Product Galva-Zinc Zinc Rich Coating

Revision date 05 January 2021

Revision 1



Safety Data Sheet (SDS)

according to Regulation (EC) No. 1907/2006

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

1.1 Product identifier

Product name Galva-Zinc Zinc Rich Coating
Other means of identification No information available.

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

Identified uses A single component, solvent borne, high zinc content primer for steel protection.

For industrial and professional use only.

Uses advised against Any other purpose.

1.3 Details of the supplier of the safety data sheet

Supplier Castle Paints Ltd

Cloncollig Industrial Estate

Tullamore Offaly R35 X993 Ireland

Tel: 353 (0)579351583 info@castlepaints.ie

1.4 Emergency telephone number

Contact person

Emergency telephone Emergency medical information: 8am - 10pm (Seven Days) contact National Poison

Center, Beaumont Hospital. Telephone: +353 (0) 18092166

Section 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and chemical hazards Flam. Liq 3- H226 Human health Lact - H362

Environment Aquatic Acute 1 - H400, Aquatic Chronic 1 - H410

2.2 Label elements

Contains Alkanes, C14-17, chloro

Label in accordance with (EC) no. 1272/2008





Signal word Warning

Hazard statements H226 Flammable liquid and vapour.

H362 May cause harm to breast-fed children.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements Prevention

P201 Obtain special instructions before use.

P210 Keep away from heat/ sparks/open flames/hot surfaces. — No smoking.

P260 Do not breathe dust/fume/ gas/mist/vapours/spray. P263 Avoid contact during pregnancy/while nursing.

Response

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

P370 + P378 In case of fire: Use dry chemical, foam or carbon dioxide for extinction.

EUH statements

EUH066 Repeated exposure may cause skin dryness or cracking.

2.3 Other hazards

None known.

Section 3: Composition/identification of ingredients

3.1 Substance

Not applicable.

3.2 Mixtures

Name	Product identifier	Regulation (EC) No 1272/2008	%
Zinc	CAS-No.: 7440-66-6 EC No.: 231-175-3 REACH Reg No.: 01-2119467174-37-XXXX	Aquatic Acute 1 - H400, Aquatic Chronic 1 - H410	50-60%
xylene	CAS-No.: 1330-20-7 EC No.: 215-535-7 REACH Reg No.: 01-2119488216-32-XXXX	Flam. Liq 3- H226	5-10%
zinc oxide	CAS-No.: 1314-13-2 EC No.: 215-222-5 REACH Reg No.: 01-2119463881-32-XXXX	Aquatic Acute 1 - H400, Aquatic Chronic 1 - H410	1-5%
Alkanes, C14-17, chloro	CAS-No.: 85535-85-9 EC No.: 287-477-0 REACH Reg No.: 01-2119519269-33-0002	Aquatic Chronic 1 - H410, Lact - H362, Aquatic Acute 1 - H400	1-5%
ethylbenzene	CAS-No.: 100-41-4 EC No.: 202-849-4	Flam. Liq 2- H225, Asp. Tox - H304, Acute Tox 4 - H332, STOT RE 2 - H373	1-5%
Quartz (SiO2)	CAS-No.: 14808-60-7 EC No.: 238-878-4		0.01-0.09%
phthalic anhydride	CAS-No.: 85-44-9 EC No.: 201-607-5 REACH Reg No.: 01-2119457017-41-XXXX	Resp. Sens 1 - H334, Skin. Sens 1 - H317, STOT SE 3 - H335	0.01-0.09%

The full text for all hazard statements are displayed in section 16.

Composition comments The data shown are in accordance with the latest EC Directives.

Zinc: M (acute and chronic) = 1. Zinc oxide: M (acute and chronic) = 1.

Alkanes, C14-17, chloro: M (acute) = 100; M (chronic) = 10.

Section 4: First aid measures

4.1 Description of first aid measures

General information Provide general first aid, rest, warmth and fresh air. As a general rule, in case of doubt or if

symptoms persist, always call a doctor. First aid personnel must be aware of own risk during

rescue.

Inhalation If this product is inhaled and symptoms occur, move the exposed person to fresh air

promptly. If breathing has stopped or the exposed person experiences difficulty in breathing, $% \left(1\right) =\left(1\right) \left(1\right) \left$

administer artificial respiration and seek immediate medical assistance.

