

Safety Data Sheet

According to Annex II to REACH - Regulation 2015/830

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

1.1. Product identifier

Code: **TFF--150503**
 Product name: **Terraglia Bianca Durezza 3**

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

Intended use: **Forgiatura oggetti ceramica**

1.3. Details of the supplier of the safety data sheet

Name: **COLOROBRIA ITALIA S.P.A.**
 Full address: **via Pietramarina 53**
 District and Country: **50053 Sovigliana - Vinci (FI) Italia**
 Tel.: **+39 0571 7091**
 Fax: **+39 0571 709.850**

e-mail address of the competent person responsible for the Safety Data Sheet: **ambientemsds@colorobbia.it**

1.4. Emergency telephone number

For urgent inquiries refer to:

- CAV - Ospedale Pediatrico Bambino Gesù - Roma - tel. +39 06 68593726**
- Az. Ospedaliera Università Foggia - Foggia - tel. 800183459**
- Az. Ospedaliera - A. Cardarelli- Napoli- tel. +39 081 7472870**
- CAV - Policlinico Umberto I- Roma - tel. +39 06 49978000**
- CAV - Policlinico A. Gemelli - Roma - tel. +39 06 3054343**
- Az. Ospedaliera Careggi - U.O. Tossicologia Medica - Firenze - tel. +39 055 7947819**
- CAV - Centro Nazionale di Informazione Tossicologica - Pavia - tel. +39 0382 24444**
- Ospedale Niguarda Ca' Granda - Milano - tel. +39 02 66101029**
- Az. ospedaliera Papa Giovanni XXIII - Bergamo - tel. 800883300**

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

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms: --

Signal words: --

Hazard statements:
EUH210 Safety data sheet available on request.
EUH212 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

Precautionary statements: --

2.3. Other hazards

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

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification **x = Conc. %** **Classification 1272/2008 (CLP)**

QUARTZ

CAS 14808-60-7 40 ≤ x < 60

EC 238-878-4

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ALUMINA

CAS 1344-28-1 9 ≤ x < 25

EC 215-691-6

INDEX

Reg. no. 01-2119817795-27

magnesium oxide

CAS 1309-48-4 5 ≤ x < 9

EC 215-171-9

INDEX

TITANIUM DIOXIDE

CAS 13463-67-7 1 ≤ x < 5

EC 236-675-5

INDEX

Reg. no. 01-2119489379-17-0000

The full wording of hazard (H) phrases is given in section 16 of the sheet.

SECTION 4. First aid measures

4.1. Description of first aid measures

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

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

Specific information on symptoms and effects caused by the product are unknown.

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

in the event of an accident or if you feel unwell, contact a beggar or a poison center

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

Choose the most appropriate extinguishing equipment for the specific case.

UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

The product is neither flammable nor combustible.

5.3. Advice for firefighters

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).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use breathing equipment if fumes or powders are released into the air. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up

Confine using earth or inert material. Collect as much material as possible and eliminate the rest using jets of water. 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 safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use.

7.2. Conditions for safe storage, including any incompatibilities

Keep the product in clearly labelled containers. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

BGR	България	МИНИСТЕРСТВО НА ТРУДА И СОЦИАЛНАТА ПОЛИТИКА МИНИСТЕРСТВО НА ЗДРАВЕОПАЗВАНЕТО НАРЕДБА No 13 от 30 декември 2003 г (4 Септември 2018г)
CZE	Česká Republika	Nařízení vlády č. 246/2018 Sb. Nařízení vlády, kterým se mění nařízení vlády č. 361/2007 Sb., kterým se stanoví podmínky ochrany zdraví při práci, ve znění pozdějších předpisů
DEU	Deutschland	TRGS 900 - Seite 1 von 69 (Fassung 29.03.2019)- Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte
ESP	España	LÍMITES DE EXPOSICIÓN PROFESIONAL PARA AGENTES QUÍMICOS EN ESPAÑA 2019 (INSST)
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
GRC	Ελλάδα	ΕΦΗΜΕΡΙΔΑ ΤΗΣ ΚΥΒΕΡΝΗΣΕΩΣ - ΤΕΥΧΟΣ ΠΡΩΤΟ Αρ. Φύλλου 152 - 21 Αυγούστου 2018
POL	Polska	ROZPORZĄDZENIE MINISTRA RODZINY, PRACY I POLITYKI SPOŁECZNEJ z dnia 12 czerwca 2018 r
ROU	România	HOTĂRÂRE nr. 584 din 2 august 2018 pentru modificarea Hotărârii Guvernului nr. 1.218/2006 privind stabilirea cerințelor minime de securitate și sănătate în muncă pentru asigurarea protecției lucrătorilor împotriva riscurilor legate de prezența agenților chimici
GBR	United Kingdom TLV-ACGIH	EH40/2005 Workplace exposure limits (Third edition, published 2018) ACGIH 2020

