

## Safety Data Sheet

according to UK REACH Regulation

### Galflo 45 Sn

Revision date: 01.06.2021

Product code: PGB\_07056SN

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

### 1.1. Product identifier

Galflo 45 Sn

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

#### Use of the substance/mixture

brazing rod, brazing wire

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

Company name: Pietro Galliani Brazing S.p.A.  
società unipersonale  
Street: via Molino Malpasso, 65  
Place: I-40038 Vergato (BO)  
Telephone: +39 051 910061      Telefax: +39 051 911055  
Responsible Department:

Responsible for the safety data sheet: sds@gbk-ingelheim.de

### 1.4. Emergency telephone number:

NIGUARDA HOSPITAL,  
Antipoison Centre +39 02 66101029

In England and Wales: NHS 111 In Scotland: NHS 24 - dial 111

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### GB CLP Regulation

This mixture is not classified as hazardous in accordance with GB CLP Regulation.

Brazing/welding vapours and fumes from brazing/welding may cause metal fumes fever. Symptoms can appear 4 to 12 hours after. (headache, dizziness, dryness, cough, nausea and fever)

May cause irritation by prolonged inhalation of brazing/welding fumes.

### 2.2. Label elements

#### GB CLP Regulation

##### Precautionary statements

- |      |   |
|------|---|
| P501 | Dispose of contents/container to waste treatment facility in accordance with local and national regulations . |
| P314 | Get medical advice/attention if you feel unwell.  |
| P285 | In case of inadequate ventilation wear respiratory protection.  |
| P260 | Do not breathe dust/fume/gas/mist/vapours/spray.  |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection.                                    |
| P202 | Do not handle until all safety precautions have been read and understood.                                     |

##### Special labelling of certain mixtures

EUH210      Safety data sheet available on request.

##### Additional advice on labelling

As an article the product does not need to be labelled in accordance with EC-regulations or respective national laws.

Although this product does not require a hazard warning label, we recommend that the safety precautions should be observed.

Metals in massive form, alloys, mixtures containing polymers and mixtures containing elastomers do not require a label according to this Annex (Annex I GHS), if they do not present a hazard to human health by inhalation, ingestion or contact with skin or to the aquatic environment in the form in which they are placed on



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the market, although classified as hazardous in accordance with the criteria of this Annex.  
Instead, the supplier shall provide the information to downstream users or distributors by means of the SDS.

**2.3. Other hazards**

Welding and brazing processes can cause spatter, melting metal and UV/IR heat can cause burns or start fires.

IARC and NIOSH are of the following opinion:

During welding- and brazing processes formed metallic fumes are suspected of being cancer causing agents.

**SECTION 3: Composition/information on ingredients****3.2. Mixtures****Chemical characterization**

Base metals and alloys

**Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
7440-22-4	Silver			10-50 %
	231-131-3		01-2119555669-21	
7440-31-5	Tin			0,1-5 %
	231-141-8		01-2119486474-28	

Full text of H and EUH statements: see section 16.

**SECTION 4: First aid measures****4.1. Description of first aid measures****After inhalation**

Take affected person into fresh air.  
Consult a physician if necessary.

**After contact with skin**

In case of contact with skin wash off immediately with plenty of water.  
Consult a physician if necessary.

**After contact with eyes**

In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice.

**After ingestion**

Rinse mouth.  
Consult a physician.

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

No data available

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

Treat symptoms.



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## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### Suitable extinguishing media

Product itself does not burn.

Use fire fighting measures that suit the environment and products stored.

### 5.2. Special hazards arising from the substance or mixture

Fire gas of organic material has to be classed invariably as respiratory poison.

### 5.3. Advice for firefighters

In case of fire, wear suitable respiratory equipment with positive air supply.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### General measures

Breathing apparatus (particle filter) only if dust is formed.

#### For non-emergency personnel

Avoid contact with skin, eyes and clothing.

#### For emergency responders

Use personal protective clothing.

Remove persons to safety.

### 6.2. Environmental precautions

Do not discharge into the drains or bodies of water.

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

#### For cleaning up

Shovel into suitable container for disposal.

#### Other information

Shovel into suitable container for disposal.

### 6.4. Reference to other sections

Observe protective instructions (see Sections 7 and 8).

Information for disposal see section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### Advice on safe handling

Avoid contact with eyes, skin or mucous membrane.

