



BEDIMENSIONAL

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 of the European Parliament and of the Council, in valid version

B-LEAF Coating 11401

Creation date	22/04/2022	Version number	1.0
Revision date			

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

1.1. Product identifier

Substance/mixture	B-LEAF Coating 11401 mixture
UFI	XUJ0-D1U4-A007-9K4H
Other name of the mixture	
Boron Nitride dispersion few layers	

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

The product is used as a component of paints and as a coating agent. Industrial uses - Coatings and paints. Professional uses

Main identified uses

PC-PNT-OTH Other paints and coating materials

Uses of the mixture not recommended

Uses other than recommended must be assessed on a case-by-case basis.

1.3. Details of the supplier of the safety data sheet

Manufacturer

Name or company name	BeDimensional S.p.A.
Address	Via Lungotorrente Secca, n. 30/r 16163 - Genova
Telephone	010 2364170
E-mail	info@bedimensional.it

The e-mail address of the competent person responsible for the safety data sheet

Name	Andrea Gamucci
E-mail	a.gamucci@bedimensional.it

1.4. Emergency telephone number

Niguarda Ca' Granda Hospital - Milan - +39 02-661029
CAV National Centre for Toxicological Information - Pavia - +39 0382-24444
Azienda Ospedaliera Papa Giovanni XXII - Bergamo - +39 800 883300
Az. Osp. "Careggi" U.O. Medical Toxicology - Florence - +39 055-7947819
CAV "A. Gemelli" Polyclinic - Rome - +39 06-3054343
CAV Policlinico "Umberto I"- Rome - +39 06-49978000
CAV Children's Hospital Bambino Gesù DEA Emergency and Acceptance Department - Rome - +39 06-68593726
Az. Osp. "A. Cardarelli" - Naples - Naples - +39 081-7472870
Az. Osp. Univ. Foggia - Foggia - +39 800 183459
Azienda Ospedaliera Integrata Verona - Verona - +39 37126800011858

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification of the mixture according to Regulation (EC) No 1272/2008

Mixture classified as hazardous.

Flam. Liq. 3, H226

Full text of all classifications and hazard statements can be found in section 16.

Most important adverse physicochemical effects

Flammable liquid and vapours.

Most important adverse effects on human health and the environment

No other

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2.2. Label elements Danger

pictogram



Warning

Attention

Indications of danger

H226 Flammable liquid and vapours.

Cautionary Advice

P210 Keep away from heat, hot surfaces, sparks, open flames or other sources of ignition. Do not smoke.

P233 Keep the container tightly closed.

P261 Breathe in mist/vapours/aerosols.

P273 Do not release into the environment.

P370+P378 In case of fire: use powder/carbon dioxide extinguishers to extinguish.

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

P501 Dispose of product/container in accordance with national regulations.

2.3. Other dangers

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. The mixture does not contain substances meeting criteria for PBT or vPvB substances in accordance with Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

SECTION 3: composition/information on ingredients

3.2. Mixtures

Mixture contains these hazardous substances and substances with occupational exposure limit values

Identification numbers	Substance name	Content in % by weight	Classification according to Regulation (EC) No 1272/2008	Annexes
Index: 607-195-00-7 CAS: 108-65-6 EC: 203-603-9	1-methyl-2-methoxyethyl acetate	85-95	Flam. Liq. 3, H226	1
CAS: 10043-11-5 EC: 233-136-6 Reg. no.: 01-2119947399-20-xxxx	Boron nitride (BN)	0-20	classification not indicated	

Annotations

1 Substance with a workplace exposure limit set at Union level. Full text of all classifications

and hazard statements can be found in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

If in doubt or if symptoms are present, consult a doctor.

In case of inhalation

Stop exposure immediately; remove the contaminated person to fresh air. Protect person from exposure to cold. Administer medical treatment if symptoms of discomfort occur.

In case of skin contact

Remove contaminated clothing. Wash the contaminated area with a large quantity of water, preferably lukewarm. A soap, solution or shampoo should only be used if no skin wounds are present. Rinse the skin or take a shower.



