# GINGIVA

Safety Data Sheet according to UK REACH Regulation

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)5141966969-0 E-Mail: info@nyte3d.de Contact person: Manuel Schlenkrich Telephone: +49(0)5141966969-0 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

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.

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/m<sup>3</sup>

#### 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/I Soil: 0,000000378 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

#### **Day of creation** 22. September 2021

28. February 2024

**Revised on** 

Hans-Heinrich-Warnke-Str. 12 29227 Celle, Germany +49(0)5141966969-0

NYTE3D GmbH

Revision no. 1.4 **Revised version** info@nyte3d.de Revision no. 1,3 www.nyte3d.de

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

Oxidizing properties

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

# Solubility in other solvents:

9.2. Other information

10.1. Reactivity

No information available.

according to provisions.

10.2. Chemical stability

ambient temperatures

according to provisions.

10.4. Conditions to avoid

No information available.

UV-radiation/sunlight, Heat.

10.5. Incompatible materials

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

SECTION 10: Stability and reactivity

No hazardous reaction when handled and stored

The product is stable under storage at normal

No hazardous reaction when handled and stored

10.3. Possibility of hazardous reactions

10.6. Hazardous decomposition products

11.1. Information on toxicological effects

Acute toxicity: Harmful if inhaled.

ATE (inhalation vapour) 15,45 mg/l

ATE (inhalation aerosol) 1,405 mg/l

Exposure route: inhalation vapour

Exposure route: inhalation (4 h) aerosol

Chemical name: diphenyl(2,4,6-trimethylbenzoyl)

ATEmix calculated:

CAS No: 63225-53-6

Exposure route: oral

Source: Manufacturer

Dose: LC50 > 1 - 5 mg/l

Source: Manufacturer

Method: OECD 436

CAS No: 75980-60-8

Exposure route: oral

Source: Manufacturer

Source: Manufacturer

Method: OECD 402

Exposure route: dermal

Dose: LD50 > 2000 mg/kg

Dose: LD50 > 5000 mg/kg

phosphine oxide

Species: Rat

Species: Rat

Dose: ATE 11 mg/l

Species: Rat

Species: Rat

Dose: LD50 > 2000 mg/kg

In case of fire may be liberated: Pyrolysis products, toxic

Chemical name: 2-[[(butylamino)carbonyl]oxy]ethyl acrylate

**SECTION 11: Toxicological information** 

#### 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

#### 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

#### **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

#### 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.

# GINGIVA

Safety Data Sheet according to UK REACH Regulation

# 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

# 12.2. Persistence and degradability

Method: OECD 202

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



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]ethylacrylat)

14.4. Packing group: III Hazard label: 9



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 senger LV: 19 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



28. February 2024

29227 Celle, Germany +49(0)5141966969-0 Revision no. 1.4

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**Revised version** 

Revision no. 1,3

# 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 20, April 2023, the following adjustments were made: Adjustments of company headquarter, phone numbers, and contact person of NYTE3D GmbH in section 1.3 and at the top right position of each page.

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.

SECTION 15:	Regulatory	information
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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

2-[[(butylamino)carbonyl]oxy]ethyl acrylate

safety assessment has been carried out:

# **SECTION 16: Other information**

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

#### А

Changes

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 march- andises 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 Inter- national Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dan- gereuses par voies de navigation intérieures)	
IMDG	International Maritime Code for Dangerous Goods	
EmS	Emergency Schedules	

- MFAG Medical First Aid Guide
- International Air Transport Association IATA ICA0
  - International Civil Aviation Organization

14.3. Transport hazard class(es): 9



#### **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

#### 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

- 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