Do not breathe vapours/dust.

Use only in well-ventilated areas.

ANSI Z49.1 Safety in Welding, Cutting and allied processes.

#### Further information on handling

When using do not eat, drink or smoke.

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

#### Requirements for storage rooms and vessels

Keep container dry and tightly closed.

### 7.3. Specific end use(s)

brazing rod, brazing wire



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## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Exposure limits (EH40)

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
7440-50-8	Copper, dusts and mists (as Cu)	-	1		TWA (8 h)	WEL
		-	2		STEL (15 min)	WEL
7440-22-4	Silver, metallic	-	0.1		TWA (8 h)	WEL
-	Tin compounds, inorganic, except SnH <sub>4</sub> , (as Sn)	-	2		TWA (8 h)	WEL
		-	4		STEL (15 min)	WEL

#### Additional advice on limit values

Designations with OLD are no longer legally valid. These are MAC values that were deleted from TRGS 900. These values were retained as additional information for a risk assessment.

### 8.2. Exposure controls

#### Appropriate engineering controls

Provide appropriate exhaust ventilation at machinery and at places where dust or smoke can be generated.

#### Protective and hygiene measures

At work do not eat, drink and smoke.

Wash hands and skin before breaks and after work.

#### Eye/face protection

Safety goggles with side protection (EN 166).

#### Hand protection

Use protective gloves for welders (DIN 4841-4).

Use inner-gloves to prevent from allergic reactions due to direct skin contact.

Protective gloves resistant to chemicals made off polychloropren, Minimum coat thickness 0.6 mm, Permeation resistance (wear duration) approx. 480 minutes, i.e. protective glove <Camapren 722> made by www.kcl.de.

Requirements can vary as a function of the use. Therefore it is necessary to adhere additionally to the recommendations given by the manufacturer of protective gloves.

This recommendation refers exclusively to the chemical compatibility and the lab test conforming to EN 374 carried out under lab conditions.

#### Skin protection

Dust resistant protective clothing.

#### Respiratory protection

Use suitable breathing apparatus if there is inadequate ventilation. Multi-purpose filter ABEK/P3

## SECTION 9: Physical and chemical properties

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

Physical state:	Solid
Colour:	Product-specific
Odour:	Odourless

pH-Value:

#### Test method

n.a.



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**Changes in the physical state**

Melting point/freezing point: ~ 600 °C

Boiling point or initial boiling point and  
boiling range: No data available

Flash point: n.a.

**Flammability**

n.a.

Solid/liquid: n.a.

**Explosive properties**

n.a.

Lower explosion limits: n.a.

Upper explosion limits: n.a.

Auto-ignition temperature: n.a.

**Self-ignition temperature**

n.a.

Solid: n.a.

Vapour pressure: n.a.

Density: No data available

Water solubility:  
(at 20 °C) insoluble**Solubility in other solvents**

n.a.

Partition coefficient n-octanol/water: n.a.

Viscosity / dynamic: n.a.

Flow time: n.a.

Relative vapour density: n.a.

Evaporation rate: n.a.

Solvent separation test: n.a.

Solvent content: n.a.

**9.2. Other information**

No data available

**SECTION 10: Stability and reactivity****10.1. Reactivity**

No data available

**10.2. Chemical stability**

Stable under normal conditions.

**10.3. Possibility of hazardous reactions**

No data available

**10.4. Conditions to avoid**

No data available

**10.5. Incompatible materials**

Oxidizing agents. Strong acids and strong bases



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#### 10.6. Hazardous decomposition products

Metallic oxides

### SECTION 11: Toxicological information

#### 11.1. Information on hazard classes as defined in GB CLP Regulation

##### **Acute toxicity**

Based on available data, the classification criteria are not met.

Brazing/welding vapours and fumes from brazing/welding may cause metal fumes fever. Symptoms can appear 4 to 12 hours after. (headache, dizziness, dryness, cough, nausea and fever)

##### **Irritation and corrosivity**

Based on available data, the classification criteria are not met.

May cause irritation by prolonged inhalation of brazing/welding fumes.

##### **Sensitising effects**

Based on available data, the classification criteria are not met.

##### **Carcinogenic/mutagenic/toxic effects for reproduction**

Based on available data, the classification criteria are not met.

##### **STOT-single exposure**

Based on available data, the classification criteria are not met.

##### **STOT-repeated exposure**

Based on available data, the classification criteria are not met.