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In case of contact with the eyes

Rinse the eyes immediately with running water, open the eyelids (rubbing them open if necessary); remove contact lenses from the contaminated person immediately if they are damaged. It may be necessary to rinse for a further 10 minutes. Administer medical treatment, possibly specialised.

In case of ingestion

Rinse the mouth with water and make the person drink 2-5 dl of water. Administer medical treatment if the person has health problems.

4.2. Main symptoms and effects, both acute and delayed In case of inhalation

Not foreseen.

In case of skin contact

Causes skin irritation.

In case of contact with eyes

Causes severe eye irritation. In

case of ingestion

Irritation, nausea.

4.3. Indication of any need for immediate medical attention and special treatment

Symptomatic treatments.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam with carbon dioxide, powder and water mist system.

Unsuitable extinguishing media

Water jet.

5.2. Special hazards arising from the substance or mixture

In the event of a fire, the formation of carbon monoxide, carbon dioxide or other toxic gases could occur. Inhalation of hazardous degradation products (pyrolysis) could cause serious damage to health.

5.3. Recommendations for firefighters

Self-contained breathing apparatus with chemical protective clothing only if (close) contact with the person is likely. Use an insulating self-contained breathing apparatus and full-body protective clothing. If sealed containers containing the product are near heat sources, they must be cooled with water. Dispersal of contaminated fire with a fire extinguisher is not permitted, as this could lead to the release of such contaminated substances into drains or surfaces and watercourses.

SECTION 6: measures in case of accidental release

6.1. Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Flammable liquids and vapours. Remove all sources of ignition. Use personal protective equipment for work. Follow the instructions in section 7 and section 8. Avoid contact with skin and eyes.

6.2. Environmental precautions

Avoid contamination of soil and sewage surfaces or groundwater.

6.3. Methods and materials for containment and remediation

Spilled product should be covered with suitable (non-flammable) absorbent materials (powders, diatomaceous earth, soil and other suitable absorbent materials); it should be stored in tightly sealed containers and then disposed of as indicated in section 13. In the event of a spillage of a large quantity of product, please inform the fire brigade and other local authorities. After removing the product, wash the contaminated area with plenty of water. Do not use solvents.

6.4. Reference to other sections

See Sections 7, 8 and 13.

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SECTION 7: Handling and Storage

7.1. Precautions for safe handling

Avoid the formation of gases and vapours with flammable or explosive concentrations that could exceed the permissible exposure limits during work. The product should only be used in areas where there is no direct contact with fire and other sources of ignition. Use non-sparking tools. It is recommended to use antistatic footwear and clothing. Avoid contact with skin and eyes. Do not smoke. Wash hands and most exposed parts of the body thoroughly after use. Use personal protective equipment as explained in section 8. Observe the legally valid health and safety regulations. Ground and earth the container and the receiving device. Use explosion-proof electrical/ventilation/lighting systems. Take care to prevent electrostatic discharges.

7.2. Conditions for safe storage, including any incompatibilities

Store inside carefully closed, dry containers in well-ventilated areas suitable for this purpose. Do not expose to sunlight. Keep container tightly closed. Store in a cool place.

Specific requirements or rules concerning the substance/mixture

Solvent vapours are dense relative to air and accumulate particularly close to the plane where an explosive mixture could form on contact with air.

7.3. Particular end uses

not indicated

SECTION 8: Exposure controls/personal protection

8.1. Control Parameters

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

European Community Commission Directive 2000/39/EC

Name of substance (component)	Type	Value	Annotation
1-methyl-2-methoxyethyl acetate (CAS: 108-65-6)	OEL 8 hours	275 mg/m ³	Leather
	OEL 8 hours	50 ppm	
	OEL 15 minutes	550 mg/m ³	
	OEL 15 minutes	100 ppm	

ItalyD

.lgs. 9 April 2008, n. 81

Name of substance (component)	Type	Value	Annotation
1-methyl-2-methoxyethyl acetate (CAS: 108-65-6)	8 hours	275 mg/m ³	Leather
	8 hours	50 ppm	
	Short term (15 minutes)	550 mg/m ³	
	Short term (15 minutes)	100 ppm	

8.2. Exposure controls

Do not eat, drink or smoke while working. Wash hands with soap and water after work and before a break.