Ingestion If swallowed, seek medical advice immediately and show the container or label. Thoroughly

rinse the mouth with water. Do not induce vomiting. If person is conscious, give water to drink on demand. If vomiting occurs, keep head low so that stomach content doesn't enter

the lungs. Never give anything by mouth to an unconscious person.

Skin contact Remove affected person from source of contamination. Remove all contaminated clothes and

footwear immediately unless stuck to skin. Wash exposed area with soap and water.

Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues

after rinsing.

Eye contact Avoid contaminating unaffected eye. Immediately flush eyes with plenty of water for at least

15 minutes, lifting lower and upper eyelids occasionally. Remove contact lenses if present and easy to do so. Continue to rinse for at least 15 minutes. Get prompt medical attention.

4.2 Most important symptoms and effects, both acute and delayed

General information The severity of the symptoms described will vary dependent on the concentration and the

length of exposure. May cause damage to organs through prolonged or repeated exposure.

May cause harm to breast-fed children.

Inhalation No specific symptoms noted. Inhalation of high concentrations of vapours may cause

irritation of the respiratory tract or dizziness.

Ingestion No specific symptoms noted. Ingestion may cause symptoms similar to those listed under

inhalation.

Skin contact Repeated exposure may cause skin dryness or cracking.

Eye contact No specific symptoms noted. Direct contact with eyes may be irritating.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to the physician Treat symptomatically.

Section 5: Fire-fighting measures

5.1 Extinguishing media

Extinguishing media Use fire-extinguishing media appropriate for surrounding materials. Foam, dry powder,

carbon dioxide.

Unsuitable extinguishing media Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

May produce hazardous combustion products such as carbon monoxide, carbon dioxide and

unknown hydrocarbons. Combustion products may include and are not limited to:

Hydrochloric acid (HCl), chlorinated hydrocarbons.

Unusual fire & explosion hazards Containers may burst if overheated. Vapours are heavier than air and may spread near

ground to sources of ignition. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Solvent vapours may form explosive mixtures with air. Runoff to sewer may create fire or explosion hazard.

Specific hazards Vapours may be ignited by a spark, a hot surface or an ember. Do not allow run-off from fire

fighting to enter drains or water courses.

5.3 Advice for firefighters

Special fire fighting procedures Keep up-wind to avoid fumes. Avoid breathing fire vapours. Ventilate closed spaces before

entering them. If possible, fight fire from protected position. Containers close to fire should

be removed immediately or cooled with water if safe to do so.

Protective equipment for firefighters Fire-fighters should wear appropriate protective equipment and self-contained breathing

apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard

EN 469 will provide a basic level of protection for chemical incidents.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Wear protective clothing as described in Section 8 of this safety data sheet. Eliminate all

sources of ignition. Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation. Keep unnecessary and unprotected personnel from entering. Read and

follow manufacturer's recommendations.

For emergency responders Follow safe handling advice and personal protective equipment recommendations for normal

use of product.

6.2 Environmental precautions

Environmental precautions Do not allow to enter sewers/ surface or ground water. Prevent further leakage if safe to do

so. In case of entry into waterways, soil or drains, inform the responsible authorities.

6.3 Methods and material for containment and cleaning up

Spill clean up methods Wear appropriate personal protective equipment as specified in Section 8. Ventilate and

evacuate the area. Eliminate all sources of ignition. Cover drains, Prevent further leakage or

spillage if safe to do so.

Use non sparking tools or equipment for clean up. Absorb spillage with inert, damp, noncombustible material. Ensure that waste and contaminated materials are collected and removed from the work area as soon as possible in a suitably labelled container.

6.4 Reference to other sections

Reference to other sections See section 1 for emergency contact. For personal protection, see section 8. For waste

disposal, see section 13.

Section 7: Handling and storage

7.1 Precautions for safe handling

Handling Provide good ventilation. Wear suitable personal protective equipment, as detailed in Section

8. Keep away from ignition sources. Use non sparking tools. Avoid inhalation of vapours.

Avoid contact with skin and eyes.

Read and follow manufacturer's recommendations. Avoid prolonged or repeated contact. Do

not wear contact lenses. Avoid contact during pregnancy or while nursing.

7.2 Conditions for safe storage, including any incompatibilities

Storage precautions Keep upright, locked up and out of reach of children. Store in tightly closed original

container in a dry, cool and well-ventilated place. Keep away from incompatible materials (see section 10). Containers once opened must be carefully resealed to prevent leakage.

Protect from direct sunlight. Prohibit ignition sources close to storage area.

Flammable liquid storage.