##### **Aspiration hazard**

Based on available data, the classification criteria are not met.

#### 11.2. Information on other hazards

##### **Endocrine disrupting properties**

No information available.

##### **Further information**

Classification in compliance with the assessment procedure specified in the Regulation (EC) no 1272/2008.

### SECTION 12: Ecological information

#### 12.1. Toxicity

No data available

#### 12.2. Persistence and degradability

No data available

#### 12.3. Bioaccumulative potential

No data available

#### 12.4. Mobility in soil

No data available

#### 12.5. Results of PBT and vPvB assessment

No data available

#### 12.6. Endocrine disrupting properties

No data available

#### 12.7. Other adverse effects

No data available

##### **Further information**

Do not flush into surface water or sanitary sewer system.



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Classification in compliance with the assessment procedure specified in the Regulation (EC) no 1272/2008.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods****Disposal recommendations**

Where possible recycling is preferred to disposal.

Dust and in exhaust systems separated particles dispose of in compliance with local regulations.

**List of Wastes Code - residues/unused products**

160304 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; inorganic wastes other than those mentioned in 16 03 03

**List of Wastes Code - used product**

150202 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; absorbents, filter materials, wiping cloths and protective clothing; absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by hazardous substances; hazardous waste

**List of Wastes Code - contaminated packaging**

150102 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); plastic packaging

**SECTION 14: Transport information****Land transport (ADR/RID)**

<b>14.1. UN number:</b>	No dangerous good in sense of this transport regulation.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.

**Inland waterways transport (ADN)**

<b>14.1. UN number:</b>	No dangerous good in sense of this transport regulation.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.

**Marine transport (IMDG)**

<b>14.1. UN number:</b>	No dangerous good in sense of this transport regulation.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.

**Air transport (ICAO-TI/IATA-DGR)**

<b>14.1. UN number:</b>	No dangerous good in sense of this transport regulation.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No



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#### 14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

#### 14.7. Maritime transport in bulk according to IMO instruments

No dangerous good in sense of this transport regulation.

#### **Other applicable information**

No hazardous material as defined by the transport regulations.

### SECTION 15: Regulatory information

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

##### **EU regulatory information**

2004/42/EC (VOC): 0 %

##### **National regulatory information**

Water hazard class (D): - - non-hazardous to water

#### 15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

### SECTION 16: Other information

#### **Changes**

Changes in section: 2, 3 3, 6, 11.2, 12.6

#### **Abbreviations and acronyms**

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route

RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses

ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure

IMDG = International Maritime Code for Dangerous Goods

IATA/ICAO = International Air Transport Association / International Civil Aviation Organization

MARPOL = International Convention for the Prevention of Pollution from Ships

IBC-Code = International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

REACH = Registration, Evaluation, Authorization and Restriction of Chemicals

CAS = Chemical Abstract Service

EN = European norm

ISO = International Organization for Standardization

DIN = Deutsche Industrie Norm

PBT = Persistent Bioaccumulative and Toxic

vPvB = Very Persistent and very Bio-accumulative

LD = Lethal dose

LC = Lethal concentration

EC = Effect concentration

IC = Median immobilisation concentration or median inhibitory concentration





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#### Abbreviations and acronyms

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route  
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses  
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure  
IMDG = International Maritime Code for Dangerous Goods  
IATA/ICAO = International Air Transport Association / International Civil Aviation Organization  
MARPOL = International Convention for the Prevention of Pollution from Ships  
IBC-Code = International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk  
  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
REACH = Registration, Evaluation, Authorization and Restriction of Chemicals  
CAS = Chemical Abstract Service  
EN = European norm  
ISO = International Organization for Standardization  
DIN = Deutsche Industrie Norm  
PBT = Persistent Bioaccumulative and Toxic  
vPvB = Very Persistent and very Bio-accumulative  
LD = Lethal dose  
LC = Lethal concentration  
EC = Effect concentration  
IC = Median immobilisation concentration or median inhibitory concentration

#### Relevant H and EUH statements (number and full text)

EUH210 Safety data sheet available on request.

#### Further Information

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge.

The delivery specifications are contained in the corresponding product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

#### Literature:

Kraume, Zober: Arbeitssicherheit und Gesundheitsschutz in der Schweißtechnik. ("Occupational Safety and Health Protection in Welding")

*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*

