

according to Regulation (EC) No 1907/2006 (REACH) as amended

# **B-LEAF Coating 10401**

Creation date 14th October 2021

Revision date Version 1.0

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

**1.1. Product identifier** B-LEAF Coating 10401

Substance / mixture mixture

UFI 7YSW-80M5-100C-T6E0

Other mixture names Dispersion of Boron Nitride few layers

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

#### Mixture's intended use

Ingredients for solvent-based paints or coating paint. Industrial uses - coating and paint. Professional uses.

#### Mixture uses advised against

Other uses must be evaluated on a case-by-case.

#### Main intended use

PC-PNT-OTH Other paints and coating materials

#### 1.3. Details of the supplier of the safety data sheet

#### Manufacturer

Name or trade name BeDimensional S.p.A.

Address Via Lungotorrente Secca, n. 30/r 16163 - Genoa

Phone (+39) 010 2364170 E-mail info@bedimensional.it

Competent person responsible for the safety data sheet

Name Andrea Gamucci

E-mail a.gamucci@bedimensional.it

#### 1.4. Emergency telephone number

Poison Control Center of Milan 02 66101029 (CAV Ospedale Niguarda CaGranda -Milano)

#### **SECTION 2: Hazards identification**

# 2.1. Classification of the substance or mixture

### Classification of the mixture in accordance with Regulation (EC) No 1272/2008

The mixture is classified as dangerous.

Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Repr. 2, H361d STOT RE 2, H373

Full text of all classifications and hazard statements is given in the section 16.

### Most serious adverse physico-chemical effects

Highly flammable liquid and vapour.

# Most serious adverse effects on human health and the environment

Causes skin irritation. May cause drowsiness or dizziness. May be fatal if swallowed and enters airways. May cause damage to organs through prolonged or repeated exposure. Suspected of damaging the unborn child.

### 2.2. Label elements

# Hazard pictogram



Signal word

Danger



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#### **Hazardous substances**

toluene

#### **Hazard statements**

H225 Highly flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.
H361d Suspected of damaging the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

# **Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

P280 Wear protective gloves.

P301+P310 IF SWALLOWED: Immediately call a doctor.

P331 Do NOT induce vomiting.

P370+P378 In case of fire: Use powder extinguisher/sand/carbon dioxide to extinguish.

P403+P235 Store in a well-ventilated place. Keep cool.

#### 2.3. Other hazards

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. Mixture does not contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

### **SECTION 3: Composition/information on ingredients**

#### 3.2. Mixtures

### **Chemical characterization**

Mixture of substances and additives specified below.

# ${\bf Mixture\ contains\ these\ hazardous\ substances\ and\ substances\ with\ the\ highest\ permissible\ concentration\ in\ the\ working\ environment}$

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
Index: 601-021-00-3 CAS: 108-88-3 EC: 203-625-9	toluene		Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Repr. 2, H361d STOT RE 2, H373	1, 2

#### **Notes**

- 1 Substance with a Union workplace exposure limit.
- 2 The use of the substance is restricted by Annex XVII of REACH Regulation

Full text of all classifications and hazard statements is given in the section 16.

# **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

Do not perform artificial respiration without self-protection (e.g. a mask). Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet. If unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards and make sure that airways are free; never induce vomiting. If the person vomits by himself, make sure that the vomit is not inhaled. In life threatening conditions first of all provide resuscitation of the affected person and ensure medical assistance. Respiratory arrest - provide artificial respiration immediately. Cardiac arrest - provide indirect cardiac massage immediately.

#### If inhaled

Take care of your own safety, do not let the affected person walk! Terminate the exposure immediately; move the affected person to fresh air. Beware of the contaminated clothes. Depending on the situation, call the medical rescue service and ensure medical treatment considering the frequent need of further observation for at least 24 hours.



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#### If on skin

Remove contaminated clothes. Wash the affected area with plenty of water, lukewarm if possible. Soap, soap solution or shampoo should be used if there is no skin injury. Provide medical treatment if skin irritation persists. Rinse skin with water or shower.

#### If in eves

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. Rinsing should continue at least for 10 minutes. Provide medical treatment, specialized if possible.

#### If swallowed

If the affected person vomits, make sure to prevent inhalation of the vomit (as there is a danger of lung damage after inhalation of these liquids in the airways also in infinitesimal amount). Provide medical treatment considering the frequent need of further observation for at least 24 hours. Bring an original container with the label and the Safety Data Sheet of the given substance as appropriate.

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

#### If inhaled

Cough, headache. May cause drowsiness or dizziness.

#### If on skin

Causes skin irritation.

### If in eyes

Not expected.

#### If swallowed

Irritation, nausea.

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

Symptomatic treatment.

### **SECTION 5: Firefighting measures**

# 5.1. Extinguishing media

# Suitable extinguishing media

Alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist.

