Safety Data Sheet

Conforms to Regulation (CE) No. 1907/2006 (REACH)
Amended by Regulation (CE) 2020/878
Conforms to Regulation (CE) No. 1272/2008 (CLP)

Version 4.0
Revision date: 11/2026

Section 1 - Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Commercial name: PES GIALLO BUC 1028
Code: PB1110280001
Description: Thermosetting powder coating

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

Identified uses: Powder coating for electrostatic painting of metal surfaces/objects.
Uses advised against: The product should only be used for industrial and/or professional purposes - it is not intended for any direct use by consumer.

1.3. Details of the supplier of the safety data sheet

Company: BULLCREM LACK srl
Registered Office and Plant
Via del lavoro, 20 Cap 31039 Riese Pio X (TV) Italy
Phone: +39 0423 755 547
Fax:
E-mail address of person responsible for this SDS: reach@bullcrem-lack.com

1.4. Emergency number

Official national advisory body/Poison control centre

See the list of Poison Control Centres operating 24 hours a day:

CAV "Ospedale Pediatrico Bambino Gesù" – Roma	Tel. (+39) 06.6859.3726
CAV "Azienda Ospedaliera Università di Foggia" – Foggia	Tel. 800.183.459
CAV "Azienda Ospedaliera A. Cardarelli" – Napoli	Tel. (+39) 081.545.3333
CAV Policlinico "Umberto I" – Roma	Tel. (+39) 06.4997.8000
CAV Policlinico "A. Gemelli" – Roma	Tel. (+39) 06.305.4343
CAV Azienda Ospedaliera "Careggi" U.O. Tossicologia Medica – Firenze	Tel. (+39) 055.794.7819
CAV Centro Nazionale di Informazione Tossicologica – Pavia	Tel. (+39) 0382.24.444
CAV Ospedale Niguarda – Milano	Tel. (+39) 02.66.1010.29
CAV Azienda Ospedaliera Papa Giovanni XXIII – Bergamo	Tel. 800.88.33.00
CAV Centro Antiveleni Veneto – Verona	Tel. 800.011.858

Manufacturer emergency telephone number: +39 0423 755 547
(during office hours: 8.00 am -12.00 pm/2.00 pm - 6.00 pm)

Section 2 - Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 (CLP)

The product is not classified as hazardous in accordance with Regulation (EC) No. 1272/2008 (CLP)

2.2. Label elements

Labelling (REGULATION (EC) No 1272/2008)

This product is not subject to labelling under the criteria of Regulation (EC) No 1272/2008 (CLP)

Hazard pictograms: None

Indications of danger: None

Precautionary statement: None

Special Provisions: EUH212 Warning! Hazardous respirable dust may be formed when used. Do not breathe dust.

EUH210 Safety data sheet available on request.

Special provisions according to Annex XVII of REACH and subsequent amendments: None

2.3. Other hazards

This mixture contains no components considered to be Persistent, Bioaccumulative or Toxic (PBT), nor very Persistent and very Bioaccumulative (vPvB) at levels of 0.1% or higher.

Nonetheless, the usual precautions for handling chemical products must be observed at all times. In particular, given that the product is in powder form, avoid contact with eyes, ingestion and inhalation of the dust.

What's more, people with allergies or breathing difficulties should not handle the powder.

The accumulation of fine dust, in the presence of air, leads to the risk of dust explosion.

Irritation to the eyes and respiratory tract may occur due to prolonged exposure to dust.

