

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
 Product name : LUS-170 INK BLACK
 Product code : LUS17-K-BA
 Product group : Trade product

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Title	Use descriptors
LUS-170 INK BLACK	SU22, PC18, PROC1

Full text of use descriptors: see section 16

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Mimaki Europe B.V.
 Stammerdijk 7E
 1112 AA Diemen - Netherlands
 T +31 20 4627640
reach@mimakieurope.com

1.4. Emergency telephone number

Emergency number : National Poisons Information Centre +31 (0)30 - 274 8888
 (Only for the purpose of informing medical personnel in cases of accidental intoxications. The emergency phone number is 24 hours/day available.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin sensitisation, Category 1 H317
 Reproductive toxicity, Category 2 H361
 Hazardous to the aquatic environment — Chronic Hazard, Category 3 H412



Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP) :  
 GHS07 GHS08

Signal word (CLP) : Warning

Hazardous ingredients : diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide ; phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide

Hazard statements (CLP) : H317 - May cause an allergic skin reaction
 H361 - Suspected of damaging fertility or the unborn child
 H412 - Harmful to aquatic life with long lasting effects

Precautionary statements (CLP) : P261 - Avoid breathing dust/fume/gas/mist/vapours/spray
 P280 - Wear protective gloves, protective clothing, face protection, eye protection
 P281 - Use personal protective equipment as required
 P308+P313 - IF exposed or concerned: Get medical advice/attention
 P363 - Wash contaminated clothing before reuse

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P501 - Dispose of contents/container to an approved waste disposal plant

2.3. Other hazards

PBT: not relevant – no registration required

vPvB: not relevant – no registration required

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	(CAS-No.) 75980-60-8 (EC-No.) 278-355-8 (EC Index-No.) 015-203-00-X (REACH-no) 01-2119972295-29	5 - 10	Skin Sens. 1, H317 Repr. 2, H361f Aquatic Chronic 2, H411
phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide	(CAS-No.) 162881-26-7 (EC-No.) 423-340-5 (EC Index-No.) 015-189-00-5 (REACH-no) 01-2119489401-38	1 - 5	Skin Sens. 1, H317 Aquatic Chronic 4, H413

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Seek medical attention if ill effect develops. Do not breathe gas, fumes, vapour or spray. Avoid contact with skin and eyes.
First-aid measures after inhalation	: In case of accident by inhalation : remove casualty to fresh air and keep at rest. Consult a doctor/medical service if you feel unwell.
First-aid measures after skin contact	: Seek medical attention if ill effect or irritation develops. Wash skin with mild soap and water. Wash contaminated clothing before reuse.
First-aid measures after eye contact	: Seek medical attention immediately. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
First-aid measures after ingestion	: If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

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

Symptoms/effects : May cause sensitisation by skin contact.

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

Concerning personal protective equipment to use, see section 8. Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Dry chemical. Carbon dioxide (CO ₂). Water. Alcohol resistant foam.
Unsuitable extinguishing media	: Heavy water stream.

5.2. Special hazards arising from the substance or mixture

Reactivity in case of fire : Combustion produces toxic gases.

5.3. Advice for firefighters

Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection. Do not breathe vapours.
Other information	: May cause sensitization by inhalation and skin contact.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid contact with skin and eyes. Keep public away from danger area.

6.1.1. For non-emergency personnel

No additional information available

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6.1.2. For emergency responders

Protective equipment : Refer to protective measures listed in Sections 7 and 8.

6.2. Environmental precautions

Carefully collect remainder. Avoid release to the environment. Do not allow material to contaminate ground water system.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Clean up any spills as soon as possible, using an absorbent material to collect it. Label the container and provide warning statements to prevent any contact. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13).

Other information : Clear contaminated areas thoroughly.

6.4. Reference to other sections

See Heading 12.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Use personal protective equipment as required. Avoid inhalation of vapours. Local exhaust or breathing protection.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep out of the reach of children. Keep only in the original container in a cool well ventilated place. Keep container tightly closed.

Storage area : Avoid : Direct sunlight. Store away from heat.