# Unsuitable extinguishing media

Water - full jet.

# 5.2. Special hazards arising from the substance or mixture

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

### 5.3. Advice for firefighters

Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit only where personal (close) contact is likely. Use a self-contained breathing apparatus and full-body protective clothing. Closed containers with the product near the fire should be cooled with water. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

### **SECTION 6: Accidental release measures**

# 6.1. Personal precautions, protective equipment and emergency procedures

Provide sufficient ventilation. Highly flammable liquid and vapour. Remove all ignition sources. Use personal protective equipment for work. Follow the instructions in the Sections 7 and 8. Do not inhale aerosols. Prevent contact with skin and eyes.

#### 6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water.

#### 6.3. Methods and material for containment and cleaning up

Spilled product should be covered with suitable (non-flammable) absorbing material (sand, diatomaceous earth, earth and other suitable absorption materials); to be contained in well closed containers and removed as per the Section 13. In the event of leakage of the substantial amount of the product, inform fire brigade and other competent bodies. After removal of the product, wash the contaminated site with plenty of water. Do not use solvents.

# 6.4. Reference to other sections

See the Section 7, 8 and 13.



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# **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Prevent formation of gases and vapours in flammable or explosive concentrations and concentrations exceeding the occupational exposure limits. The product should be used only in the areas where it is not in contact with open fire and other ignition sources. Use non-sparking tools. Use of antistatic clothes and footwear is recommended. Do not inhale aerosols. Prevent contact with skin and eyes. No smoking. Obtain special instructions before use. Wash hands and exposed parts of the body thoroughly after handling. Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Take action to prevent static discharges.

#### 7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. Do not expose to sunlight. Store locked up. Keep container tightly closed. Keep cool.

#### The specific requirements or rules relating to the substance/mixture

Solvent vapours are heavier than air and accumulate especially near the floor where they may form an explosive mixture with the air.

#### 7.3. Specific end use(s)

not available

#### SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

The mixture contains substances for which occupational exposure limits are set.

#### **European Union**

#### Commission Directive 2006/15/EC

Substance name (component)	Туре	Value	Note
	OEL 8 hours	192 mg/m <sup>3</sup>	
	OEL 8 hours	50 ppm	
toluene (CAS: 108-88-3)	OEL 15 minutes	384 mg/m³	Skin
	OEL 15 minutes	100 ppm	

### Italy Leg. April 9, 2008, no. 81

Substance name (component)	Туре	Value	Note
taluana (CAC, 100,00,3)	8 hours	192 mg/m <sup>3</sup>	Chin
toluene (CAS: 108-88-3)	8 hours	50 ppm	Skin

# 8.2. Exposure controls

Follow the usual measures intended for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. If exposure limits cannot be observed in this mode, suitable protection of airways must be used. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

# Eye/face protection

Protective goggles.

# Skin protection

Hand protection: Protective gloves resistant to the product. When choosing appropriate thickness, material and permeability of the gloves, observe recommendations of their particular manufacturer. Observe other recommendations of the manufacturer. Other protection: protective workwear. Contaminated skin should be washed thoroughly.

# Respiratory protection

Mask with a filter against organic vapours in a poorly ventilated environment.

#### Thermal hazard

Not available.

### **Environmental exposure controls**

Observe usual measures for protection of the environment, see Section 6.2.



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# **SECTION 9: Physical and chemical properties**

### 9.1. Information on basic physical and chemical properties

Physical state Colour data not available Odour data not available Melting point/freezing point data not available Boiling point or initial boiling point and boiling range data not available Flammability data not available Lower and upper explosion limit data not available Flash point data not available data not available Auto-ignition temperature Decomposition temperature data not available data not available Kinematic viscosity data not available Solubility in water data not available Partition coefficient n-octanol/water (log value) data not available Vapour pressure data not available Density and/or relative density data not available Relative vapour density data not available Particle characteristics data not available

#### Form

### 9.2. Other information

not available

# **SECTION 10: Stability and reactivity**

# 10.1. Reactivity

not available

### 10.2. Chemical stability

The product is stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

Unknown.

#### 10.4. Conditions to avoid

The product is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost.

### 10.5. Incompatible materials

Protect against strong acids, bases and oxidizing agents.

#### 10.6. Hazardous decomposition products

Not developed under normal uses. Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire.

#### **SECTION 11: Toxicological information**

# 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Inhalation of solvent vapors above values exceeding exposure limits for working environment may result in acute inhalation poisoning, depending on the level of concentration and exposure time. No toxicological data is available for the mixture.

#### Acute toxicity

Based on available data the classification criteria are not met.

### Skin corrosion/irritation

Causes skin irritation.

# Serious eye damage/irritation

Based on available data the classification criteria are not met.



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#### Respiratory or skin sensitisation

Based on available data the classification criteria are not met.

