NYTE 3D

GINGIVA

Safety Data Sheet
according to UK REACH Regulation

Day of creation
22. September 2021

Revised on
1. August 2024

Revision no. 1,5
Revised version:
Revision no. 1,4

NYTE3D GmbH
Hans-Heinrich-
Warnke-Str. 12
29227 Celle, Germany

+49 5141 97445-50

info@nyte3d.de
www.nyte3d.de

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

1.1. Product identifier
NYTE3D Gingiva

Product code
NG1

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

Use of the substance/mixture
3D Printing, resin

1.3. Details of the supplier of the safety data sheet

Company name: NYTE3D GmbH
Street: Hans-Heinrich-Warnke-Str. 12
Place: D-29227 Celle
Telephone: +49 (0)5141 966969-0
E-Mail: info@nyte3d.de
Contact person: Manuel Schlenkrich
Telephone: +49 (0)5141 966969-0
Internet: www.nyte3d.de

1.4. Emergency telephone number:
GIZ-Nord, Göttingen, Germany +49 551 19240 (24h/7d)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
GB CLP Regulation

Hazard categories

- Acute toxicity: Acute Tox. 4
- Respiratory or skin sensitisation: Skin Sens. 1
- Hazardous to the aquatic environment: Aquatic Chronic 2

Hazard Statements

- Harmful if inhaled.
- May cause an allergic skin reaction.
- Toxic to aquatic life with long lasting effects.

2.2. Label elements
GB CLP Regulation

Hazard components for labelling

- 2-[[(butylamino)carbonyl]oxy]ethyl acrylate
- diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide

Signal word: Warning

Pictograms:

Hazard statements

H317 May cause an allergic skin reaction.
H332 Harmful if inhaled.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P273 Avoid release to the environment.
P280 Wear suitable protective clothing, gloves and eye/face protection.
P391 Collect spillage.
P501 Dispose of waste according to applicable legislation.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No: 63225-53-6
Chemical name: 2-[[(butylamino)carbonyl]oxy]ethyl acrylate
Quantity: 50 - < 80 %
EC No: 264-036-0
REACH No: 01-2120751208-56
GHS Classification: Acute Tox. 4, Skin Sens. 1B,
Aquatic Chronic 2; H332 H317 H411

CAS No: 75980-60-8
Chemical name: diphenyl(2,4,6-trimethylbenzoyl) phosphine oxide
Quantity: 1 - < 5 %
EC No: 278-355-8
Index No.: 015-203-00-X
GHS Classification: Repr. 2, Skin Sens. 1,
Aquatic Chronic 2; H361f H317 H411

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

Specific Conc. Limits, M-factors and ATE

CAS No: 63225-53-6
EC No: 264-036-0
Chemical name: 2-[[(butylamino)carbonyl]oxy]ethyl acrylate
Quantity: 50 - < 80 %
inhalation: ATE = 11 mg/l (vapours)
inhalation: LC50 = > 1 - 5 mg/l (dusts or mists)
oral: LD50 = > 2000 mg/kg

CAS No: 75980-60-8
EC No: 278-355-8
Chemical name: diphenyl(2,4,6-trimethylbenzoyl) phosphine oxide
Quantity: 1 - < 5 %
dermal: LD50 = > 2000 mg/kg
oral: LD50 = > 5000 mg/kg

SECTION 4: First aid measures

4.1. Description of first aid measures

General information
When in doubt or if symptoms are observed, get medical advice.

After inhalation
Provide fresh air. If experiencing respiratory symptoms: Call a doctor.

After contact with skin
After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. In case of skin reactions, consult a physician.

After contact with eyes
After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately. Remove contact lenses, if present and easy to do. Continue rinsing.

After ingestion
Observe risk of aspiration if vomiting occurs. Do NOT induce vomiting. Rinse mouth immediately and drink 1 glass of of water. Get medical advice/attention if you feel unwell. Never give anything by mouth to an unconscious person or a person with cramps.

4.2. Most important symptoms and effects, both acute and delayed
May produce an allergic reaction.

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:
Co-ordinate fire-fighting measures to the fire surroundings.

