



# SAFETY DATA SHEET

[In accordance with the criteria of Regulation No 1907/2006 (REACH) as amended]

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

### 1.1 Product identifier

Trade name: GALVANISING ALLOY CGG  
 Synonyms: galvanising alloy ZZA 02; ZZA 03; ZZA 04; ZZA 05; ZZA 06; ZZA 07; ZZA 08, ZZA 1.

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

Relevant identified uses: in galvanising industry the material is used for unit hot galvanising of steel and cast iron products.

Uses advised against: not determined.

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

Manufacturer: Zakłady Górniczo-Hutnicze „Bolesław” Spółka Akcyjna  
 Address: ul. Kolejowa 37, 32-332 Bukowno, Poland  
 Telephone/Fax number: +48 32 295 51 00/+48 32 295 50 00  
 E-mail address for a competent person responsible for msds: biuro@thetaconsulting.pl

### 1.4 Emergency telephone number

112, Factory dispatcher: +48 32 296 55 80 (on call 24h)

## Section 2: Hazards identification

### 2.1 Classification of the substance or mixture

Product is not classified as hazardous for human health and life and for the environment.

### 2.2 Label elements

#### Hazard pictograms and signal words

None.

#### Hazard statements

None.

#### Precautionary statements

None.

### 2.3 Other hazards

The components do not meet the criteria for PBT or vPvB in accordance with Annex XIII of REACH Regulation. The product does not contain substances included in the list established in accordance with Article 59(1) for having endocrine disrupting properties, or substances identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 (3) or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0.1 % by weight.

## Section 3: Composition/information on ingredients

### 3.1. Substances

Not applicable.



# SAFETY DATA SHEET

## 3.2. Mixtures

### zinc metallic

Range:	99,0-99,8 %
CAS number:	7440-66-6
EINECS number:	231-175-3
Registration number:	01-2119467174-37-0036
Classification:	not classified as hazardous

### aluminum metallic

Range:	0,2-1,0 %
CAS number:	7429-90-5
EINECS number:	231-072-3
Registration number:	-
Classification:	not classified as hazardous

## Section 4: First aid measures

### 4.1 Description of first aid measures

General observations: at room temperature (apart from mechanical hazards), the metallic alloy does not pose a threat to human health and life.

Skin contact: wash out skin with plenty of water with soap. If irritation appears, consult a doctor. In case of contact with hot melt, cool the burned skin with plenty of cold water. Put a sterile dressing and seek medical advice.

Eye contact: wash out eyes with plenty of water with the eyelid hold wide open, for at least 10-15 min. Remove any contact lenses. Obtain medical attention if necessary. In the case of splashes in the eyes of hot melt, apply a sterile dressing and immediately contact an ophthalmologist.

Ingestion: exposure usually does not occur.

Inhalation: exposure usually does not occur. However, if you feel unwell, take the victim to fresh air.

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

As a result of direct contact with a metallic alloy, adverse health effects are not observed. During the careless penetration there is a possibility of liquid alloy splashing with surface wet, dipping of cold packages, ingots. Contact with hot product may cause thermal burns.

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

Physician makes a decision regarding further medical treatment after thoroughly examination of the injured. Symptomatic treatment.

## Section 5: Firefighting measures

### 5.1 Extinguishing media

Suitable extinguishing media: metallic alloy is not flammable. Use extinguishing measures that are appropriate to the environment.

Unsuitable extinguishing media: water jet – risk of the propagation of the flame.

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

During combustion, product may release toxic gases containing aluminum oxides, manganese oxides and other unidentified thermal decomposition products. Do not inhale combustion products, they can be dangerous for human health.

### 5.3 Advice for firefighters

Personal protection typical in case of fire. Do not stay in the fire zone without self-contained breathing apparatus and protective clothing resistant to chemicals. Collect used extinguishing agents.



# SAFETY DATA SHEET

## Section 6: Accidental release measures

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

Limit the access for the outsiders into the breakdown area, until the suitable cleaning operations are completed. In case of release of large amounts of the mixture, it is necessary to take appropriate steps to prevent it from spreading into the environment. In the event of release of hot melt, use appropriate personal protective equipment.

### 6.2 Environmental precautions

In case of release of large amounts of the mixture, it is necessary to take appropriate steps to prevent it from spreading into the environment. Do not let the mixture to get through the surface or ground water, soil, sewage system, wells, basements etc. Notify relevant emergency services.

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

Collect the product mechanically. Treat the collected material as waste or dispose of it for reuse.

### 6.4 Reference to other sections

Appropriate conduct with waste product – section 13. Appropriate personal protective equipment – section 8.

## Section 7: Handling and storage

### 7.1 Precautions for safe handling

Handle in accordance with good occupational hygiene and safety practices. Ensure adequate ventilation. Before break and after work wash carefully hands. Use appropriate personal protective equipment.