7.3 Specific end use(s)

Storage class

Specific end use(s) The identified uses for this product are detailed in Section 1.2. Usage description Use only according to directions. Replace and tighten cap after use.

Section 8: Exposure controls/Personal protection

8.1 Control parameters

Component	STD	TWA ((8 Hrs)	STEL (15mins)	Notes
xylene	OEL	50 ppm	221 mg/m ³	100 ppm	442 mg/m ³	Mixed isomers. Sk, IOELV.
zinc oxide	OEL		2 (R) mg/m ³		10 mg/m ³	Fume.
ethylbenzene	OEL	100 ppm	442 mg/m ³	200 ppm	884 mg/m ³	Sk, IOELV.
Quartz (SiO2)	OEL		0.1 mg/m ³			Respirable dust. BOELV.
phthalic anhydride	OEL	1 ppm			12 mg/m ³	Sens.

Ingredient comments

Ireland, Occupational Exposure Limits 2020.

8.2 Exposure Controls

Protective equipment





Engineering measures Provide adequate ventilation, including appropriate local extraction, to ensure that the

defined occupational exposure limit is not exceeded.

Where necessary use lighting and electrical equipment designed for use in atmospheres where flammable vapours are present, and which can direct static electricity by grounding

equipment.

Respiratory equipment Where risk assessment shows air-purifying respirators are appropriate a full face respirator

conforming to EN 143 should be used, and suitable respirator cartridges as a backup to engineering controls. Suggested filter type: Multi-purpose (combination) ABEK (EN 14387) respirator cartridges. Where aerosols are in use, use self contained breathing apparatus with a type AX filter or appropriate combined filter (e.g. AX-P3), in compliance with EN 371. Use respirators and components tested and approved under appropriate government standards such as CEN (EU). Use respiratory protection as specified by an industrial

hygienist or other qualified professional. Change filters frequently.

Hand protectionSelection of the glove material depends on consideration of the penetration times, rates of diffusion and degradation, and concentration specific to the workplace. Where hand contact

with the product may occur use gloves approved to relevant standards (e.g. Europe: EN374.)

Gloves must be inspected prior to use.

Suggested material: (Suggested suitable materials for longer, direct contact or splash contact) Butyl rubber. Layer thickness: 0.7 mm. Breakthrough time: >480 minutes. Consult manufacturer for specific advice on material. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory

practices. Change gloves regularly.

Eye protection Wear safety goggles or face shield to prevent any possibility of eye contact. Use equipment

for eye protection tested and approved under appropriate government standards such as ${\tt EN}$

166(EU).

Other protection Wear appropriate clothing to prevent any possibility of skin contact. Fire/chemical resistant

full-length overalls and boots.

Protective clothing should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. The selected

clothing must satisfy the European norm standard EN 943.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice. Observe normal

hygiene standards. Keep container tightly closed. Do not eat, drink or smoke during work.

Wash promptly if skin becomes contaminated.

Process conditions Ensure that eye flushing systems and safety showers are located close by in the work place.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

AppearanceLiquid.ColourSilver grey.OdourAromatic.

Odour threshold - lower No information available as testing has not been completed.

Odour threshold - upperNo information available as testing has not been completed.

pH-Value, Conc. Solution
No information available as testing has not been completed.

pH-Value, Diluted solution 9.00 - 9.50

Melting point No information available as testing has not been completed.

Initial boiling point and boiling

range

> 35 °C

Flash point 23.00 - 60.00 °C

Evaporation rate No information available as testing has not been completed.

Flammability state Flammable liquid and vapour.

Flammability limit - lower(%) No information available as testing has not been completed.

Flammability limit - upper(%) No information available as testing has not been completed.

Vapour pressure No information available for the mixture as testing has not been completed. Xylene: 0,82 kPa

[room temperature].

Vapour density (air=1) No information available for the mixture as testing has not been completed. Xylene: 3,7 [Air

= 11.

1.9g/cm³ @ 20.00 °C Relative density

Bulk density No information available as testing has not been completed.

Solubility No information available as testing has not been completed.

Decomposition temperature No information available as testing has not been completed.

Partition coefficient; n-

Octanol/Water

No information available for the mixture as testing has not been completed. Xylene: Log Kow

(Log Pow) 3,12 to 3,2.

Auto ignition temperature (°C) No information available as testing has not been completed.

Dynamic Viscosity: 1,350 cP @ 40°C. Kinematic Viscosity: > 20.5 mm²/s @ 40°C. Viscosity

Explosive properties Not classified as explosive.