#### Germ cell mutagenicity

Based on available data the classification criteria are not met.

#### Carcinogenicity

Based on available data the classification criteria are not met.

# Reproductive toxicity

Suspected of damaging the unborn child.

### Toxicity for specific target organ - single exposure

May cause drowsiness or dizziness.

### Toxicity for specific target organ - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

#### **Aspiration hazard**

May be fatal if swallowed and enters airways.

#### 11.2. Information on other hazards

not available

# **SECTION 12: Ecological information**

# 12.1. Toxicity

#### **Acute toxicity**

Data for the mixture are not available.

### 12.2. Persistence and degradability

not available

### 12.3. Bioaccumulative potential

Not available.

# 12.4. Mobility in soil

Not available.

# 12.5. Results of PBT and vPvB assessment

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

### 12.6. Endocrine disrupting properties

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

### 12.7. Other adverse effects

Not available.

# **SECTION 13: Disposal considerations**

# 13.1. Waste treatment methods

Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.



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### Waste management legislation

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

#### **SECTION 14: Transport information**

14.1. UN number or ID number

UN 1993

14.2. UN proper shipping name

FLAMMABLE LIQUID, N.O.S.

14.3. Transport hazard class(es)

3 Flammable liquids

14.4. Packing group

II - substances presenting medium danger

14.5. Environmental hazards

not relevant

14.6. Special precautions for user

Reference in the Sections 4 to 8.

14.7. Maritime transport in bulk according to IMO instruments

not relevant

# **Additional information**

Hazard identification No.	33
UN number	1993
Classification code	F1
Safety signs	3



# Air transport - ICAO/IATA

Packaging instructions passenger 355
Cargo packaging instructions 366

Marine transport - IMDG

EmS (emergency plan) F-E, S-E MFAG 310

# **SECTION 15: Regulatory information**

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

Legislative Decree No. 200/2011 - Sanctions for the violation of the provisions on the export and import of dangerous chemical substances – Official Gazette no. 283 of 05 December 2011. Legislative decree no. 81 of 09 April 2008 on health and safety protection of employees in the workplace. Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16th 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, as amended.

# Restrictions pursuant to Annex XVII of Regulation (EC) No. 1907/2006 (REACH), as amended

# toluene

Restriction	Conditions of restriction
	Shall not be placed on the market, or used, as a substance or in mixtures in a concentration equal to or greater than $0.1~\%$ by weight where the substance or mixture is used in adhesives or spray paints intended for supply to the general public.



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### 15.2. Chemical safety assessment

not available

### **SECTION 16: Other information**

# A list of standard risk phrases used in the safety data sheet

H225 Highly flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.
H361d Suspected of damaging the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

#### Guidelines for safe handling used in the safety data sheet

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

P280 Wear protective gloves.

P301+P310 IF SWALLOWED: Immediately call a doctor.

P331 Do NOT induce vomiting.

P370+P378 In case of fire: Use powder extinguisher/sand/carbon dioxide to extinguish.

P403+P235 Store in a well-ventilated place. Keep cool.

#### Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

### Key to abbreviations and acronyms used in the safety data sheet

ADR European agreement concerning the international carriage of dangerous goods by

road

BCF Bioconcentration Factor
CAS Chemical Abstracts Service

CLP Regulation (EC) No 1272/2008 on classification, labelling and packaging of

substance and mixtures

EC Identification code for each substance listed in EINECS

EINECS European Inventory of Existing Commercial Chemical Substances

EmS Emergency plan EU European Union

EuPCS European Product Categorisation System IATA International Air Transport Association

IBC International Code For The Construction And Equipment of Ships Carrying

**Dangerous Chemicals** 

ICAO International Civil Aviation Organization IMDG International Maritime Dangerous Goods

INCI International Nomenclature of Cosmetic Ingredients
ISO International Organization for Standardization
IUPAC International Union of Pure and Applied Chemistry

log Kow Octanol-water partition coefficient

MARPOL International Convention for the Prevention of Pollution from Ships

OEL Occupational Exposure Limits

PBT Persistent, Bioaccumulative and Toxic

ppm Parts per million

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals

RID Agreement on the transport of dangerous goods by rail

UN Four-figure identification number of the substance or article taken from the UN

Model Regulations

UVCB Substances of unknown or variable composition, complex reaction products or

biological materials

VOC Volatile organic compounds

vPvB Very Persistent and very Bioaccumulative



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Asp. Tox. Aspiration hazard
Flam. Liq. Flammable liquid
Repr. Reproductive toxicity
Skin Irrit. Skin irritation

STOT RE Specific target organ toxicity - repeated exposure STOT SE Specific target organ toxicity - single exposure

#### **Training guidelines**

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

### Recommended restrictions of use

not available

#### Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

#### More information

Classification procedure - calculation method.

#### **Statement**

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.