

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

1.1. Product identifier

audioprint L-2 FLX

UFI K60J-WD7P-1911-TYSU

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

Relevant identified uses: Manufacture.
Uses advised against: Private households (= general public).

1.3. Details of the supplier of the safety data sheet

Manufacturer

pro3dure medical GmbH
Am Burgberg 13
D 58642 Iserlohn

Telephone +49 (0)2374 920050-10
Telefax: +49 (0)2374 920050-50

Supplier

pro3dure medical GmbH
Am Burgberg 13
D 58642 Iserlohn

Telephone +49 (0)2374 920050-10
Telefax: +49 (0)2374 920050-50

Information contact

pro3dure medical GmbH

Information telephone +49 (0)2374 920050-10
Information telefax +49 (0)2374 920050-50
E-mail (competent person) info@pro3dure.com
Website www.pro3dure.com

1.4. Emergency telephone number

pro3dure medical GmbH
This number is serviced during office hours.

Telephone +49 (0)2374 920050-10

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008:
Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1/1A/1B, H317; Repr. 2, H361f; STOT SE 3, H335

2.2. Label elements

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

Hazard pictograms



GHS07,GHS08
Warning

Signal word:

Hazard statements:

- H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H361f Suspected of damaging fertility.

Precautionary statements:

- P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash hands thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302+352 IF ON SKIN: Wash with plenty of water/soap.
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.
P308+313 IF exposed or concerned: Get medical advice/attention.
P312 Call a POISON CENTER/doctor if you feel unwell.
P321 Specific treatment (see information on this label).
P332+313 If skin irritation occurs: Get medical advice/attention.
P333+313 If skin irritation or rash occurs: Get medical advice/attention.
P337+313 If eye irritation persists: Get medical advice/attention.
P362+364 Take off contaminated clothing and wash it before reuse.
P403+233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P501 Dispose of contents/container according to official regulations.

Special labelling of particular preparations:

none

2.3. Other hazards

No information available.

SECTION 3: Composition / information on ingredients

3.1. Substances

not applicable

3.2. Mixtures

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Composition/information on ingredients

Substance:	CAS-No.:	REACH-no.:	Concentration:	Classification: EC 1272/2008 (CLP):	M, ATE, Note
Methyl 2-methylprop-2-enoate	80-62-6		25-45 %	Flam. Liq. 2, H225; Skin Irrit. 2, H315; Skin Sens. 1/1A/1B, H317; Skin Sens. 1, H317; Skin Sens. 1A, H317; Skin Sens. 1B, H317; STOT SE 3, H335	ATE (dermal) = No value can be determined ATE (oral) = No value can be determined ATE (inhalativ) = No value can be determined
7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxo-5,12-diazahexadecane-1,16-diyl bismethacrylate	72869-86-4	01-2120751202-68-XXXX	25-45 %	Skin Sens. 1/1A/1B, H317; Aquatic Chronic 2, H411	M = 0 ATE (dermal) = 2000 mg/kg bw ATE (oral) = 5000 mg/kg bw ATE (inhalativ) = No value can be determined
Esterification products of 4,4'-isopropylidenediphenol, ethoxylated and 2-methylprop-2-enoic acid	41637-38-1		10-20 %	Skin Irrit. 2, H315; Skin Sens. 1/1A/1B, H317; Eye Irrit. 2, H319; STOT SE 3, H335; Aquatic Chronic 4, H413	ATE (dermal) = 2000 ATE (oral) = 2000 ATE (inhalativ) = No value can be determined
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8		<03 %	Repr. 2, H361; Skin Sens. 1/1A/1B, H317; Aquatic Chronic 2, H411	M = 0 ATE (dermal) = 2000 ATE (oral) = 5000 ATE (inhalativ) = 2000

(Full text of H- and EUH-statements: see section 16.)

SECTION 4: First aid measures

4.1. Description of first aid measures

General information: Provide fresh air. Seek medical attention if problems persist

In case of inhalation: Provide fresh air.
In case of respiratory tract irritation, consult a physician.

Following skin contact: After contact with skin, wash immediately with plenty of water and soap.
In case of skin irritation, consult a physician.

After eye contact: In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart.
Seek medical attention if problems persist.

After ingestion: Rinse mouth immediately and drink plenty of water. No administration in cases of unconsciousness or cramps. Do NOT induce vomiting. Seek medical attention if problems persist.

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

May cause sensitization by skin contact.

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

First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media ABC-powder alcohol resistant foam BC-powder Carbon dioxide (CO₂)

Unsuitable extinguishing media Excess water Full water jet

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: Carbon monoxide. Carbon dioxide. Nitrogen oxides (NO_x).