Eye/face protection

Protective goggles (EN 166).

Skin protection

Hand protection: product-resistant protective gloves (EN 374). Please observe your manufacturer's recommendations when choosing appropriate densities, appropriate materials and good glove permeability. Observe other manufacturer's recommendations. Additional protection: protective work clothing. Contaminated skin must be washed meticulously.



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Respiratory protection

Use of half-mask with filter against organic vapours or appropriate use of self-contained breathing apparatus if exposure to the limit values of substances is higher or if there are poorly ventilated places (EN 141).

Thermal hazard

Not available.

Environmental exposure controls

Observe the safety measures relating to the environment; for these, please refer to section 6.2.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical-liquid state

Colour white

Not available

Melting point/freezing point Date not available

Boiling point or initial boiling point and boiling range date not available

Flammability date not available

Lower and upper explosive limit Date not available

Flash point date not available

Self-ignition temperature not available

Decomposition temperature date not available

pH data not available

Kinematic viscosity date not available

Water solubility not available

Partition coefficient n-octanol/water (logarithmic value) date not available

Vapour pressure date not available

Density and/or relative density date not available

Relative vapour density date not available

Particle characteristics not available

Form data not available

9.2. Other information

not

indicated

SECTION 10: Stability and reactivity

10.1. Reactivity

not indicated

10.2. Chemical stability

The product is stable under normal conditions of use.

10.3. Possibility of dangerous reactions

Unknown.

10.4. Conditions to avoid

The product is stable and does not need any degradation after normal use. Protect from flames, sparks, overheating and oxidising agents.

10.5. Incompatible materials

Protect against strong acids, bases and oxidising agents.

10.6. Hazardous decomposition products

No processing according to normal use. Due to high temperatures and contact with heat sources, hazardous substances such as carbon monoxide and carbon dioxide may be formed.



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SECTION 11: Toxicological information

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

Inhalation of solvent vapours exceeding the exposure limit values within the working environment could lead to intense inhalation of poisons, depending on concentration level and exposure time. No toxicological data is available for the mixture.

Acute toxicity

Based on the available data, it is not possible to reveal a standard criteria classification.

Skin corrosion/irritation

Based on the available data, it is not possible to reveal a standard criteria classification.

Severe eye damage/irritation

Based on the available data, it is not possible to reveal a standard criteria classification.

Respiratory or skin sensitisation

Based on the available data, it is not possible to reveal a standard criteria classification.

Germ cell mutagenicity

Based on the available data, it is not possible to reveal a standard criteria classification.

Carcinogenicity

Based on the available data, it is not possible to reveal a standard criteria classification.

Reproductive toxicity

Based on the available data, it is not possible to reveal a standard criteria classification.

Specific target organ toxicity (STOT) - single exposure

Based on the available data, it is not possible to reveal a standard criteria classification.

Specific target organ toxicity (STOT) - repeated exposure

Based on the available data, it is not possible to reveal a standard criteria classification.

Danger in case of aspiration

Based on the available data, it is not possible to reveal a standard criteria classification.

11.2. Information on other dangers

not indicated

SECTION 12: ecological information

12.1. Toxicity

Acute toxicity

Data for the mixture are not available.

12.2. Persistence and degradability

not indicated

12.3. Bioaccumulative potential

Not available.

12.4. Mobility in the soil

Not available.

12.5. Results of PBT and vPvB assessment

The product does not contain any substances fulfilling the criteria for the identification of persistent, bioaccumulative and toxic substances (PBT substances) and very persistent and very bioaccumulative substances (vPvB substances) in accordance with Annex XIII of Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (abbreviation: REACH) as amended.



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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

Danger of environmental contamination; waste disposal in accordance with local and/or national regulations. Act in accordance with current waste sorting regulations. Any unused product and any contaminated packaging must be placed inside labelled waste collection containers and handed over for disposal to a waste disposal person (such as a specialised waste disposal company) who is authorised for each special waste disposal activity. Do not empty unused product into the sewage system. The product must not be considered as solid urban waste. Empty containers may be used as waste incinerators to produce energy or may be disposed of in landfills by appropriate classification. Perfectly cleaned containers may be recycled.