The product does not meet the criteria to be classified as oxidising. Oxidising properties

9.2 Other information

Molecular weight The product is a mixture, molecular weight data is not required.

Volatile organic compound EU limit value (Cat A/i) (2010) is 500 g/l. Product contains max 490 g/l.

Other information None noted.

Section 10: Stability and reactivity

10.1 Reactivity

Reactivity Stable under recommended transport and storage conditions and under recommended use.

See section 10.3 for further information.

10.2 Chemical stability

Stability Stable product under recommended storage and handling conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions

Flammable liquid and vapour. Vapours may form explosive mixture with air.

Hazardous polymerisation Polymerisation description No information available as testing has not been completed. No information available as testing has not been completed.

10.4 Conditions to Avoid

Conditions to avoid Heat, sparks, flames and other sources of ignition.

10.5 Incompatible materials

Materials to avoid Avoid strong oxidising agents, bases, strong acids. Do not mix with other chemicals unless

listed on directions.

10.6 Hazardous decomposition products

Hazardous decomposition products Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or

vapours.

Section 11: Toxicological information

11.1 Information on toxicological effects

Toxicological information Not classified based on available information. Acute toxicity (Oral LD50) No information available as testing has not been completed. **Acute toxicity (Dermal LD50)** No information available as testing has not been completed. **Acute toxicity (Inhalation LD50)** No information available as testing has not been completed.

Serious eye damage/irritation The product is not classified as an eye irritant.

Skin corrosion/irritation The product is not classified as a skin corrosion/irritation hazard.

Respiratory sensitisation The product is not classified as a respiratory hazard. Skin sensitisation The product is not classified as a skin sensitisation hazard.

Germ cell mutagenicity The product is not classified as a mutagen.

The product is not classified as a carcinogen hazard. Carcinogenicity

Specific target organ toxicity - Single exposure:

STOT - Single exposure The product is not classified as a single exposure specific target organ toxin.

Specific target organ toxicity - Repeated exposure:

STOT - Repeated exposure The product is not classified as a repeat exposure specific target organ toxin.

Inhalation No specific symptoms noted. Inhalation of high concentrations of vapours may cause

irritation of the respiratory tract or dizziness.

Ingestion No specific symptoms noted. Ingestion may cause symptoms similar to those listed under

inhalation.

Skin contact Repeated exposure may cause skin dryness or cracking.

No specific symptoms noted. Direct contact with eyes may be irritating. Eve contact

When handling waste, consideration should be made to the safety precautions applying to Waste management

handling of the product.

Routes of entry Eye or skin contact, ingestion or inhalation.

Target organs No target organs specified.

The product is not classified as an aspiration hazard. **Aspiration hazards:**

Reproductive toxicity: May cause harm to breast-fed children.

Name	LD50 oral	LD50 dermal	LD50 inhalation
Alkanes, C14-17, chloro	>4000.00mg/kg Rat	4000.00mg/kg Rat	>48170.00mg/m-3 Rat 1 Hours
ethylbenzene	3500.00mg/kg Rat	>5000.00mg/kg Rabbit	
xylene	4300.00mg/kg Rat		5000.00ppmV Rat 4 Hours
Quartz (SiO2)	>5000.00mg/kg Rat		
Zinc	>20000.00mg/kg Rat		
zinc oxide	>5000.00mg/kg Rat	>2000.00mg/kg Rat	>5.70mg/l (dust/mist) Rat 4 Hours

Section 12: Ecological information

12.1 Toxicity

Acute toxicity - Fish No information available as testing has not been completed. Acute toxicity - Aquatic invertebrates No information available as testing has not been completed. Acute toxicity - Aquatic plants No information available as testing has not been completed. Acute toxicity - Microorganisms No information available as testing has not been completed. **Chronic toxicity - Fish** No information available as testing has not been completed. **Chronic toxicity - Aquatic** No information available as testing has not been completed. invertebrates

Chronic toxicity - Aquatic plants

No information available as testing has not been completed. **Chronic toxicity - Microorganisms** No information available as testing has not been completed.

Very toxic to aquatic life with long lasting effects. **Ecotoxicity**

Eco toxilogical information No ecological toxicity data available for the overall finished product.

12.2 Persistence and degradability

Degradability No information available as testing has not been completed. Biological oxygen demand No information available as testing has not been completed. Chemical oxygen demand No information available as testing has not been completed.