5.3. Advice for firefighters

General information

Co-ordinate fire-fighting measures to the fire surroundings.

Special protective equipment for fire-fighters:

In case of fire: Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

Provide adequate ventilation.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advices on safe handling

When using do not eat, drink, smoke, sniff. Use only in well-ventilated areas. All work processes must always be designed so that the following is as low as possible: Inhalation.

Precautions against fire and explosion:

Use only in well-ventilated areas. Always close containers tightly after the removal of product.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints on joint storage

Do not store together with: Oxidizing agent Organic peroxides. Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

Observe instructions for use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

occupational exposure limit value

Substance:	CAS-No.:		Source:	Occupational exposure limit value:[ppm]	Occupational exposure limit value:[mg/m ³]	Limitation of exposure peaks:	Remark:

Substance with a common (EC) occupational exposure limit value.

Substance:	CAS-No.:		Source:	Occupational exposure limit value:[ppm]	Occupational exposure limit value:[mg/m ³]	Limitation of exposure peaks:	Remark:

DNEL-/PNEC-values
DNEL value

Substance:	CAS-No.:	DNEL/DMEL
Esterification products of 4,4'-isopropylidenediphenol, ethoxylated and 2-methylprop-2-enoic acid	41637-38-1	worker inhalative short-term, systemic 3,52 mg/m ³ worker dermal short-term, systemic 2 mg/m ³ /24h population inhalative short-term, systemic 870 µg/m ³ population dermal short-term, systemic 1 mg/m ³ /24h population short-term, systemic 500 µg/m ³ /24h
7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate	72869-86-4	worker inhalative systemic 3,3 mg/m ³ worker dermal systemic 1,3 mg/kg bw /24h population inhalative systemic 0,6 mg/m ³ population dermal systemic 0,7 mg/kg bw/24h population systemic 0,3 mg/kg bw/24h
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8	worker inhalative long-term, systemic 0,822 mg/m ³ worker dermal long-term, systemic 0,233 mg/kg bw/day population inhalative long-term, systemic 0,145 mg/m ³ population dermal long-term, systemic 0,0833 mg/kg bw/day population oral long-term, systemic 0,0833 mg/kg bw/day

PNEC Value

Substance:	CAS-No.:	PNEC
7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate	72869-86-4	aquatic, freshwater 0,01 µg/l aquatic, marine water 0,001 µg/l sewage treatment plant 3,61 µg/l sediment, freshwater 4,56 µg/kg dw sediment, marine water 0,46 µg/kg dw soil 0,91 µg/kg dw
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8	aquatic, freshwater 1,4 µg/l aquatic, marine water 0,14 µg/l sediment, freshwater 115 µg/kg dw sediment, marine water 11,5 µg/kg dw soil 22,2 µg/kg dw

Additional information

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8.2. Exposure controls

Occupational exposure controls:

Provide adequate ventilation as well as local exhaust at critical locations. Technical measures and the application of suitable work processes have priority over personal protection equipment.

General protection and hygiene measures:

When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work. Apply skin care products after work. Wash contaminated clothing prior to re-use.

Personal protection equipment

Only wear fitting, comfortable and clean protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Hand protection

Suitable gloves type: NBR (Nitrile rubber).

Eye/face protection

Eye glasses with side protection

Body protection:

lab coat

Environmental exposure controls

There are no data available on the preparation/mixture itself.

Consumer exposure controls

There are no data available on the preparation/mixture itself.

Exposure Scenario:

Skin contact

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state:	Liquid
Colour:	colourless
Odour:	ester
Odour threshold:	-

Safety relevant basis data

parameter	Value	unit	Remark
Melting point/freezing point:			No data available
Initial boiling point and boiling range:			No data available
Flammability:			No data available
lower flammability or explosive limits:			No data available
Upper flammability or explosive limits:			No data available
Flash point:			No data available
Ignition temperature:			No data available
Decomposition temperature:			No data available
pH:			not applicable
Kinematic viscosity:			No data available
Water solubility (g/L):			No data available
Partition coefficient: n-octanol/water:			No data available
Vapour pressure:			No data available
Density:	1,1	g/mL	
Relative density:			No data available
Particle properties:			No data available

9.2. Other information

none

SECTION 10: Stability and reactivity

10.1. Reactivity

Sensitivity to light (photosensitive).

10.2. Chemical stability

Can polymerise exothermically if heated, exposed to air, sunlight or by addition of free radical initiators.

