

### 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: **GLT0090**  
Product name: **F 2307 TRANSPARENT BLUE**

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

Intended use: **Preparation of ceramic frit and mineral raw materials.**

Identified Uses	Industrial	Professional	Consumer
Ceramic / Porcelain / Glass / Metal	✓	-	-

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

Name: **CRG S.r.l.**  
Full address: **Via Monte Bianco, 81**  
District and Country: **41042 Fiorano Modenese (MO) ITALIA**  
Tel: **+39 0536 845220**  
Fax: **+39 0536 845412**

E-mail address of the competent person responsible for the Safety Data Sheet: **reach@coloritalia.it**

Product distribution by: **www.coloritalia.it**

##### 1.4. Emergency telephone number

For urgent inquiries refer to **+39 0536 845220 (office hours: Monday - Friday 8.30 to 12.30, 14.00 to 18.00)**

#### SECTION 2. Hazards identification

##### 2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2015/830.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

##### Hazard classification and indication:

Carcinogenicity, category 2	H351	Suspected of causing cancer.
Reproductive toxicity, category 1A	H360Df	May damage the unborn child. Suspected of damaging fertility.
Acute toxicity, category 4	H302	Harmful if swallowed.
Acute toxicity, category 4	H332	Harmful if inhaled.
Specific target organ toxicity - repeated exposure, category 1	H372	Causes damage to organs through prolonged or repeated exposure.
Hazardous to the aquatic environment, acute toxicity, category 1	H400	Very toxic to aquatic life.
Hazardous to the aquatic environment, chronic toxicity, category 1	H410	Very toxic to aquatic life with long lasting effects.

##### 2.2. Label elements

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

Hazard pictograms:



**SECTION 2. Hazards identification ... / >>**

Signal words: Danger

Hazard statements:

**H351** Suspected of causing cancer.  
**H360Df** May damage the unborn child. Suspected of damaging fertility.  
**H302+H332** Harmful if swallowed or if inhaled.  
**H372** Causes damage to organs through prolonged or repeated exposure.  
**H410** Very toxic to aquatic life with long lasting effects.  
 Restricted to professional users.

Precautionary statements:

**P201** Obtain special instructions before use.  
**P280** Wear protective gloves/ protective clothing / eye protection / face protection.  
**P308+P313** IF exposed or concerned: Get medical advice / attention.  
**P273** Avoid release to the environment.  
**P391** Collect spillage.  
**P261** Avoid breathing dust / fume / gas / mist / vapours / spray.

**Contains:** Frits, chemicals (SiO<sub>2</sub> < 30%; Pb ≥ 25%; B > 0%)

**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)
<b>Frits, chemicals (SiO<sub>2</sub> &lt; 30%; Pb ≥ 25%; B &gt; 0%)</b>		
CAS	65997-18-4 50 ≤ x < 100	<b>Carc. 2 H351, Repr. 1A H360Df, Acute Tox. 4 H302, Acute Tox. 4 H332, STOT RE 1 H372, Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1</b>
EC	266-047-6	
INDEX		
Reg. no.	01-2119548361-42-xxxx	
<b>Cobalt Zinc Aluminate blue Spinel</b>		
CAS	68186-87-8 1 ≤ x < 5	<b>Substance with a community workplace exposure limit.</b>
EC	269-049-5	
INDEX		
Reg. no.	01-2119486823-27-0014	

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

Frits, chemicals (SiO<sub>2</sub> < 30%; Pb ≥ 25%; B > 0%)

This FRIT, included in Group 8.2 of the "Validity Assessment of the Exemption Dossier Ceramic Frits" (see SECTION 16), is subject to the registration procedure according to EC Regulation n.1907/2006 (REACH).

**SECTION 4. First aid measures**
**4.1. Description of first aid measures**

**EYES:** Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

**SKIN:** Remove contaminated clothing. Wash immediately with plenty of water. If irritation persists, get medical advice/attention. Wash contaminated clothing before using it again.

**INHALATION:** Remove to open air. In the event of breathing difficulties, get medical advice/attention immediately.

**INGESTION:** Get medical advice/attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person, unless authorised by a doctor.