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

Keep only in dry and well-ventilated place. Protect against fire sources, water and moisture. Keep away from inorganic acids and bases.

### 7.3 Specific end use(s)

In galvanising industry the material is used for unit hot galvanising of steel and cast iron products.

## Section 8: Exposure controls/personal protection

### 8.1 Control parameters

For substances contained in the mixture are not defined any occupational exposure limit values at working place in European Union.

Please check any national occupational exposure limit values in your country.

Legal Basis: Commission Directive 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, 2019/1831/EU

DNEL values for zinc [CAS 7440-66-6]

Exposure way	Exposure scheme	DNEL (workers)
inhalation	Long-term systemic effects	5 mg/m <sup>3</sup>
dermal	Long-term systemic effects	83 mg/kg bw/d
Exposure way	Exposure scheme	DNEL (general population)
inhalation	Long-term systemic effects	2,5 mg/m <sup>3</sup>
dermal	Long-term systemic effects	83 mg/kg bw/d
oral	Long-term systemic effects	0,83 mg/kg bw/d

PNEC values for zinc [CAS 7440-66-6]

PNEC	Value	Factor
freshwater	20,6 µg/l	1
marine water	6,1 µg/l	1



# SAFETY DATA SHEET

freshwater sediment	117,8 mg/kg dry weight	1
marine water sediment	56,5 mg/kg dry weight	1
soil	35,6 mg/kg dry weight	1
STP	100 µg/l	1

## 8.2. Exposure controls

### Appropriate engineering controls

Use the product in accordance with good occupational hygiene and safety practices. When handling do not eat, drink or smoke. Before break and after work carefully wash hands. Ensure adequate general ventilation and/or locally.

### Individual protection measures, such as personal protective equipment

The necessity to use and selection of appropriate personal protective equipment should take into account the type of risk posed by the product, working conditions and the way of handling the product. The personal protective equipment used must meet the requirements of Regulation (EU) 2016/425 and the relevant standards. The employer is obliged to provide protection measures appropriate to the activities performed and meeting all quality requirements, including their maintenance and cleaning. Any contaminated or damaged PPE must be replaced immediately.

### Hand and body protection

Normally not required.

### Eye protection

Normally not required.

### Respiratory protection

Normally not required.

The above information relating to personal protective equipment for the case of contact with alloy in metallic form, which does not pose a direct threat to their health. The use of plant protection (gloves, protective clothing or masks) is necessary in the case of contact with emerging opportunities in industrial processes zinc compounds, the product being processed or during processing. You should also take into account the possibility of mechanical or thermal hazards during the processing of metallic alloy. Selection of PPE should be based on the use of product.

### Thermal hazards

Use protective gloves, thermal protective clothing and safety goggles to protect against splashing of molten product when handling hot product.

### Environmental exposure controls

Do not allow the mixture to contaminate surface water/ground water.

## Section 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state:	solid
Colour:	silver-white
Odour:	odourless
Melting point/freezing point:	ca. 410 °C ± 10 °C
Boiling point or initial boiling point and boiling range:	ca. 905 °C ± 5 °C
Flammability:	the product is not classified in terms of flammability
Lower and upper explosion limit:	not determined
Flash point:	not applicable
Auto-ignition temperature:	not applicable
Decomposition temperature:	not applicable
pH:	not determined
Kinematic viscosity:	not determined



# SAFETY DATA SHEET

Solubility:	insoluble in water soluble in inorganic acids, bases
Partition coefficient n-octanol/water (log value):	not determined
Vapour pressure:	not applicable
Density and/or relative density:	7,14 g/cm <sup>3</sup> (25 °C)
Relative vapour density:	not determined
Particle characteristics:	not applicable

- 9.2 Other information  
No additional data.

## Section 10: Stability and reactivity

- 10.1 Reactivity  
Product is reactive. See also subsection 10.3.-10.5.
- 10.2 Chemical stability  
The product is stable under normal conditions.
- 10.3 Possibility of hazardous reactions  
Hazardous reactions are not known.
- 10.4 Conditions to avoid  
Avoid moisture, excessive heating, high temperatures.
- 10.5 Incompatible materials  
Inorganics acids, bases.
- 10.6 Hazardous decomposition products  
Not known.

## Section 11: Toxicological information

- 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008  
As a result of direct contact with a metallic alloy, adverse health effects are not observed. During the careless penetration there is a possibility of liquid alloy splashing with surface wet, dipping of cold packages, ingots. Contact with hot product may cause thermal burns.
- Acute toxicity  
Based on available data, the classification criteria are not met.
- Skin corrosion/irritation  
Based on available data, the classification criteria are not met.
- Serious eye damage/irritation  
Based on available data, the classification criteria are not met.
- Respiratory or skin sensitisation  
Based on available data, the classification criteria are not met.
- Germ cell mutagenicity  
Based on available data, the classification criteria are not met.
- Carcinogenicity  
Based on available data, the classification criteria are not met.
- Reproductive toxicity  
Based on available data, the classification criteria are not met.
- STOT-single exposure  
Based on available data, the classification criteria are not met.