10.3. Possibility of hazardous reactions

Polymerization.

10.4. Conditions to avoid

heat.
UV-radiation/sunlight.

10.5. Incompatible materials

Polymerization with heat evolution may occur in the presence of radical forming substances (e.g. peroxides), reducing substances, and/or heavy metal ions.

10.6. Hazardous decomposition products

In case of fire may be liberated: Carbon dioxide. Carbon monoxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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M-factor: - **Acute toxicity (dermal):** -
Acute toxicity (oral): - **Acute toxicity (inhalative):** -

Acute toxicity

Substance:	CAS-No.:	Toxicological information
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8	LC50 inhalation (Rat) 2000 mg/ kg bw LD50 oral (rat) 5000 mg/kg bw LD50 dermal (rat) > 2000 mg/kg bw
7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate	72869-86-4	LD50 oral (rat) > 5000 mg/kg LD50 dermal (rat) > 2000 mg/kg NOAEL Repr.-Tox. (Rat) 1000 mg/kg/d NOAEL STOT-RE (rat) 100 mg/kg/d
Esterification products of 4,4'-isopropylidenediphenol, ethoxylated and 2-methylprop-2-enoic acid	41637-38-1	LD50 oral (rat) 2000 mg/kg LD50 dermal (rat) 2000 mg/kg

Skin corrosion/irritation:
sensitising.

Serious eye damage/irritation:
strongly irritant.

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

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Carcinogenicity:

There are no data available on the preparation/mixture itself.

Germ cell mutagenicity:

There are no data available on the preparation/mixture itself.

Reproductive toxicity:

There are no data available on the preparation/mixture itself.

STOT-single exposure:

There are no data available on the preparation/mixture itself.

STOT-repeated exposure:

There are no data available on the preparation/mixture itself.

Aspiration hazard:

May cause sensitisation especially in sensitive humans.

SECTION 12: Ecological information

12.1. Toxicity

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Ecotoxicity

Substance:	CAS-No.:	Ecotoxicity
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8	EC50 (Daphnia, 48 h) 3,53 mg/L EC50 (algae, 72 h) > 2,01 mg/L
7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate	72869-86-4	LC50 (Daphnia) > 1,2 mg/l EC50 (algae, 72 h) > 0,68 mg/l LC50 (fish, 96 h) 101 mg/L EC50 (Daphnia, 48 h) > 12 mg/L NOEC (algae, 72h) 21 mg/l
Esterification products of 4,4'-isopropylidenediphenol, ethoxylated and 2-methylprop-2-enoic acid	41637-38-1	LC50 (fish, 96 h) 100 mg/l LC50 (crustaceans, 48h) 6 mg/l EC50 (algae, 72 h) 100 mg/l

12.2. Persistence and degradability

There are no data available on the preparation/mixture itself.

12.3. Bioaccumulative potential

There are no data available on the preparation/mixture itself.

12.4. Mobility in soil

There are no data available on the preparation/mixture itself.

12.5. Results of PBT and vPvB assessment

There are no data available on the preparation/mixture itself.

12.6 Endocrine disruptive effect

There are no data available on the preparation/mixture itself.

12.7. Other adverse effects

There are no data available on the preparation/mixture itself.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate disposal/Product:

Dispose of waste according to applicable legislation.

Appropriate disposal / Package

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

List of proposed waste codes / waste designations according to EWC / AVV

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

SECTION 14: Transport information

14.1. UN number

UN No.: 1247

14.2. UN proper shipping name

Land transport (ADR/RID)

METHYLMETHACRYLAT, MONOMER, STABILISIERT

Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)

METHYL METHACRYLATE MONO- MER, STABILIZED

14.3. Transport hazard class(es)

Hazard label(s) / Label: 3

Classification code: / Classification Code: F1



14.4. Packing group

Packing group/ Packing Group: II

14.5. Environmental hazards

ADR/RID / IMDG / ICAO-TI / IATA-DGR:
Marine pollutant:

Yes

No

14.6. Special precautions for user

Land transport (ADR/RID)

transport category: 2

Special provisions: 386

tunnel restriction code: D/E

Limited quantity (LQ): 1 L

Sea transport (IMDG)

EmS-No: F-E, S-D

Special provisions: - Limited quantity (LQ): 1 L

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

Remark -

SECTION 15: Regulatory information

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

EU legislation

Information on Regulation (EC) No 166/2006 establishing a European Pollutant Release and Transfer Register:

No information available.

Regulation (EC) No. 1005/2009 on substances that lead to the depletion of the ozone layer:

No information available.