5.2. Special hazards arising from the substance or mixture
Non-flammable.
In case of fire may be liberated: Pyrolysis products, toxic.

5.3. Advice for firefighters
Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information
Suppress gases/vapours/mists with water spray jet.
Collect contaminated fire extinguishing water separately.
Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Provide adequate ventilation. Do not breathe gas/fumes/ vapour/spray. Avoid contact with skin, eyes and clothes.

6.2. Environmental precautions
Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up
Ventilate affected area.

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

Advice on safe handling
Provide adequate ventilation. Do not breathe gas/fumes/ vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

Advice on protection against fire and explosion
Usual measures for fire prevention.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels
Keep container tightly closed.

Hints on joint storage
Keep away from food, drink and animal feedingstuffs.

Further information on storage conditions
Protect against: UV-radiation/sunlight, Heat.

7.3. Specific end use(s)
3D Printing, resin

SECTION 8: Exposure controls/ personal protection

8.1. Control parameters

DNEL/DMEL values

CAS No: 63225-53-6
Substance: 2-[[(butylamino)carbonyl]oxy]ethyl acrylate
DNEL type: Worker DNEL, long-term
Exposure route: dermal
Effect: systemic
Value: 2 mg/kg bw/day

DNEL type: Worker DNEL, long-term
Exposure route: inhalation
Effect: systemic
Value: 9,9 mg/m³

PNEC values

CAS No: 63225-53-6
Substance: 2-[[(butylamino)carbonyl]oxy]ethyl acrylate
Freshwater: 0,000003 mg/l
Marine water: 0,0000000277 mg/l
Freshwater sediment: 0,00000385 mg/kg
Marine sediment: 0,000000356 mg/kg
Micro-organisms in sewage treatment plants (STP): 0 mg/l
Soil: 0,0000000378 mg/kg

8.2. Exposure controls

Appropriate engineering controls:
Provide adequate ventilation as well as local exhaustion at critical locations.

Protective and hygiene measures:
Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff.

Eye/face protection:
Use eye protection according to EN 166.

Hand protection:
Wear suitable gloves tested to EN374.
When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection:
Wear suitable protective clothing.

Respiratory protection:
In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls:
Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid
Colour: pink
Odour: characteristic
Odour threshold: not determined
pH-Value: 5 - 8

Changes in the physical state:
Melting point/freezing point: not determined
Boiling point or initial boiling point and boiling range: > 100 °C
Flash point: > 100 °C

Flammability:
Solid: not applicable
Gas: not applicable

Explosive properties:
The product is not: Explosive.
Lower explosion limits: not determined
Upper explosion limits: not determined
Auto-ignition temperature: not determined

Self-ignition temperature:
Solid: not applicable
Gas: not applicable
Decomposition temperature: not determined

Oxidizing properties
Not oxidising.
Vapour pressure: < 0,1 hPa (at 20 °C)
Density: not determined
Water solubility: miscible

Solubility in other solvents:
not determined
Partition coefficient n-octanol/water: not determined
Viscosity / dynamic: not determined
Viscosity / kinematic: not determined
Relative vapour density: not determined
Evaporation rate: not determined

9.2. Other information
No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity
No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability
The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions
No hazardous reaction when handled and stored according to provisions.

10.4. Conditions to avoid
UV-radiation/sunlight, Heat.

10.5. Incompatible materials
No information available.

10.6. Hazardous decomposition products
In case of fire may be liberated: Pyrolysis products, toxic

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity: Harmful if inhaled.