7.3. Specific end use(s)

It is recommended to pass the information of this safety data sheet, eventually in an appropriated form, to the users.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide (75980-60-8)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	1 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	3,5 mg/m ³
PNEC (Water)	
PNEC aqua (freshwater)	0,004 mg/l
PNEC aqua (marine water)	0 mg/l
PNEC aqua (intermittent, freshwater)	0,035 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0,29 mg/kg dwt
PNEC sediment (marine water)	0,029 mg/kg dwt
PNEC (Soil)	
PNEC soil	0,056 mg/kg dwt
phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide (162881-26-7)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	3 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	21 mg/m ³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	1,5 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	5,2 mg/m ³
Long-term - systemic effects, dermal	1,5 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0 (1,2 - 17,2) µg/L
PNEC aqua (intermittent, freshwater)	12 - 16 µg/L
PNEC (Sediment)	
PNEC sediment (freshwater)	0,712 mg/kg dwt
PNEC sediment (marine water)	0,712 mg/kg dwt
PNEC (Soil)	
PNEC soil	20 mg/kg dwt

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phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide (162881-26-7)

PNEC (STP)

PNEC sewage treatment plant

1 mg/l

8.2. Exposure controls

Appropriate engineering controls:

Ensure that there is a suitable ventilation system.

Personal protective equipment:

Safety glasses. Gloves. Protective clothing.

Hand protection:

Wear suitable gloves. Breakthrough time (EN 374-3:2003): > 480 min (www.echa.europa.eu). Nitrile rubber gloves (0,4 mm). Chloroprene rubber (0,5mm). Polyvinylchloride (PVC)

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing. Plastic apron or overall



Environmental exposure controls:

Do not discharge into drains or the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Black.
Odour	: characteristic.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 95 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1 - 1,3
Solubility	: Water: insoluble in water
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 7 - 12 mPa.s (25°C)
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

VOC content : 0 %

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SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Heat. Sparks. Open flame.

10.5. Incompatible materials

Strong oxidizers.

10.6. Hazardous decomposition products

May liberate toxic gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide (75980-60-8)

LD50 oral rat	> 5000 mg/kg
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LD50 dermal rat	> 2000 mg/kg
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phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide (162881-26-7)

LD50 oral rat	> 2000 mg/kg
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LD50 dermal rat	> 2000 mg/kg
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Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified

Respiratory or skin sensitisation : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Suspected of damaging fertility or the unborn child.

STOT-single exposure : Not classified

diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide (75980-60-8)

LOAEL (oral, rat)	250 - 300 mg/kg bodyweight
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NOAEL (oral, rat)	50 - 100 mg/kg bodyweight/day
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STOT-repeated exposure : Not classified

diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide (75980-60-8)

NOAEL (subacute, oral, animal/male, 28 days)	50 mg/kg bodyweight NOAEL (oral, rat)
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NOAEL (subacute, oral, animal/female, 28 days)	50 mg/kg bodyweight NOAEL (oral, rat)
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Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Acute aquatic toxicity : Not classified

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide (75980-60-8)

LC50 fish 1	10 mg/l (96h)
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LC50 fish 2	6,53 mg/l 48h
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EC50 Daphnia 1	3,53 (48h)
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EC50 Daphnia 2	2,01 mg/l (72h)
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EC50 72h algae (1)	2,01 mg/l
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phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide (162881-26-7)

LC50 fish 1	> 9 mg/l
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12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide (75980-60-8)

Log Pow	3,1 - 3,87 @ 23 °C and pH 6.4
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phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide (162881-26-7)

Log Pow	3,09
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12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

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PBT: not relevant – no registration required

vPvB: not relevant – no registration required

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.
Product/Packaging disposal recommendations : Dispose of contents/container to Dispose of at authorized waste collection point.
European List of Waste (LoW) code : 08 03 12* - waste ink containing dangerous substances

SECTION 14: Transport information

In accordance with ADN / ADR

ADR	ADN
14.1. UN number	
Not applicable	Not applicable
14.2. UN proper shipping name	
Not applicable	Not applicable
14.3. Transport hazard class(es)	
Not applicable	Not applicable
14.4. Packing group	
Not applicable	Not applicable
14.5. Environmental hazards	
Not applicable	Not applicable
No supplementary information available	

14.6. Special precautions for user

- Overland transport

Not applicable

- Inland waterway transport

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008	LUS-170 INK BLACK
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3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10	LUS-170 INK BLACK
3(c) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1	LUS-170 INK BLACK

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

VOC content : 0 %

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Full text of H- and EUH-statements:

Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Aquatic Chronic 4	Hazardous to the aquatic environment — Chronic Hazard, Category 4
Repr. 2	Reproductive toxicity, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
H317	May cause an allergic skin reaction
H361	Suspected of damaging fertility or the unborn child
H361f	Suspected of damaging fertility
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects
H413	May cause long lasting harmful effects to aquatic life
PC18	Ink and Toners
PROC1	Use in closed process, no likelihood of exposure
SU22	Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

SDS EU (REACH Annex II)

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