

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

**Product name** : 70000-00149 black ink, green fluorescent  
**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)

## 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:

Flammable liquids, category 2

Irritation to eyes, category 2

Specific target organ toxicity (single exposure), 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.

P241: Use explosion-proof electrical/ventilating/lighting/ equipment.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P303+361+353: IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water/shower.

P304+340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

### 2.3 Other hazards

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

PBT assessment: This product is not identified as a PBT/vPvB substance.

### 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, dyestuff

Dangerous components pursuant to REACH-Directive 67/548/EEC:

Name of substance		
CAS-No.	EC-No.	REACH-No.
Symbol of danger	R-Phrase	Wt.- %
Hazard class	H-Phrase	Symbol
Butanone		
78-93-3	201-159-0	01-2119457290-43-000
Xi, F, GHS02, GHS07	11-36-66-67	50-70
Flam. Liq.2, Eye Irrit.2, STOT SE3	225,319,336,EUH066	 
Ethanol		
64-17-5	200-578-6	01-2119457610-43-000
F, GHS02	11	10-30
Flam. Liq.2	225	

Full text of R/H phrases see heading 16.

### 4. First aid measures

#### 4.1 Description of first aid measures

**Skin contact:** Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water.

**Eye contact:** Bathe the eye with running water for 15 minutes. Consult a doctor.

**Ingestion:** Wash out mouth with water. Consult a doctor.

**Inhalation:** Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

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

**Skin contact:** There may be irritation and redness at the site of contact.

**Eye contact:** There may be irritation and redness. The eyes may water profusely.

**Ingestion:** There may be soreness and redness of the mouth and throat.

**Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest. Exposure may cause coughing or wheezing.

**Delayed / immediate effects:** Immediate effects can be expected after short-term exposure.

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

Eye bathing equipment should be available on the premises.

## 5. Fire-fighting measures

### 5.1 Extinguishing media:

Suitable extinguishing media: Carbon dioxide (CO<sub>2</sub>), powder or 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

**Exposure hazards:** Highly flammable. In combustion emits toxic fumes. Forms explosive air-vapour mixture. Vapour may travel considerable distance to source of ignition and flash back.

### 5.3 Advice for fire-fighters

Wear self-contained respiratory protective device.

Wear protective clothing to prevent contact with skin and eyes.

## 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 and all sources of ignition.

### 6.2 Environmental precautions:

Do not discharge into drains or rivers. Contain the spillage using bunding.

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

Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method. Do not use equipment in clean-up procedure which may produce sparks.

### 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.

## 7. Handling and storage

### 7.1 Precautions for safe handling

Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).

Open and handle receptacle with care.

Avoid splashes or spray in enclosed areas.

Prevent formation of aerosols.

Do not inhale vapours/aerosols.

Make sure that all applicable workplace limits are observed.

Avoid contact with the eyes and skin.

### Information about fire - and explosion protection:

Protect from heat.

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Fumes can combine with air to form an explosive mixture.

Flammable gas-air mixtures may form in empty receptacles.

Use explosion-proof apparatus / fittings and spark-proof tools.

Do not spray onto a naked flame or any incandescent material.  
Emergency cooling must be available in case of nearby fire.  
Keep respiratory protective device available.  
Handle only outside or in explosion protected rooms.

## 7.2 Conditions for safe storage, including any incompatibilities

Provide floor trough without outlet.  
Observe all local and national regulations for storage of water polluting products.

### Information about storage in one common storage facility:

Store away from oxidizing agents.

### Further information about storage conditions:

Store receptacle in a well ventilated area.  
Keep container tightly sealed.  
Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.  
Store only outside or in explosion proof rooms.