ATEmix calculated:
ATE (inhalation vapour) 15,45 mg/l
ATE (inhalation aerosol) 1,405 mg/l

CAS No: 63225-53-6
Chemical name: 2-[[(butylamino)carbonyl]oxy]ethyl acrylate
Exposure route: oral
Dose: LD50 > 2000 mg/kg
Species: Rat
Source: Manufacturer

Exposure route: inhalation vapour
Dose: ATE 11 mg/l
Exposure route: inhalation (4 h) aerosol
Dose: LC50 > 1 - 5 mg/l
Species: Rat
Source: Manufacturer
Method: OECD 436

CAS No: 75980-60-8
Chemical name: diphenyl(2,4,6-trimethylbenzoyl) phosphine oxide
Exposure route: oral
Dose: LD50 > 5000 mg/kg
Species: Rat
Source: Manufacturer
Exposure route: dermal
Dose: LD50 > 2000 mg/kg
Species: Rat
Source: Manufacturer
Method: OECD 402

Irritation and corrosivity:
Based on available data, the classification criteria are not met.

Sensitising effects:
May cause an allergic skin reaction.
(2-[[(butylamino)carbonyl]oxy]ethyl acrylate; diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide)

Carcinogenic/mutagenic/toxic effects for reproduction:
Based on available data, the classification criteria are not met.

STOT-single exposure:
Based on available data, the classification criteria are not met.

STOT-repeated exposure:
Based on available data, the classification criteria are not met.

Aspiration hazard:
Based on available data, the classification criteria are not met.

NYTE3D GmbH
Hans-Heinrich-
Warnke-Str. 12
29227 Celle, Germany

+49 5141 97445-50

info@nyte3d.de
www.nyte3d.de

SECTION 12: Ecological information

12.1. Toxicity: Toxic to aquatic life.

CAS No: 63225-53-6
Chemical name: 2-[[(butylamino)carbonyl]oxy]ethyl acrylate
Aquatic toxicity: Acute fish toxicity
Dose: LC50 2,52 mg/l
[h]|[d]: 96 h
Species: Piscis
Source: Manufacturer
Method: OECD 203
Aquatic toxicity: Acute algae toxicity
Dose: ErC50 5,98 mg/l
[h]|[d]: 72 h
Species: Algae
Source: Manufacturer
Method: OECD 201

CAS No: 75980-60-8
Chemical name: diphenyl(2,4,6-trimethylbenzoyl) phosphine oxide
Aquatic toxicity: Acute algae toxicity
Dose: ErC50 > 2,01 mg/l
[h]|[d]: 72 h
Species: Algae
Source: Manufacturer
Method: OECD 201
Aquatic toxicity: Acute crustacea toxicity
Dose: EC50 3,53 mg/l
[h]|[d]: 48 h
Species: Daphnia spec.
Source: Manufacturer
Method: OECD 202

12.2. Persistence and degradability
The product has not been tested.

CAS No: 63225-53-6
Chemical name: 2-[[(butylamino)carbonyl]oxy]ethyl acrylate
Method: OECD 301F
Value: 15 %
d: 28
Source: Manufacturer
Evaluation: Not readily biodegradable
(according to OECD criteria)

CAS No: 75980-60-8
Chemical name: diphenyl(2,4,6-trimethylbenzoyl) phosphine oxide
Method: OECD 301F
Value: < 20 %
d: 28
Source: Manufacturer
Evaluation: Not readily biodegradable
(according to OECD criteria)

12.3. Bioaccumulative potential
The product has not been tested.

Partition coefficient n-octanol/water

CAS No: 63225-53-6
Chemical name: 2-[[(butylamino)carbonyl]oxy]ethyl acrylate
Log Pow: 1,82

12.4. Mobility in soil
The product has not been tested.

12.5. Results of PBT and vPvB assessment
The product has not been tested.

12.6. Other adverse effects
No information available.

Further information
Do not allow to enter into surface water or drains.
Do not allow to enter into soil/subsoil.
Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations
Do not allow to enter into surface water or drains.
Do not allow to enter into soil/subsoil.
Dispose of waste according to applicable legislation.