12.3 Bioaccumulative potential

Bioaccumulative potential No information available as testing has not been completed. Bioaccumulation factor No information available as testing has not been completed.

Partition coefficient; n- No information available for the mixture as testing has not been completed. Xylene: Log Kow

Octanol/Water (Log Pow) 3,12 to 3,2.

12.4 Mobility in soil

Mobility No information available as testing has not been completed.

12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment The product does not contain any PBT or vPvB substances.

12.6 Other adverse effects

Other adverse effects None known.

Name	Acute toxicity (Fish)	Acute toxicity (Aquatic invertebrates)	Acute toxicity (Aquatic plants)
Alkanes, C14-17, chloro		EC50 0.01mg/l Daphnia magna	
ethylbenzene	LC50 96 Hours 4.20mg/l Onchorhynchus mykiss (Rainbow Trout)	EC50 48 Hours <4.40mg/l Daphnia magna	EC50 72 Hours 4.60mg/l EC50 96 Hours 3.60mg/l
xylene	LC50 96 Hours 13.40mg/l Pimephales promelas (Fat-head Minnow)		
Quartz (SiO2)	>500.00mg/l Onchorhynchus mykiss (Rainbow Trout)	48 Hours >300.00mg/l Daphnia magna	
Zinc	LC50 96 Hours 0.17ppm Freshwater Fish	EC50 48 Hours 1.83ppm Daphnia magna	
zinc oxide		LC50 48 Hours 0.33mg/l Daphnia magna	

Section 13: Disposal considerations

Waste management When handling waste, consideration should be made to the safety precautions applying to

handling of the product.

13.1 Waste treatment methods

Disposal methods Dispose of waste and residues in accordance with local authority requirements, and in

accordance with the European Directives on waste and hazardous waste. For waste disposal,

use a licensed industrial waste disposal agent.

Section 14: Transport information

14.1 UN number

UN no. (ADR)	UN1263
UN no. (IMDG)	UN1263
UN no. (IATA)	UN1263

14.2 UN proper shipping name

ADR proper shipping name	PAINT
IMDG proper shipping name	PAINT
IATA proper shipping name	PAINT

14.3 Transport hazard class(es)

ADR class	3
IMDG class	3
IATA class	3

Transport labels



14.4 Packing group

ADR/RID/ADN packing group III
IMDG packing group III
IATA packing group III

14.5 Environmental hazards

ADR Yes IMDG Yes IATA Yes

14.6 Special precautions for user

EMS F-E, S-E
Emergency action code A3 A72 A192
Hazard no. (ADR) <none>
Tunnel restriction code (E)

14.7 Transport in bulk according to annex II of MARPOL73/78 and the IBC code

Not applicable.

Section 15: Regulatory information

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

EU legislation 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 with amendments. The UN Globally Harmonized System (GHS) Safety Data Sheet format (Annex IV) is implemented as Annex II of REACH EU No 830/2015 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals

(REACH).

Approved code of practice 2020 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents)

Regulations (2001-2015) and the Safety, Health and Welfare at Work (Carcinogens)

Regulations (2001-2019)

Chemical safety assessment No chemical safety assessment has been carried out.

Section 16: Other information

General information This Safety Data Sheet is in accordance with REACH Annex II, (EC) No 830/2015.

2020 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations (2001-2015) and the Safety, Health and Welfare at Work (Carcinogens)

Regulations (2001-2019)

Revision commentsThis is a first issue. **Revision date**05 January 2021

Revision 1

Safety data sheet status Approved.

Hazard statements in full

H400 Very toxic to aquatic life.

 $\begin{tabular}{ll} \bf H410 & \begin{tabular}{ll} \bf Very\ toxic\ to\ aquatic\ life\ with\ long\ lasting\ effects. \end{tabular}$

H226Flammable liquid and vapour.H312Harmful in contact with skin.H315Causes skin irritation.H332Harmful if inhaled.

EUH066 Repeated exposure may cause skin dryness or cracking.

H362 May cause harm to breast-fed children. H225 Highly flammable liquid and vapour. H304 May be fatal if swallowed and enters airways. H373 May cause damage to organs through prolonged or repeated exposure . H302 Harmful if swallowed. May cause an allergic skin reaction. H317 H318 Causes serious eye damage.

May cause allergy or asthma symptoms or breathing difficulties if inhaled. H335 May cause respiratory irritation.

Disclaimer

H334

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use. Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations. The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions. It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations. The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.