Violent reactions with strong alkalis and oxidizing agents.  
Danger of receptacles bursting because of high vapour pressure when heated

### 10.4 Conditions to avoid

No further relevant information available.

### 10.5 Incompatible materials:

Oxidizing agents, strongly acidic and alkaline materials

### 10.6 Hazardous decomposition products:

Carbon monoxide (CO) and Carbon dioxide (CO<sub>2</sub>) in the event of fire

## 11. Toxicological information

### 11.1 Information on toxicological effects

**Primary irritant effect on the skin:** - Frequent or prolonged skin exposure can degrease and dry out the skin, which can lead to skin defects and inflammation (dermatitis).

**Primary irritant effect in the eyes:** - Causes eye irritation.

**Sensitization:** - No sensitising effect on the skin known.

**Subacute to chronic toxicity:** - Liver damage is possible with chronic exposure

#### Additional toxicological advice:

- High concentrations can cause drowsiness and narcosis in addition to headaches.
- Prolonged or repeated contact may degrease the skin and lead to skin inflammation (dermatitis).
- Damage to the liver and kidneys is possible.

**Inhalation:** - Inhalation of the vapour can cause irritation of the airways.

**Ingestion:** - Ingestion may cause irritation

## 12. Ecological information

### 12.1 Toxicity:

Aquatic toxicity: no measurement data is available

### 12.2 Persistence and degradability:

Not determined

### 12.3 Bioaccumulative potential:

Not determined

### 12.4 Mobility in soil:

No further relevant information available.

Additional ecological information:

#### General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

### 12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

### 12.6 Other adverse effects

No further relevant information available.

## 13. Disposal considerations

### 13.1 Waste treatment methods

**Waste disposal key:** According to local/national regulations.

#### Disposal recommendation

Must not be disposed of together with house waste. Do not allow to enter sewers. Taking into account the provisions of the local authorities, conduct special waste handling operations.

#### Waste code number:

Since 1.1.1999, waste code numbers are not only related to the product, but generally related to the application. The valid waste code number for the application can be found in the European waste catalogue.

#### European waste catalogue

Waste disposal key numbers from EWC have to be assigned depending on origin and processing.

#### Uncleaned packaging:

**Recommendation:** Disposal must be made according to official regulations.

**Recommended cleansing agents:** Water

## 14. Transport information

	<u>ADR/RID</u>	<u>IMDG</u>	<u>IATA-DGR</u>
14.1. UN number	1210	1210	1210
14.2. UN proper shipping name	PRINTING INK (butanone)	PRINTING INK (butanone)	Printing ink (butanone)
14.3. Transport hazard class(es)	3	3	3
14.4. Packing group	II	II	II
14.5. Environmental hazards	Yes	Yes	Yes
Marine pollutant	No	No	No

#### 14.6. Special precautions for user

Warning: Flammable liquids.

Danger code (Kemler): 33

EMS Number: F-E,S-D .

#### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No information available.

#### Transport/further information

Regulations concerning free quantities are to be observed.

### 15. Regulatory information

#### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture National regulations:

##### National provisions:

- Major Accidents Ordinance: Substance group 7 (highly flammable liquids); observe quantity threshold.
- Presentation according to the Industrial Safety Regulation (BetrSichV): Highly flammable
- Technical instructions air: No measurement values are available.

##### Waterhazard class:

Water hazard class (Germany): 1 – slightly water-polluting (self classification)

REACH (EC) 1907/2006: The main components are preregistered, released or otherwise in conformity.

#### 15.2 Chemical safety assessment:

A Chemical Safety Assessment has not been carried out yet.

### 16. Other informations

#### Shortcuts:

n.a.: not applicable - n.d.: not determined

#### Abbreviations and acronyms:

*n.a.: not applicable*

*n.d.: not determined*

*RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer  
Regulations Concerning the International Transport of Dangerous Goods by Rail)*

*ICAO: International Civil Aviation Organization*

*LEV: Local Exhaust Ventilation*

*RPE: Respiratory Protective Equipment*

*RCR: Risk Characterisation Ratio (RCR= PEC/PNEC)*

*ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)*

*IMDG: International Maritime Code for Dangerous Goods*

*IATA: International Air Transport Association*

*GHS: Globally Harmonized System of Classification and Labelling of Chemicals*

*CLP: Classification, Labelling and Packaging (Regulation (EC) No. 1272/2008)*

*EINECS: European Inventory of Existing Commercial Chemical Substances*

*CAS: Chemical Abstracts Service (division of the American Chemical Society)*

*TRGS: Technische Regeln für Gefahrstoffe (Technical Rules for Dangerous Substances, BAuA, Germany)*

*DNEL: Derived No-Effect Level (REACH)*

*LC50: Lethal concentration, 50 percent*

*LD50: Lethal dose, 50 percent*

**According to Regulation (EC) No 1272/2008:**

**Full text of H phrases in heading 3:**

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

EUH066 Repeated exposure may cause skin dryness or cracking.

The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should not therefore be construed as guaranteeing specific properties. These products should be stored, handled, and used in conformity with any legal regulation. The information provided above is for general guidance only without responsibility, liability, and warranty on our part and is subject to change without notice.