Section 3 - Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Chemical characterisation

A mixture of synthetic resins, inert fillers and organic and inorganic pigments

Chemical name	CAS NO.	EC no.	No. registration REACH	CLP Classification	Conc. %w/w	Notes
Bismuth vanadate	14059-33-7	237-898-0	01-2119486965-17-0002	STOT RE 2; H373	>=5% <=15%	
Titanium dioxide	13463-67-7	217-461-0	01-2119489379-17	The product is not considered danger-ous in accordance with EC Regulation 1272/2008 (CLP).	>=1% <=5%	V W 10 EUH210 EUH212

Detailed notes:

Note V: When the substance is to be placed on the market in the form of fibers (diameter < 3µm, length > 5µm and aspect ratio ≥ 3:1) or particles fulfilling the WHO fiber criteria or in particle form having a modified surface chemistry, the hazardous properties shall be assessed in accordance with Title II of this Regulation, to ascertain whether a higher category (Carc. 1B or 1A) and/or additional routes of exposure (oral or dermal route) should be applied.

Note W: it has been observed that the danger of carcinogenicity of the substance arises when the quantity of inhaled respirable dust is such as to significantly compromise the pulmonary mechanisms of expulsion of the particles.

This note aims to describe the particular toxicity of the substance and is not a classification criterion under this Regulation.

Note 10: The classification as an inhalation carcinogen only applies to mixtures in the form of Powders containing ≥ 1% titanium dioxide in the form of, or incorporated into, particles with an aerodynamic diameter ≤ 10µm.

For mixtures containing titanium dioxide:

EUH 210 – Safety data sheet available on request.

EUH 212 – Attention! If used, dangerous respirable dust may form. Do not breathe dust.

See section 16 for explanations of the abbreviations used for H phrases

Section 4 - First-aid measures

4.1. Description of first aid measures

General advice

If symptoms persist or if in any doubt, please consult a doctor. Do not administer anything to an unconscious person.

Skin contact

Do not use solvents or thinners. Remove/Take off immediately all contaminated clothing.

Immediately wash any areas of the body that have or may have come into contact with the product, using plenty of soap and water.

If skin irritation persists: seek medical advice/attention.

Inhalation

Ventilate the area. Avoid breathing in dust.

Dust inhalation can cause wheezing, tightness of the chest, a sore throat and coughing. Seek fresh air. Should irregular breathing or respiratory arrest occur, perform artificial respiration if you have the skills to do so.

If symptoms persist, seek medical advice/attention

Ingestion

Do not induce vomiting. Seek medical attention immediately, presenting the Safety Data Sheet.

Eye Contact

Remove contact lenses, if worn. Immediately and thoroughly wash with running water, keeping the eyes open, for at least 10 minutes; then protect the eyes with sterile gauze or a clean, dry tissue. Seek medical attention. Do not use eye drops or ointments of any kind prior to visiting or receiving advice from an eye doctor.

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

There are no known effects due to exposure to the product.

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

See Section 4.1.

Section 5 - Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

CO_2, foam and chemical powders depending on the materials on fire.

Unsuitable extinguishing media

Do not use full or high-pressure water jets. Direct water jets can raise clouds of flammable dust from surrounding storage areas, creating the risk of violent secondary explosions

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

The flame produces dense black smoke that contains dangerous products resulting from the combustion. Inhalation of decomposition products may cause damage to one's health.

Hazardous decomposition products

In case of fire, carbon monoxide, carbon bioxide, nitrogen oxides may form.

5.3. Advice for firefighters

Fire and explosion hazards

The solid product is not readily flammable, but may form explosive dust-air mixtures.

Special protective equipment and procedures to combat fires

Avoid breathing fumes. Use respiratory protection; use EN137 self-contained breathing apparatus or specific combined filters for fire fumes or gases.

Wear appropriate, fully flame-retardant clothing.

Section 6 - Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1 Personal precautions

Avoid formation of dust and do not inhale dust.

6.1.2. In case of emergency

All persons not assigned to emergency operations should leave the affected area. Remove ignition sources.

Use adequate ventilation. Wear protective eyewear, gloves and clothing and pay attention to slippery surfaces in contaminated areas. Do not walk through spilt material.

6.2. Environmental precautions

Do not allow the product to go down drains. In the case of contamination of rivers, lakes, sewers or drains, inform the respective competent authorities in accordance with local laws in force.