Regulation (EC) No. 648/2004 (Detergents regulation)

No information available.

Regulation (EC) No 850/2004 [POP-Regulation]:

No information available.

Regulation (EU) No 649/2012 on the export and import of dangerous chemicals:

No information available.

Use restriction according to REACH annex XVII, no.:

No information available.

National regulations

Observe in addition any national regulations!

Restrictions of occupation

No information available.

Other regulations, restrictions and prohibition regulations

No information available.

15.2. Chemical Safety Assessment

For this preparation a chemical safety assessment has been carried out. No

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

Relevant H- and EUH-phrases (Number and full text):

Hazard statements

H227	Combustible liquid.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H361f	Suspected of damaging fertility.

Training advice

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Recommended restrictions of use:

Reserved for industrial and professional use.

Further remarks:

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

Documentation of changes:

Changes compared to Version 1:

1 UFI-code added.

Key literature references and sources for data

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Abbreviations and acronyms

AC: Artikelkategorie (Article Category)
ACGIH: Rat für Arbeitsschutz und Gefahrstoffe, Amerika (American Conference of Government Industrial Hygienists)
ADN: Europäisches Übereinkommen über die internationale Beförderung gefährlicher Güter auf Binnengewässern (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)
ADR: Europäisches Übereinkommen über die internationale Beförderung gefährlicher Güter auf der Straße (Accord européen relatif transport des marchandises dangereuses par route)
AGW: Arbeitsplatzgrenzwert
AOX: Adsorbierbare organisch gebundene Halogene (Adsorbable Organic halogen compounds)
Bw: Körpergewicht (Body weight)
CMR: Stoffe klassifiziert als Krebserzeugend, Mutagen oder Reproduktionstoxisch (Carcinogenic, Mutagenic, toxic for Reproduction)
CSR: Stoffsicherheitsbericht (Chemical Safety Report)
DIN: Deutsches Institut für Normung / Deutsche Industrienorm
DNEL: Grenzwert, unterhalb dessen der Stoff keine Wirkung ausübt (Derived No Effect Level)
DPD: Zubereitungsrichtlinie / Richtlinie 1999-45-EC (Dangerous Preparations Directive)
DSD: Stoffrichtlinie / Richtlinie 67-548-EC (Dangerous Substances Directive)
DU: Nachgeschalteter Anwender (Downstream User)
EC50: Wirksame Konzentration 50% (Effective Concentration 50%)
ECHA: Europäische Chemikalienagentur
EN: Europäische Norm
EWC/EWL: Europäischer Abfallartenkatalog (European Waste Catalogue)
IATA: Verband für den internationalen Lufttransport (International Air Transport Association)
IBC: Großpackmittel (Intermediate Bulk Container)
ICAO: Internationale Zivilluftfahrt-Organisation (International Civil Aviation Organization)
IMDG Code: Gefahrgutvorschriften für den internationalen Seetransport (International Maritime Dangerous Goods Code)
IMO: Internationale Seeschiffahrts-Organisation (International Maritime Organization)
ISO: Internationale Normungsorganisation (International Standards Organisation)
LC50: Lethale (Tödliche) Konzentration 50%
LD50: Lethale (Tödliche) Dosis 50%
LEV: Lokale Absaugung (Local exhaust ventilation)
MAK: Maximale Arbeitsplatzkonzentration – DFG
n.a.: nicht anwendbar
n.b.: nicht bestimmt
OEL: Arbeitsplatzgrenzwert (Occupational Exposure Limit)
PBT: persistent, bioakkumulierbar, giftig (persistent, bioaccumulative, toxic)
PNEC: Abgeschätzte Nicht-Effekt-Konzentration (Predicted No Effect Concentration)
PPE/PSA: Persönliche Schutzausrüstung (Personal Protective Equipment)
REACH: Registrierung, Bewertung und Zulassung von Chemikalien (Registration, Evaluation and Authorization of Chemicals)
RID: Gefahrgutvorschriften für den Transport mit der Eisenbahn (Règlement International concernant le transport de marchandises dangereuses par chemin de fer)
STEL: Grenzwert für Kurzzeitexposition (Short-term Exposure Limit)
SVHC: Stoff sehr hoher Besorgnis (Substance of Very High Concern)
TLV: Arbeitsplatzgrenzwert (Threshold Limit Value)
VOC: Flüchtige organische Kohlenwasserstoffe (Volatile Organic Compounds)
vPvB: sehr persistent, sehr bioakkumulierbar (very persistent, very bioaccumulative)