SECTION 8. Exposure controls/personal protection ... / >>

QUARTZ

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	CZE	0,1				
AGW	DEU	0,15				
VLA	ESP	0,05				
VLEP	FRA	0,1				RESP
NDS/NDSch	POL	2				INHAL
NDS/NDSch	POL	0,3				RESP
WEL	GBR	0,3				
TLV-ACGIH		0,025				

ALUMINA

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	BGR	2				като алуминий
MAK	DEU	4				INHAL
MAK	DEU	1,5				RESP
VLA	ESP	10				
VLEP	FRA	10				
TLV	GRC	10				
NDS/NDSch	POL	2,5				INHAL Na Al
NDS/NDSch	POL	1,2				RESP Na Al
TLV	ROU	2		5		Aerosoli
WEL	GBR	10				INHAL
TLV-ACGIH		1	0,9			

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral	6,2 mg/kg/d	VND						
Inhalation	15,6 mg/mc	VND						15,63 mg/m3

magnesium oxide

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
NDS/NDSch	POL	10				
TLV-ACGIH		10				

TITANIUM DIOXIDE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	BGR	10				RESP
VLA	ESP	10				
VLEP	FRA	10				
TLV	GRC	10				
NDS/NDSch	POL	10				INHAL
TLV	ROU	10		15		
WEL	GBR	10				INHAL
WEL	GBR	4				RESP
TLV-ACGIH		10				

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.
VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

SECTION 8. Exposure controls/personal protection ... / >>

When choosing personal protective equipment, ask your chemical substance supplier for advice. Personal protective equipment must be CE marked, showing that it complies with applicable standards.

HAND PROTECTION

In the case of prolonged contact with the product, protect the hands with penetration-resistant work gloves (see standard EN 374). Work glove material must be chosen according to the use process and the products that may form. Latex gloves may cause sensitivity reactions.

SKIN PROTECTION

Wear category I 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 166).

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.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	solid	
Colour	Not available	
Odour	odourless	
Odour threshold	Not available	
pH	Not available	
Melting point / freezing point	0 °C	
Initial boiling point	Not available	
Boiling range	Not available	
Flash point	Not applicable	
Evaporation Rate	Not available	
Flammability of solids and gases	Not available	
Lower inflammability limit	Not applicable	
Upper inflammability limit	Not applicable	
Lower explosive limit	Not applicable	
Upper explosive limit	Not applicable	
Vapour pressure	Not available	
Vapour density	Not available	
Relative density	Not available	
Solubility	partially soluble	
Partition coefficient: n-octanol/water	Not available	
Auto-ignition temperature	Not applicable	
Decomposition temperature	Not available	
Viscosity	Not applicable	
Explosive properties	Not available	
Oxidising properties	Not available	

9.2. Other information

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.

SECTION 10. Stability and reactivity ... / >>

10.4. Conditions to avoid

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

10.5. Incompatible materials

Information not available

10.6. Hazardous decomposition products

Information not available

SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification. It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

QUARTZ

Information relating to free silicon monoxide:

- once inhaled into the lungs, free crystalline silica dust can cause silicosis. More frequently, there is a development of phenomena mainly characterised by an obstructive component.

11.1. Information on toxicological effects

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

ACUTE TOXICITY

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)

TITANIUM DIOXIDE

LD50 (Oral) > 10000 mg/kg Rat

ALUMINA

LD50 (Oral) > 2000 mg/kg rat
LC50 (Inhalation) 7,6 mg/l/4h rat

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

SECTION 11. Toxicological information ... / >>

Does not meet the classification criteria for this hazard class

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

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

TITANIUM DIOXIDE
 Solubility in water < 0,001 mg/l
 Degradability: information not available

ALUMINA
 Degradability: information not available

12.3. Bioaccumulative potential

Information not available

12.4. Mobility in soil

Information not available

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. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

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 15. Regulatory information ... / >>

15.2. Chemical safety assessment

A chemical safety assessment has been performed for the following contained substances
TITANIUM DIOXIDE

SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

EUH210	Safety data sheet available on request.
EUH212	Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 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 NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 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 STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- 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) 790/2009 (I Atp. CLP) of the European Parliament
 4. Regulation (EU) 2015/830 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) 2018/1480 (XIII Atp. CLP)
 16. Regulation (EU) 2019/521 (XII 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

SECTION 16. Other information ... / >>

- 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.

