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MAKE IT SHINE

Revision nr. 6

Dated 30/01/2025

Printed on 13/02/2025

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Replaced revision:5 (Dated: 30/01/2025)

NITTY-GRITTY SRL
NGLSBIO - LASER SHIELD

Product safety information note

Under REACH (Article 32)

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

1.1. Product identifier

Code: **NGLSBIO**
Product name: **LASER SHIELD**
Chemical name and synonym: **LASER SHIELD**

Other Denomination: **3YOTS**
Manufacturer: **EPCM.expert SRL**
Piazza Municipio, 14
38057 Pergine Valsugana (TN) Italy
Tel. +39 (0)0461 1724951

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

Intended use: **Non -stick and biodegradable shield for laser cutting**

1.3. Details of the supplier of the Information Sheet

Name: **NITTY-GRITTY S.R.L.**
Full address: **via dei Marmorari 36**
District and Country: **41057 Spilamberto (Mo)**
Italia
Tel. **059785210**
Fax **0597861612**

e-mail address of the competent person responsible for the information sheet: **lapelosa@nitty-gritty.it**

1.4. Emergency telephone number

For urgent inquiries refer to:
111 (NHS for England, Scotland and Wales)
01 809 2166 (Republic of Ireland)
Belgium: 070 245 245
Bulgaria: +359 2 9154 233
Estonia: 16662 / +372 7943 794
Finland: 0800 147 111 (the call is free of charge) / 09 471 977
Greece: +30 2107793777
Iceland: +354 543 22 22
Slovenia: 112 / +386 41 650 500
Turkey: 0800 314 7900 / +90 0312 433 70 01

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is not classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements).

Hazard classification and indication: --

2.2. Label elements



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Hazard pictograms: --

Signal words: --

Hazard statements: --

Precautionary statements: --

2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage \geq than 0,1%.

The product does not contain substances with endocrine disrupting properties in concentration \geq 0.1%.

SECTION 3. Composition/information on ingredients

3.1. Substances

Information not relevant

3.2. Mixtures

The product does not contain substances classified as being hazardous to human health or the environment pursuant to the provisions Regulation (EC) 1272/2008 (CLP) (and subsequent amendments and supplements) in such quantities as to require the statement.

SECTION 4. First aid measures

4.1. Description of first aid measures

Not specifically necessary. Observance of good industrial hygiene is recommended.

The symptoms due to intoxication may appear following the exposure, therefore, in case of doubts, consult a doctor following direct exposure to the chemical product or in case of persistent malaise, showing the SDS of this product.

For inhalation:

It is a product that does not contain substances classified as dangerous by inhalation, however it is recommended in the case of symptoms of intoxication to take away the person involved by the exposure site, take it to the open air and keep it at rest. If the symptoms persist request the intervention of a doctor.

By contact with the skin:

In case of contact, it is recommended to clean the affected area with plenty of water and neutral soap. In case of skin changes (Burn, redness, rash, bubbles, ...), contact a doctor with this security data tab.

By contact with eyes:

It is a product that does not contain substances classified as dangerous in contact with the eyes. Rinse the eyes with abundant Water at room temperature for at least 15 minutes, avoiding that the person involved rubbes or close the eyes.

For ingestion/suction:

In case of ingestion, soliciting the immediate intervention of a doctor by showing the product security data sheet.

Rescuer protection

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

No episodes of damage to health ascribable to the product have been reported.

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The acute and delayed effects are indicated in paragraphs 2 and 11.

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

Not relevant

Means to have available in the workplace for specific and immediate treatment

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

Carbon dioxide, foam, chemical powder.

UNSUITABLE EXTINGUISHING EQUIPMENT

Do not use jets of water.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

If possible remove the containers from the fire area or cool them. The product, when exposed to heat radiation or directly involved in a fire, may release flammable gases. The vapours and gases released can cause dizziness, fainting or suffocation.

As a consequence of combustion or thermal decomposition, reaction by -products are generated which may be highly Toxic and, therefore, can present a high risk for health.