Waste regulations

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste with subsequent amendments. Decision 2000/532/EC for the establishment of a list of wastes with subsequent amendments.

SECTION 14: Transport Information

14.1. UN or ID number

UN 1993

14.2. Official UN transport designation

FLAMMABLE LIQUID, N.O.S.

14.3. Transport hazard classes

3Flammable liquids

14.4. Packaging group

III - slightly hazardous materials

14.5. Environmental hazards

irrelevant

14.6. Special precautions for users

Further recommendations can be found from section 4 to section 8.

14.7. Maritime transport in bulk according to IMO Acts

irrelevant

Further information

Hazard Identification No.

30

UN No.

1993

Classification code

F1

Danger labels

3



Ship transport - IMDG

EmS (emergency plan)

F-E, S-E

MFAG

310



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SECTION 15: Regulatory Information

15.1. Safety, health and environmental laws and regulations specific to the substance or mixture

Legislative Decree No. 200/2011 - Sanctions for the violation of the provisions on the export and import of hazardous chemicals - Official Gazette No. 283 of 05 December 2011. Legislative Decree No 81 of 9 April 2008 on the protection of health and safety in the workplace. Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (abbreviation: REACH), as established by the European Chemicals Agency, replacing 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 16 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.

15.2. Chemical Safety Assessment

not indicated

SECTION 16: other information

List of hazard statements, used in the safety data sheet

H226 Flammable liquid and vapours.

List of instructions for safe handling, used in the safety data sheet.

P210 Keep away from heat, hot surfaces, sparks, open flames or other sources of ignition. Do not smoke.

P370+P378 In case of fire: use powder/carbon dioxide extinguishers to extinguish.

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

P501 Dispose of product/container in accordance with national regulations.

P273 Do not release into the environment.

P233 Keep the container tightly closed.

P261 Breathe in mist/vapours/aerosols.

Further important information concerning the health and safety of human beings

The product must not be used for purposes other than those set out in section 1, unless there are specialised uses that are approved by the manufacturer or importer. The user is responsible for complying with all regulations related to health protection.

Key to abbreviations and acronyms used in the safety data sheet

ADRA European Agreement concerning the International Carriage of Dangerous Goods by Road

AGW Workplace exposure limits

BCFF bioconcentration factor

CAS Chemical Abstracts Service

CEN Number ES is the numerical identifier of substances in the ES list

CLP REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

Volatile organic compounds

EINECS Inventory of Existing Commercial Chemical Substances

EmSPiano di emergenza

EuPCSS European Product Classification System

IATA Association of International Air Carriers

IBC The International Code for the Construction and Equipment of Ships Carrying Dangerous Chemical Substances

ICAO International Civil Aviation Organisation

IMDG International Maritime Transport of Dangerous Goods

International Nomenclature of Cosmetic Ingredients

ISOL International Organisation for Standardisation

IUPAC International Union for Pure and Applicable Chemistry

log Kow Coefficient of partition between octanol and water

MAK Maximum concentration at work

MARPOL The International Convention for the Prevention of Pollution from Ships

OELimits of workplace exposure



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PBTP Persistent , bioaccumulative and toxic

ppmParts per million

REACHRegistration , Evaluation, Authorisation and Restriction of Chemicals

RIDA Agreement on the transport of dangerous goods by rail

EUEuropean Union

UNIThe four-digit identification number of the substance or article taken from the UN Standard Regulations

UVCBSubstances of unknown or variable composition, products of a complex reaction or biological materials

vPvBM Very persistent and very bioaccumulative

Flam. Liq. Flammable liquid

Guidelines for Training Courses

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

Recommended limited use

not indicated

Information on the source of the data used to compile the safety data sheet.

REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) with subsequent amendments. REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended.

Submission of data provided by the manufacturer of the substance or mixture, if available; information from registration dossiers.

Other information

Classification procedure - calculation method.

Declaration

The safety data sheet provides information to ensure safety and health protection at work as well as environmental protection. The information provided refers to the current state of knowledge and experience regarding the product and complies with the legal regulations in force. The information is not to be understood as a guarantee for the compatibility and use of the product for particular purposes.