6.3. Methods and material for containment and cleaning up

Collect the accidentally-spilled material using a vacuum cleaner ATEX certificated and deposit it in the containers provided for such purpose then dispose of according to local regulations.

Avoid formation of dust.

6.4. Reference to other sections

See section 7 for details on safe handling, 8 for personal protection and 13 for information on disposal.

Section 7 - Handling and storage

7.1. Precautions for safe handling

7.1.1 Warnings for safe use

Avoid formation and dispersion of dust from the product in the air.

Should dust formation occur, take appropriate measures and prevent the formation of electrostatic charges. Keep away from sources of ignition.

Appropriate individual and collective protection measures are required to safeguard against explosion risks.

Use only earthed tubes or ducts when pouring.

Lighting and electrical devices must comply with the provisions under CEI regulations to prevent the dust coming into contact with hot surfaces, sparks or other sources of ignition.

No smoking.

7.1.2. Hygiene measures

Do not consume food or drink whilst handling.

No smoking.

Users of the product must remove contaminated clothing and wash hands and face before entering dining areas.

7.2. Conditions for safe storage, including any incompatibilities

Storage and container requirements

Store at a temperature below 30°C in the absence of moisture, in a cool, dry place, protected from direct sunlight, far from heat sources and flammable products.

Affix a no smoking warning.

Lighting and electrical devices must comply with the provisions under CEI regulations to prevent the dust coming into contact with hot surfaces, sparks or other sources of ignition.

Store the product in its original packaging, tightly sealed and stored upright, so as to avoid accidental spillage.

Instructions for storing together with other products

Store separately, away from any oxidising and strongly alkaline agents and acidic materials.

Do not store together with explosive, compressed or liquefied products nor those containing pressurized gases, aerosols, flammable liquids, oxidising or toxic non-combustible products nor near contagious products.

7.3. Specific end use(s)

See the "Powder Technology Safety Guidelines" (CEPE, 5th edition, 2001).

Section 8 - Exposure controls/personal protection

8.1. Control parameters

Titanium dioxide; CAS: 13463-67-7

- OEL type: National – TWA(8h): 4 mg/m3 - Notes: Respirable aerosol
- OEL type: ACGIH – TWA(8h): 10 mg/m3 - Notes: A4 – LRT irr

DNEL Exposure Limit Values

Substance name	End use	Route of exposure	Potential health effects	Maximum Value

Bismuth vanadate	Consumers	Inhalation	Long-term local effects	<0.02 mg/m³
	Consumers	Inhalation	Long-term local effects	<0.005 mg/m³

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PNEC values (Predicted No-Effect Concentration)

Substance name	Environmental compartment	Maximum Value
Bismuth vanadate	Fresh water	Data not available
	Sea water	Data not available
	Sewage treatment plant	<10000 mg/L
	Fresh water sediment	Data not available
	Marine sediment	Data not available
	soil	Data not available
	Intermittent	Data not available

8.2. Exposure controls

Personal protective equipment

Eye protection

When dust formation is expected, wear goggles conforming to EN166:2001 and EN170:2002.

Hand Protection

Chemical resistant gloves

The selected protective gloves must satisfy the requirements of EU 2016/425 and the EN 374-1 standard deriving therefrom. The suitably of a specific workplace should be discussed with the manufacturers of the protective gloves.

Skin and body protection

Dust-proof antistatic protective clothing.

Avoid dust coming into contact with parts of the neck and wrists in consideration of possible skin irritation.

Respiratory protection

Adequate respiratory protection is required; upon exposure limits being exceeded, wear a dust mask (Type FFP2), dust filter mask or breathing apparatus.

Protection measures

Do not get on skin. Do not breathe dust. When using do not eat, drink or smoke.

Environmental exposure controls

Extraction systems must be equipped with high-efficiency filtration systems (e.g., cyclones and bag filters) to ensure the removal of fine dust.