5.3. Advice for firefighters

GENERAL INFORMATION

Do not stand in the hazard area. In order to avoid contact with the skin, keep an adequate safety distance and wear suitable protective clothing. The water used to extinguish the fire must not reach the sewers.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137). If contact with the product and/or its combustion products is likely, chemical protective clothing with liquid tight connections for the whole body (Type 3) conforming to the relevant standard, such as BS 8428 or EN 14605, in combination self-contained open circuit positive pressure compressed air breathing apparatus (EN 137).

Have a minimum of emergency systems or elements for the intervention (fireproof covers, kit for emergency room, ...) in accordance with Directive 89/654/EC.

Additional provisions:

Act in accordance with the internal emergency plan and the information sheets on the intervention in the event of accidents and other emergencies. Eliminate any source of ignition. In the event of a fire, cool down containers and storage tanks of the products that can inflame, explode or trigger a BLEVE explosion as a consequence of high temperatures. Avoid the use of the products used for the extinction of the fire in water.

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site. Send away individuals who are not suitably equipped. Wear protective gloves / protective clothing / eye protection / face protection.

Isolate the escapes or spills as long as this does not presuppose an additional risk for those who carry out this. In the event of potential contact with the

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paid product, the use of personal protection elements is mandatory (see section 8).

6.2. Environmental precautions

Do not disperse in the environment.

Product not classified as dangerous for the environment. Keep away from discharges, surface waters and groundwater.

6.3. Methods and material for containment and cleaning up

Use inert absorbent material to soak up leaked product. Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Before handling the product, consult all the other sections of this material information sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Wash hands after use.

A.- Precautions for safe manipulation

Satisfy the legislation in force regarding the prevention of risks at work. Keep order and cleaning and eliminate with safe methods (paragraph 6).

B.- Technical recommendations for the prevention of fires and explosions.

Non -flammable product under normal storage conditions, manipulation and use. It is recommended to slowly translate to avoid generating electrostatic charges that can involve flammable products. Consult paragraph 10 on conditions and materials to avoid.

C.- Technical recommendations to prevent ergonomic and toxicological risks.

Avoid eating or drinking during manipulation and then take care to wash with adequate products.

D.- Technical recommendations to prevent environmental risks

It is recommended to have absorbent material near the product (see section 6.3)

7.2. Conditions for safe storage, including any incompatibilities

Keep the product in clearly labelled containers. Store the containers sealed, in a well ventilated place, away from direct sunlight.

For more information see paragraph 10.5

7.3. Specific end use(s)

Except for the indications already specified, it is not necessary to make any special recommendation as the uses of this product.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Substances whose professional exposure limit values must be controlled in the workplace:

There are no values environmental limits for the substances that make up the mixture.

DNEL (workers):

Non -applicable

DNEL (population):



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Non -applicable
PNEC:
Non -applicable

8.2. Exposure controls

Comply with the safety measures usually applied when handling chemical substances.

Provide an emergency shower with face and eye wash station. Exposure levels must be kept as low as possible to avoid significant build-up in the organism. Manage personal protective equipment so as to guarantee maximum protection (e.g. reduction in replacement times).

HAND PROTECTION

If contact with the product is expected, it is recommended to protect your hands with work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, permeability time.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION

Wear airtight protective goggles (see standard EN ISO 16321).

RESPIRATORY PROTECTION

None required, unless indicated otherwise in the chemical risk assessment.

ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

As a prevention measure, the use of basic individual protective equipment is recommended, marked by the corresponding "Sigillo CE". For more information on individual protection equipment (storage, use, protection category, etc.), consult the information sheet provided by the Adpi manufacturer. The indications contained at this point refer to the pure product. The protection measures for the diluted product may vary according to its degree of dilution, use, the method of application, etc. To determine the obligation to install emergency showers and/or hills in the warehouses, the legislation relating to the imagination of chemicals applicable to any case will take into consideration. For more information, read paragraphs 7.1 and 7.2.