Frits belonging to various groups:

Group 1: Ceramic frits containing general elements that are not included in Annex I of Directive 67/548/EEC and Annex VI of 1272/2008 Regulation,

without Pb, Ba, Zn and Cd.

Group 2: Ceramic frits containing general elements that are not included in Annex I of Directive 67/548/EEC and Annex VI of 1272/2008 Regulation, with Zn and without Pb, Ba or Cd.

Group 3: Ceramic frits containing general elements that are not included in Annex I of Directive 67/548/EEC and Annex VI of 1272/2008 Regulation, with Ba and without Pb, Zn or Cd.

Group 4: Ceramic frits containing general elements that are not included in Annex I of Directive 67/548/EEC and Annex VI of 1272/2008 Regulation, with Zn and Ba and without Pb or Cd.

Group 5: Ceramic frits containing general elements that are not included in Annex I of Directive 67/548/EEC and Annex VI of 1272/2008 Regulation, with Pb and without Cd.

Group 5.1 Lead Bisilicates (0% < PbO ≤69%; SiO₂ ≥30%; Al₂O₃ ≥1%).

Group 5.2 Lead Borosilicates (0-69% PbO, SiO₂ ≥30%, Al₂O₃ ≥ 0,5%, B₂O₃>0%)

Group 6: Ceramic frits containing general elements that are not included in Annex I of Directive 67/548/EEC and Annex VI of 1272/2008 Regulation, with Pb and Zn and/or Ba (0 < PbO ≤69; SiO₂ ≥30; Al₂O₃ ≥1)

Group 7: Ceramic frits containing general elements that are not included in Annex I of Directive 67/548/EEC and with Cd and some of the elements Zn, Ba, and Pb (0 < PbO <69; 0 < CdO ≤5; SiO₂ ≥30; Al₂O₃ ≥1)

Group 8 – frits containing lead expressed in % PbO and/or Cd expressed in % CdO, containing general elements that are not included in annex 1 of Directive 67/548/EEC and Annex VI of 1272/2008 Regulation (Zr, Si, Al, Mg, Ca, K, Na, etc.), that are not included in the their groups definition.

8.1 : lead monosilicates frits (0,05%<PbO<80%; Si O₂ < 30%; Al₂O₃ < 1%)

8.2 : lead borosilicates frits (0,05%<PbO<80%; Si O₂ < 30%; Al₂O₃ < 0,5%; B₂O₃ > 0%)

8.3 : lead and cadmium frits (0.05%<PbO<80%; 0%<Cd<5%; SiO₂ < 30% o 0,05% PbO<80%; 5% < CdO < 24%)

Group 9 – coloured frits generally containing elements which are not listed in annex 1 of Directive 67/548/EEC and Annex VI of 1272/2008 Regulation (Zr, Si, Al, Mg, Ca, K, Na, etc.), and same metallic oxides listed in annex 1 of Directive 67/548/EEC and Annex VI of 1272/2008 Regulation :

9.1 : frits Ni (0%<NiO<=3,8%)

9.2 : frits Ni (3,8%<NiO<=15%)

9.3 : frits V (0%<V₂O₅<15,5%)

9.4 : frits Cd (5%<CdO<28%)

Group 10 and subgroups - frits that contain B, Se, Sb and Co.

10.0 : SiO₂ ≥30%; Al₂O₃ ≥0,5; 0%<B₂O₃<=34;

10.1 : SiO₂ ≥30%; Al₂O₃ ≥1%; B₂O₃ = 0; 0<Se<= 1,5%; o SiO₂ ≥= 30; Al₂O₃ ≥= 0,5; 0<B₂O₃<=34%; 0<Se<=1,5%

10.2 : SiO₂ ≥30%; Al₂O₃ ≥= 1; B₂O₃=0; 0<Sb₂O₃<=2; o SiO₂ ≥=30%; Al₂O₃ ≥= 0,5; 0<B₂O₃<=34; 0<Sb₂O₃<=2;

10.3 : SiO₂ ≥30%; Al₂O₃ ≥= 1; B₂O₃=0; 0<Co₃O₄<=2 o SiO₂ ≥=30%; Al₂O₃ ≥= 0,5; 0<B₂O₃<=34; 0<Co₃O₄<=2;

Changes to previous review:

The following sections were modified:

01 / 02 / 03 / 04 / 06 / 08 / 11 / 13 / 16.