# SAFETY DATA SHEET

## 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.

## Information on likely routes of exposure

Routes of exposure: eye contact, skin contact, inhalation, ingestion. For more information on the impact of each possible route of exposure, see subsection 4.2.

## Symptoms related to the physical, chemical and toxicological characteristics

See subsection 4.2.

## Delayed and immediate effects as well as chronic effects from short and long-term exposure

See subsection 4.2.

## 11.2 Information on other hazards

### Endocrine disrupting properties

The product does not contain substances included in the list established in accordance with Article 59(1) for having endocrine disrupting properties, or substances identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 (3) or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0.1 % by weight.

### Other information

Not known.

## Section 12: Ecological information

### 12.1 Toxicity

Mixture is not classified as dangerous for environment.

### 12.2 Persistence and degradability

No data available.

### 12.3 Bioaccumulative potential

It shows no potential for bioaccumulation.

### 12.4 Mobility in soil

This product is not mobile in soil; does not dissolve in water and does not spread in the aquatic environment.

### 12.5 Results of PBT and vPvB assessment

Mixture does not meet the PBT or vPvB criteria.

### 12.6 Endocrine disrupting properties

The product does not contain substances included in the list established in accordance with Article 59(1) for having endocrine disrupting properties, or substances identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 (3) or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 % by weight.

### 12.7 Other adverse effects

The mixture is not classified as hazardous to the ozone layer. The possibility of other harmful effects of individual components of the mixture on the environment should be considered (e.g. global warming potential).

## Section 13: Disposal considerations

### 13.1 Waste treatment methods

Disposal methods for the mixture: disposed of in accordance with applicable regulations. Do not remove with household waste. Residues stored in their original containers. Recycle or re-processed. Waste code should be assigned in place of formation.



# SAFETY DATA SHEET

Disposal methods for used packing: metallic alloy of zinc and aluminium does not have individual packages.  
Legal basis: Directive 2008/98/EC as amended, 94/62/EC as amended.

## Section 14: Transport information

- 14.1 UN number or ID number  
Not applicable, product is not classified as hazardous for air, sea and land transport.
- 14.2 UN proper shipping name  
Not applicable.
- 14.3 Transport hazard class(es)  
Not applicable.
- 14.4 Packing group  
Not applicable.
- 14.5 Environmental hazards  
Not applicable.
- 14.6 Special precautions for user  
Not applicable.
- 14.7 Maritime transport in bulk according to IMO instruments  
Not applicable.

## Section 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture  
ADR Agreement Concerning the International Carriage of Dangerous Goods by Road.  
IMDG Code International Maritime Dangerous Goods Code.  
IATA The International Air Transport Association regulations.  
Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending 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.  
Commission Regulation (EU) No 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).  
Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives as amended.  
European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste as amended.  
Regulation (EU) 2016/425 of the European Parliament and of the Council of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC.  
Commission Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.  
Commission Directive 2006/15/EC of 7 February 2006 establishing a second list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC.  
Commission Directive 2009/161/EU of 17 December 2009 establishing a third list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Commission Directive 2000/39/EC.  
Commission Directive 2017/164/EU of 31 January 2017 establishing a fourth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC, and amending Commission Directives 91/322/EEC, 2000/39/EC and 2009/161/EU.



# SAFETY DATA SHEET

Commission Directive 2019/1831/EU of 24 October 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC and amending Commission Directive 2000/39/EC.

## 15.2 Chemical safety assessment

It is not necessary to prepare Chemical Safety Report for mixture.

## Section 16: Other information

### Clarification of aberrations and acronyms

PBT	Persistent, Bioaccumulative and Toxic substance
vPvB	very Persistent, very Bioaccumulative substance
PNEC	Predicted no effect concentration
DNEL	Derived no-effect level

### Trainings

Before commencing working with the product, the user should learn the Health & Safety regulations, regarding handling chemicals, and in particular, undergo a proper workplace training.

### Key literature references and sources of data

This SDS was prepared on the basis of on manufacturer's data, literature data, online databases, our knowledge and experience, taking into account the current legislation.

### Other data

Date of issue:	29.01.2019
Date of update:	30.09.2022
Version:	6.0/EN
Changes:	sections: 1-16
Safety Data Sheet made by:	THETA Consulting Sp. z o.o. (based on producer's data)

The information above is based on a current available data concerning the product, but also on the experience and knowledge in this field of the producer. They are neither a quality description of the product nor a guarantee of particular features. They are to be treated as aid to safety in transport, storage and usage of the product. That does not free the user from the responsibility of improper usage of the information above and also of improper compliance with the law norms in the field.