Controls of the Environmental Exposition:

By virtue of Community legislation on the protection of the environment, it is recommended to avoid the release of the product and its containers in the environment. For more information see paragraph 7.1.d.

Volatile organic compounds:

In application of Directive 2010/75/EU, this product presents the following characteristics:

- C.O.V. (Supply): 0 % weight
- density of C.O.V. at 20 °C: 0 kg/m³ (0 g/l)
- Middle carbon number: not applicable
- average molecular weight: not applicable

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Information
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Appearance	liquid
Colour	orange
Odour	mild
Melting point / freezing point	< -2 °C
Initial boiling point	> 300 °C
Flammability	not available
Lower explosive limit	not available
Upper explosive limit	not available
Flash point	> 60 °C
Auto-ignition temperature	not available
Decomposition temperature	not available
pH	7,5
Kinematic viscosity	not available
Solubility	not available
Partition coefficient: n-octanol/water	not available
Vapour pressure	< 300 kPa
Density and/or relative density	0,9
Relative vapour density	not available
Particle characteristics	not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

Information not available

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

No dangerous reaction is expected by variation in temperature and/or pressure.

10.4. Conditions to avoid



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None in particular. However the usual precautions used for chemical products should be respected.

10.5. Incompatible materials

Avoid strong acids and strong oxidizing agents.

10.6. Hazardous decomposition products

See header 10.3, 10.4 and 10.5 to specifically know the decomposition products. In dependence on the conditions of decomposition, as a consequence of the same it is possible that complex mixtures of chemicals are freed: carbon dioxide (CO₂), carbon monoxide and other organic compounds.

SECTION 11. Toxicological information

According to currently available data, this product has not yet produced health damages. Anyway, it must be handled according to good industrial practices.

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

Interactive effects

Information not available

<u>ACUTE TOXICITY</u> ATE (Inhalation) of the mixture:	Not classified (no significant component)
ATE (Oral) of the mixture:	Not classified (no significant component)
ATE (Dermal) of the mixture:	Not classified (no significant component)

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

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CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

SECTION 12. Ecological information

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

12.1. Toxicity

Information not available

12.2. Persistence and degradability

Information not available

12.3. Bioaccumulative potential

Information not available

12.4. Mobility in soil

Insoluble in water.

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage \geq than 0,1%.

12.6. Endocrine disrupting properties



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Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

12.7. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Code 13 02 07*: oil oils, gears and lubrication, easily biodegradable.
Type of residue: non -dangerous (Regulation (EU) n. 1357/2014)

Reuse, when possible. Neat product residues should be considered special non-hazardous waste.
Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

14.1. UN number or ID number

not applicable

14.2. UN proper shipping name

not applicable

14.3. Transport hazard class(es)

not applicable

14.4. Packing group

not applicable

14.5. Environmental hazards



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not applicable

14.6. Special precautions for user

not applicable

14.7. Maritime transport in bulk according to IMO instruments

Information not relevant

SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EU: None

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

None

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors

not applicable

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage \geq than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

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Information not available

15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

SECTION 16. Other information

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent, bioaccumulative and toxic
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PMT: Persistent, mobile and toxic
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very persistent and very bioaccumulative
- vPvM: Very persistent and very mobile
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
12. Regulation (EU) 2016/1179 (IX Atp. CLP)
13. Regulation (EU) 2017/776 (X Atp. CLP)
14. Regulation (EU) 2018/669 (XI Atp. CLP)
15. Regulation (EU) 2019/521 (XII Atp. CLP)
16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
17. Regulation (EU) 2019/1148
18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)



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- 19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
- 20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
- 21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
- 22. Delegated Regulation (UE) 2022/692 (XVIII Atp. CLP)
- 23. Delegated Regulation (UE) 2023/707
- 24. Delegated Regulation (UE) 2023/1434 (XIX Atp. CLP)
- 24. Delegated Regulation (UE) 2023/1435 (XX Atp. CLP)

- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

CALCULATION METHODS FOR CLASSIFICATION

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

Changes to previous review:

The following sections were modified:

10 / 12 / 13.