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

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

**SECTION 4. First aid measures ... / >>****4.3. Indication of any immediate medical attention and special treatment needed**

Information not available

**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**

If there are no contraindications, spray powder with water to prevent the formation of dust.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. 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**

Collect the leaked product and place it in containers for recovery or disposal. If there are no contraindications, use jets of water to eliminate product residues.

Make sure the leakage site is well aired. Evaluate the compatibility of the container to be used, by checking section 10. 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. Wash hands after use.

**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.

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

Information not available

### SECTION 8. Exposure controls/personal protection

#### 8.1. Control parameters

Regulatory References:

EU OEL EU Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC.

#### Frits, chemicals (SiO<sub>2</sub> < 30%; Pb ≥ 25%; B > 0%)

##### Threshold Limit Value

Type	Country	TWA/8h mg/m <sup>3</sup>	ppm	STEL/15min mg/m <sup>3</sup>	ppm	Remarks / Observations
OEL	EU	0,15				

#### Cobalt Zinc Aluminate blue Spinel

##### Threshold Limit Value

Type	Country	TWA/8h mg/m <sup>3</sup>	ppm	STEL/15min mg/m <sup>3</sup>	ppm	Remarks / Observations
OEL	EU	0,02				as Cobalt (Co)

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

During the risk assessment process, it is essential to take into consideration the ACGIH occupational exposure levels for inert particulate not otherwise classified (PNOC respirable fraction: 3 mg/m<sup>3</sup>; PNOC inhalable fraction: 10 mg/m<sup>3</sup>). For values above these limits, use a P type filter, whose class (1, 2 or 3) must be chosen according to the outcome of risk assessment.

#### 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.

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.

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

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 III 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).

In the presence of risks of exposure to splashes or squirts during work, adequate mouth, nose and eye protection should be used to prevent accidental absorption.

##### RESPIRATORY PROTECTION

If the operator is exposed to a carcinogenic or mutagenic agent, wear a type FFP3 facemask, (see standard EN 149).

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

##### ENVIRONMENTAL EXPOSURE CONTROLS

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

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

### SECTION 9. Physical and chemical properties

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

Properties	Value	Information
Appearance	powder	
Colour	blue	

**SECTION 9. Physical and chemical properties ... / >>**

Odour		odourless
Odour threshold		Not applicable
pH		Not applicable
Melting point / freezing point	>	480 °C
Initial boiling point		Not applicable
Boiling range		Not applicable
Flash point		Not applicable
Evaporation rate		Not applicable
Flammability (solid, gas)		not flammable
Lower inflammability limit		Not applicable
Upper inflammability limit		Not applicable
Lower explosive limit		Not applicable
Upper explosive limit		Not applicable
Vapour pressure		Not applicable
Vapour density		Not applicable
Relative density		Not determined
Solubility		insoluble
Partition coefficient: n-octanol/water		Not applicable
Auto-ignition temperature		Not applicable
Decomposition temperature		Not determined
Viscosity		Not applicable
Explosive properties		not explosive
Oxidising properties		non-oxidizing

**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.

**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.

**11.1. Information on toxicological effects**

Ionic compounds of lead may cause chronic poisoning, since lead accumulates in the organism following prolonged and repeated exposures causing damage to the blood and central nervous system. Vapours can also cause irritation of the eyes and respiratory tract. The way of absorption are inhalation and ingestion.

Metabolism, toxicokinetics, mechanism of action and other information

**SECTION 11. Toxicological 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:	1,5 mg/l
ATE (Oral) of the mixture:	500,00 mg/kg
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

CARCINOGENICITY

Suspected of causing cancer

REPRODUCTIVE TOXICITY

May damage the unborn child - Suspected of damaging fertility

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

STOT - REPEATED EXPOSURE

Causes damage to organs

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

**SECTION 12. Ecological information**

This product is dangerous for the environment and highly toxic for aquatic organisms. In the long term, it has negative effects on aquatic environment.

**12.1. Toxicity**

Information not available

**12.2. Persistence and degradability**

## SECTION 12. Ecological information ... / >>

The inorganic substances contained in the product are not biodegradable.