Exhaust from extraction systems must be managed to avoid dispersion into the environment, recovering fine dust if possible, or disposing of it as hazardous waste (see Section 13). Avoid washing work areas with water, which could carry dust into wastewater systems.

Section 9 - Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method	Notes
Physical state	solid	---	
Colour	giallo	---	
Odour	mild	---	
Melting point/freezing point	Not applicable	---	
Boiling point or initial boiling point and boiling range	Not applicable	---	
Flammability	Not applicable	---	
Lower and upper explosive limit	30 – 90g/m3	---	
Flash point	Not applicable		
Auto-ignition temperature	from 450 to 600°C		
Decomposition temperature	>250°C		
minimum ignition energy	from 5 to 20mJ		
Ph	Not applicable		
Viscosity, kinematic	Not applicable		
Water solubility	insoluble		
Solubility in oil	Not applicable		
Partition coefficient n-octanol/water (logarithmic value)	Not applicable		
Vapor pressure	Not applicable		
Density and/or relative density	1.2 - 1.9gr/cm3	DIN51757	
Relative vapour density	Not applicable		
Particle size	*D(50) 35-45	Particle size by laser diffraction	*D(50) average particle

9.2. Other information

None

Section 10 - Stability and reactivity

10.1. Reactivity

There are no known dangerous reactions under normal conditions of use and storage.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

There are no known dangerous reactions under normal conditions of use and storage.

10.4. Conditions to avoid

At temperatures above 50°C, the product may partially soften, with the consequent variation in the physical properties which may impact upon its utilisation. Avoid electrostatic charges accumulating. Do not expose the product to humidity.

10.5. Incompatible materials

Store away from oxidising agents and strongly alkaline or acidic materials so as to prevent exothermic reactions.

10.6. Hazardous decomposition products

If used as per the instructions, the product does not decompose. Toxic gases may be generated upon coming into contact with strong oxidising agents or reductants.

When subjected to high temperatures, dangerous decomposition products may result, including smoke and carbon monoxide.

Section 11 - Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Toxicological information regarding the main substances present in the product:
Components: Bismuth vanadate – CAS: 14059-33-7
LD50 Test – Route: Oral – Species: Rat > 5000 mg/Kg
LC50 Test – Route: Inhalation – Species: Rat > 5.15 mg/L
Components: Titanium dioxide; CAS: 13463-67-7
LD50 test - Route: Oral - Species: Rat > 2000 mg/kg - Duration 5 days
LC50 test – Route: Inhalation – Species: Rat > 5 mg/l – Duration: 4h

Skin corrosion/irritation

Not classified

Serious eye damage/irritation

Not classified

Respiratory or skin sensitisation

Not classified

Germ cell mutagenicity

Not classified

Carcinogenicity

Not classified

Reproductive toxicity

Not classified

Specific target organ toxicity (STOT) - single exposure

Not classified

Specific target organ toxicity (STOT) - repeated exposure

Not classified

Aspiration hazard

Not classified

11.2 Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration >= 0.1%

Section 12 - Toxicological information

12.1 Toxicity

There is no data available on the mixture itself.

Do not dispose of paint residues in the sewer system or waterways, or wherever they may be contaminate groundwater or surface water.

Procedure used to derive the classification pursuant to Regulation (EC) No. 1272/2008(CLP/GHS)

Substance name	Results	Type	Exposition
Bismuth vanadate	LC50 fish >10000 mg/L EC50 invertebrates > 100 mg/L EC50r algae >= 100 mg/L	Danio rerio Daphia Magna Desmodesmus subspicatus	96 hours 48 hours

12.2 Persistence and degradability
Not applicable

12.3 Bioaccumulative potential
Not applicable

12.4 Mobility in soil
Not applicable

12.5 Results of PBT and vPvB assessment
This mixture contains no components considered to be Persistent, Bioaccumulative or Toxic (PBT), nor very Persistent and very Bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Endocrine disrupting properties
No endocrine disruptor substances present in concentration >= 0.1%

12.7 Other adverse effects
None

Section 13 - Disposal considerations

13.1. Waste treatment methods

Product

Under current legislation, the product is classified as **non-hazardous special waste**. The European Waste Catalogue (EWC) code relative to powder coating is the following: 080112.
If possible, salvage or send to authorised plants or incinerators operating under controlled conditions. Avoid dispersing dust into the environment during waste handling operations. Do not dispose of via wastewater or sewage systems to prevent the release of synthetic polymer microparticles.