Contaminated packaging
Dispose of waste according to applicable legislation.
Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 3082

14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-[[(butylamino)carbonyl]oxy]ethyl acrylat)

14.3. Transport hazard class(es): 9

14.4. Packing group: III
Hazard label: 9

Classification code: M6
Special Provisions: 274 335 375 601
Limited quantity: 5 L
Excepted quantity: E1
Transport category: 3
Hazard No: 90
Tunnel restriction code: -

Inland waterways transport (ADN)

14.1. UN number: UN 3082

14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-[[(butylamino)carbonyl]oxy]ethyl acrylat)

14.3. Transport hazard class(es): 9

14.4. Packing group: III
Hazard label: 9

Classification code: M6
Special Provisions: 274 335 375 601
Limited quantity: 5 L
Excepted quantity: E1

Marine transport (IMDG)

14.1. UN number: UN 3082

14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-[[(butylamino)carbonyl]oxy]ethyl acrylate)

14.3. Transport hazard class(es): 9

14.4. Packing group: III
Hazard label: 9

Marine pollutant: P
Special Provisions: 274, 335, 969
Limited quantity: 5 L
Excepted quantity: E1
EmS: F-A, S-F

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 3082

14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-[[(butylamino)carbonyl]oxy]ethyl acrylate)

14.3. Transport hazard class(es): 9

14.4. Packing group: III
Hazard label: 9

Special Provisions: A97 A158 A197 A215
Limited quantity Passenger: 30 kg G
Passenger LQ: Y964
Excepted quantity: E1
IATA-packing instructions – Passenger: 964
IATA-max. quantity – Passenger: 450 L
IATA-packing instructions – Cargo: 964
IATA-max. quantity – Cargo: 450 L

14.5. Environmental hazards
ENVIRONMENTALLY HAZARDOUS: Yes

Danger releasing substance:
2-[[(butylamino)carbonyl]oxy]ethyl acrylate

14.6. Special precautions for user
No information available.

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

EU regulatory information

Restrictions on use (REACH, annex XVII)
Entry 3

Information according to 2012/18/EU (SEVESO III):
Not subject to 2012/18/EU (SEVESO III)

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the , juvenilework protection guideline' (94/33/EC).

Water hazard class (D): 2 – obviously hazardous to water

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:
2-[[(butylamino)carbonyl]oxy]ethyl acrylate

SECTION 16: Other information

Changes
This data sheet contains changes from the previous version in section(s): 2,3,4,6,8,9,10,11,12,13,14,15.

Abbreviations and acronyms

CLP	Classification, labelling and Packaging
REACH	Registration, Evaluation and Authorization of Chemicals
GHS	Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
UN	United Nations
CAS	Chemical Abstracts Service
DNEL	Derived No Effect Level
DMEL	Derived Minimal Effect Level
PNEC	Predicted No Effect Concentration
ATE	Acute toxicity estimate
LC50	Lethal concentration, 50%
LD50	Lethal dose, 50%
LL50	Lethal loading, 50%
EL50	Effect loading, 50%
EC50	Effective Concentration 50%
ErC50	Effective Concentration 50%, growth rate
NOEC	No Observed Effect Concentration
BCF	Bio-concentration factor
PBT	persistent, bioaccumulative, toxic
vPvB	very persistent, very bioaccumulative
ADR	Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID	Regulations concerning the international carriage of dangerous goods by rail
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)
IMDG	International Maritime Code for Dangerous Goods
EmS	Emergency Schedules
MFAG	Medical First Aid Guide
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
MARPOL	International Convention for the Prevention of Marine Pollution from Ships
IBC	Intermediate Bulk Container
VOC	Volatile Organic Compounds
SVHC	Substance of Very High Concern

For abbreviations and acronyms, see table at http://abbrev.esdscom.eu

Classification for mixtures and used evaluation method according to GB CLP Regulation

— Acute Tox. 4; H332: Calculation method
— Skin Sens. 1; H317: Calculation method
— Aquatic Chronic 2; H411: Calculation method

Relevant H and EUH statements (number and full text)

H317 May cause an allergic skin reaction.
H332 Harmful if inhaled.
H361f Suspected of damaging fertility.
H411 Toxic to aquatic life with long lasting effects

Further Information
The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)

On 28. February 2024, the following adjustment was made:
Adjustment of the NYTE3D GmbH company headquarter in section 1.3 and at the top right position of each page.

On 1. August 2024, the following adjustment was made:
Adjustment of the NYTE3D GmbH telephone number in section 1.3 and at the top right position of each page.