## 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	TWA	Value	Country
78-93-3	Butanone	8 hour TWA	600 mg/m <sup>3</sup>	UK
64-17-5	Ethanol	8 hour TWA	1920 mg/m <sup>3</sup>	GB

### 8.1.2 Biological limit values:

DNELs: No Data available  
PNECs: 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.  
Immediately remove all soiled and contaminated clothing.  
Do not carry product impregnated cleaning cloths in trouser pockets.  
Do not inhale gases / fumes / aerosols.  
Avoid contact with the eyes and skin.  
Apply solvent resistant skin cream before starting work.  
Wash hands before breaks and at the end of work.

### Respiratory protection:

If all workplace limits are observed and good ventilation is ensured, no special precautions necessary.

**Recommended filter device for short term use:** Filter AX

### Protection of hands:

Solvent resistant gloves  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation. The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Check the permeability prior to each renewed use of the glove.  
To avoid skin problems reduce the wearing of gloves to the required minimum.  
Sensibilization by the components in the glove materials is possible.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

#### **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Advice: Butyl rubber, BR

#### **Penetration time of glove material**

Penetration time:  $\geq 60$  minutes

Thickness:  $> 0,5$  mm

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed. Protective gloves should be replaced at first signs of wear.

**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:	no data available
Melting range:	n.d.
Relative density:	no data available
Vapour pressure:	no data available
Viscosity:	no data available
pH:	n.a.
Flash point:	$<23$ °C
Autoignition temperature:	no data available
Explosion limit, lower:	no data available
Explosion limit, upper:	no data available
Water solubility:	partially miscible

### **9.2 Other information:**

no data available

## **10. Stability and reactivity**

### **10.1 Reactivity**

Stable under recommended transport or storage conditions.

### **10.2 Chemical stability**

Stable under normal conditions. Stable at room temperature.

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

### 10.3 Possibility of hazardous reactions

Hazardous reactions will not occur under normal transport or storage conditions.  
Decomposition may occur on exposure to conditions or materials listed below.

### 10.4 Conditions to avoid

Heat. Hot surfaces. Sources of ignition. Flames.

### 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>)

## 11. Toxicological information

### 11.1 Information on toxicological effects

#### Hazardous ingredients:

#### ETHANOL

IVN	RAT	LD50	1440 mg/kg
ORL	MUS	LD50	3450 mg/kg
ORL	RAT	LD50	7060 mg/kg

#### Relevant hazards for substance:

<u>Hazard</u>	<u>Route</u>	<u>Basis</u>
Serious eye damage/irritation	OPT	Hazardous: calculated
STOT-single exposure	-	Hazardous: calculated

#### Symptoms / routes of exposure

**Skin contact:** There may be irritation and redness at the site of contact.

**Eye contact:** There may be irritation and redness. The eyes may water profusely.

**Ingestion:** There may be soreness and redness of the mouth and throat.

**Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest. Exposure may cause coughing or wheezing.

**Delayed / immediate effects:** Immediate effects can be expected after short-term exposure.

## 12. Ecological information

### 12.1 Toxicity:

Aquatic toxicity: Not determined

### 12.2 Persistence and degradability:

Not determined

### 12.3 Bioaccumulative potential:

No bioaccumulation potential.

### 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 operations:** Transfer to a suitable container and arrange for collection by specialised disposal company.

**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

## 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	No	No	No
Marine pollutant	No	No	No

### 14.6. Special precautions for user

Warning: Flammable liquids.

Danger code (Kemler): 33

EMS Number: F-E,S-D .

Tunnel restriction code D/E

Classification code F1

### 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:**

#### Information about limitation of use:

Employment restrictions concerning juveniles must be observed.

#### Breakdown regulations:

Critical quantity values according to the regulations on accidents should be adhered to.

### 15.2 Chemical safety assessment:

A Chemical Safety Assessment has not been carried out yet.

## 16. Other information

### 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 Directives 67/548/EEC and 1999/45/EC:

#### Full text of R phrases in heading 3:

R11 Highly flammable

R36 Irritating to eyes

R66 Repeated exposure may cause skin dryness or cracking

R67 Vapours may cause drowsiness and dizziness

### 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.