Containers

Packaging retains product residue and should be disposed of as unused product.
Ensure that empty packaging is tightly closed before disposal to prevent accidental release of residual dust.

Section 14 - Transport information

14.1. UN number or ID number
Non-hazardous material according to the regulations on transport.

14.2. Official UN transport designation
ADR/RID: Non-dangerous goods
IMDG: Not dangerous goods

14.3. Transport hazard class(es)
Non-dangerous goods

14.4. Packing group
Non-dangerous goods.

14.5. Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

14.6. Special precautions for user

Not applicable

14.7. Bulk shipping in accordance with IMO acts

Not applicable.

Section 15 - Regulatory information

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

Legislative Decree 81/2008 et seq. (Consolidated text on workplace health and safety protection).
Legislative Decree 152/2006 et seq. (Environmental consolidated text).
The supply of these synthetic polymer microparticles is subject to the conditions laid down in entry 78 of Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council
Synthetic polymer content 70 – 80%.
The product is exempt from the market release ban pursuant to paragraph 5(b) because the synthetic polymer microparticles lose their particulate morphology during industrial application (polymerization/thermal cross-linking).
REACH - List of substances of very high concern candidates for authorisation (Article 59): Not applicable/Does not contain SVHC substances in concentrations >0.1%.
EC Regulation No.1005/2009 on substances that deplete the ozone layer: Not applicable
Regulation (EC) 2019/1021 on persistent organic pollutants: Not applicable
Regulation (EC) No 649/2012 of the European Parliament and of the Council concerning the export and import of dangerous chemicals: Not applicable
REACH - list of substances subject to authorisation (Annex XIV): Not applicable
Directive 2012/18/EU (SEVESO III) of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances: Not applicable
Directive 2004/42/EC (VOC / Decopaint): Not applicable. The product is a solvent-free, thermosetting powder paint.

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out for this product.

Section 16 - Other information

16.1. Modifications to the Safety Data Sheet

none

16.2 Abbreviations and acronyms

PBT: persistent, bioaccumulative and toxic
VPvB: very persistent and very bioaccumulative
LD50: indicates the dose (expressed in milligrams per kilogram of body weight) of a substance that causes the death of 50% of the animals to which the substance was administered
LC50: indicates the environmental concentration of an airborne substance that causes the death of 50% of the animals who were exposed to it for a determined period of time (minutes or hours)
CLP: Classification, Labelling and Packaging
IMDG: International Maritime Code for Dangerous Goods
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
ADR: Agreement concerning the international transport of dangerous goods by road
Repr: Reproductive toxicity
STOT RE: specific target organ toxicity - repeated exposure

OECD: Organisation for Economic Cooperation and Development
EC number: European Community number
SDS: safety data sheet
SVHC: substance of very high concern

16.3 Complete text descriptions of H statements

STOT RE 2: Specific target organ toxicity - repeated exposure
H373 - May cause damage to organs through prolonged or repeated exposure.

16.4 Further information

The information contained in this Safety Data Sheet is true and correct to the best of our knowledge regarding the product at the time of publication. Such information is provided with the sole aim of ensuring use, storage, transport and disposal of the product in the best and safest way. This information should not be considered as a guarantee or specification of the quality of the product. It only refers to the material specifically indicated and does not apply if the product is used in combination with other materials or in other processes not specifically indicated in the text of the Safety Data Sheet for this material.