### 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, this product does not contain any PBT or vPvB in percentage greater than 0,1%.

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. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

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

## SECTION 14. Transport information

### 14.1. UN number

ADR / RID, IMDG, IATA: 3077

ADR / RID: In accordance with Special Provision 375, this product, when is packed in receptacles of a capacity  $\leq$  5Kg or 5L, is not submitted to ADR provisions.

IMDG: In accordance with Section 2.10.2.7 of IMDG Code, this product, when is packed in receptacles of a capacity  $\leq$  5Kg or 5L, is not submitted to IMDG Code provisions.

IATA: In accordance with SP A197, this product, when is packed in receptacles of a capacity  $\leq$  5Kg or 5L, is not submitted to IATA dangerous goods regulations.

### 14.2. UN proper shipping name

ADR / RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Frits, chemicals (SiO<sub>2</sub> < 30%; Pb  $\geq$  25%; B > 0%))

IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Frits, chemicals (SiO<sub>2</sub> < 30%; Pb  $\geq$  25%; B > 0%))

IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Frits, chemicals (SiO<sub>2</sub> < 30%; Pb  $\geq$  25%; B > 0%))

**SECTION 14. Transport information** ... / >>

**14.3. Transport hazard class(es)**

ADR / RID: Class: 9 Label: 9



IMDG: Class: 9 Label: 9



IATA: Class: 9 Label: 9



**14.4. Packing group**

ADR / RID, IMDG, IATA: III

**14.5. Environmental hazards**

ADR / RID: Environmentally Hazardous



IMDG: Marine Pollutant



IATA: Environmentally Hazardous



**14.6. Special precautions for user**

ADR / RID:	HIN - Kemler: 90	Limited Quantities: 5 kg	Tunnel restriction code: (-)
	Special Provision: -		
IMDG:	EMS: F-A, S-F	Limited Quantities: 5 kg	
IATA:	Cargo:	Maximum quantity: 400 Kg	Packaging instructions: 956
	Pass.:	Maximum quantity: 400 Kg	Packaging instructions: 956
	Special Instructions:	A97, A158, A179, A197	

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**

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/EC: E1

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006  
None

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 (EC) Reg. 649/2012:  
None

Substances subject to the Rotterdam Convention:  
None

Substances subject to the Stockholm Convention:



**SECTION 15. Regulatory information ... / >>**

None

**Healthcare controls**

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

**15.2. Chemical safety assessment**

A chemical safety assessment has been performed for the following contained substances  
 Frits, chemicals (SiO<sub>2</sub> < 30%; Pb ≥ 25%; B > 0%)

**SECTION 16. Other information**

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

<b>Carc. 2</b>	Carcinogenicity, category 2
<b>Repr. 1A</b>	Reproductive toxicity, category 1A
<b>Acute Tox. 4</b>	Acute toxicity, category 4
<b>STOT RE 1</b>	Specific target organ toxicity - repeated exposure, category 1
<b>Aquatic Acute 1</b>	Hazardous to the aquatic environment, acute toxicity, category 1
<b>Aquatic Chronic 1</b>	Hazardous to the aquatic environment, chronic toxicity, category 1
<b>H351</b>	Suspected of causing cancer.
<b>H360Df</b>	May damage the unborn child. Suspected of damaging fertility.
<b>H302+H332</b>	Harmful if swallowed or if inhaled.
<b>H302</b>	Harmful if swallowed.
<b>H332</b>	Harmful if inhaled.
<b>H372</b>	Causes damage to organs through prolonged or repeated exposure.
<b>H400</b>	Very toxic to aquatic life.
<b>H410</b>	Very toxic to aquatic life with long lasting effects.

**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
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

**OTHER BIBLIOGRAPHICAL SOURCES:**

- Validity Assessment of the Exemption Dossier Ceramic Frits, RCC Ltd., Switzerland, 2007, Harlan Laboratories Ltd., 2009
- Estudio de Evaluación de Riesgos de las Fritas Cerámicas, Universitat Jaume I, 2005.
- Modelling Study of Ceramic Frits Formulation for their Classification in REACH, Universitat Jaume I, 2009.

**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.