



SAFETY DATA SHEET

ZINC GALVA

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name ZINC GALVA
Internal Id A086

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

Identified uses Rust protection compound.

1.3. Details of the supplier of the safety data sheet

Supplier ARROW SOLUTIONS
RAWDON ROAD
MOIRA
SWADLINCOTE
DERBYSHIRE
DE12 6DA
TEL: +44 (0)1283 221044
EMERGENCY: +44 (0) 777 8505 330
FAX: +44 (0)1283 225731
sales@arrowchem.com

1.4. Emergency telephone number

+44 (0) 777 8505 330

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (1999/45/EEC) F+;R12. N;R50/53. R66.

2.2. Label elements

Labelling



Extremely flammable



Dangerous for the environment

Risk Phrases

| | |
|--------|--|
| R12 | Extremely flammable. |
| R50/53 | Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| R66 | Repeated exposure may cause skin dryness or cracking. |

Safety Phrases

| | |
|-----|---|
| A1 | Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. |
| A2 | Do not spray on a naked flame or any incandescent material. |
| S2 | Keep out of the reach of children. |
| S9 | Keep container in a well-ventilated place. |
| S16 | Keep away from sources of ignition - No smoking. |
| S23 | Do not breathe vapour/spray. |

ZINC GALVA

S35
S37
S51
S61

This material and its container must be disposed of in a safe way.
Wear suitable gloves.
Use only in well-ventilated areas.
Avoid release to the environment. Refer to special instructions/safety data sheets.

2.3. Other hazards

This product does not contain any PBT or vPvB substances.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

| | | |
|--|--|--|
| HYDROCARBON PROPELLANT | | 30-60% |
| CAS-No.: 68476-85-7 | EC No.: 270-704-2 | |
| Classification (EC 1272/2008) Flam. Gas 1 - H220 | Classification (67/548/EEC) F+;R12. | |
| ZINC POWDER (PYROPHORIC) | | 10-30% |
| CAS-No.: 7440-66-6 | EC No.: 231-175-3 | |
| Classification (EC 1272/2008) Pyr. Sol. 1 - H250 Water-react. 1 - H260 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410 | Classification (67/548/EEC) F;R15,R17 N;R50/53 | |
| ISOBUTYL METHYL KETONE | | 10-30% |
| CAS-No.: 108-10-1 | EC No.: 203-550-1 | |
| Classification (EC 1272/2008) Flam. Liq. 2 - H225 EUH066 Acute Tox. 4 - H332 Eye Irrit. 2 - H319 STOT SE 3 - H335 | Classification (67/548/EEC) F;R11 Xn;R20 Xi;R36/37 R66 | |
| BUTYL ACETATE -norm | | 5-10% |
| CAS-No.: 123-86-4 | EC No.: 204-658-1 | |
| Classification (EC 1272/2008) Flam. Liq. 3 - H226 EUH066 STOT SE 3 - H336 | Classification (67/548/EEC) R10 R66 R67 | |
| XYLENE | | 5-10% |
| CAS-No.: 1330-20-7 | EC No.: 215-535-7 | Registration Number: 01-2119486136-34-xxxx |

ZINC GALVA

Classification (EC 1272/2008)
Flam. Liq. 3 - H226
Acute Tox. 4 - H312
Acute Tox. 4 - H332
Skin Irrit. 2 - H315
Asp. Tox. 1 - H304

Classification (67/548/EEC)
R10
Xn;R20/21
Xi;R38

PROPAN-2-OL

1-5%

CAS-No.: 67-63-0

EC No.: 200-661-7

Registration Number: 01-2119457558-25-xxxx

Classification (EC 1272/2008)
Flam. Liq. 2 - H225
Eye Irrit. 2 - H319
STOT SE 3 - H336

Classification (67/548/EEC)
F;R11
Xi;R36
R67

ETHYLBENZENE

0-1%

CAS-No.: 100-41-4

EC No.: 202-849-4

Classification (EC 1272/2008)
Flam. Liq. 2 - H225
Acute Tox. 4 - H332

Classification (67/548/EEC)
F;R11
Xn;R20

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation

Move into fresh air and keep at rest. Get medical attention if any discomfort continues.

Ingestion

Rinse mouth thoroughly. Do not induce vomiting. Get medical attention if any discomfort continues.

Skin contact

Wash skin with soap and water. Get medical attention if any discomfort continues.

Eye contact

Rinse the eye with water immediately. Get medical attention if any discomfort continues.

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

Inhalation.

Vapours may cause drowsiness and dizziness.

Ingestion

May cause discomfort if swallowed.

Skin contact

Prolonged contact may cause redness, irritation and dry skin.

Eye contact

Irritation of eyes and mucous membranes.

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

Treat Symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Extinguish with foam, carbon dioxide or dry powder.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

Fire creates: Carbon monoxide (CO). Carbon dioxide (CO2).

ZINC GALVA

Unusual Fire & Explosion Hazards

Aerosol cans may explode in a fire.

5.3. Advice for firefighters

Special Fire Fighting Procedures

No specific fire fighting procedure given.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Do not smoke, use open fire or other sources of ignition. Do not breathe vapour.

6.2. Environmental precautions

Do not discharge onto the ground or into water courses.

6.3. Methods and material for containment and cleaning up

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Absorb with inert, damp, non-combustible material, then flush area with water.

6.4. Reference to other sections

For personal protection, see section 8.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Keep away from heat, sparks and open flame. Avoid spilling, skin and eye contact.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from heat, sparks and open flame. Aerosol cans: Must not be exposed to direct sunlight or temperatures above 50°C. Store in closed original container at temperatures between 0°C and 40°C.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

| Name | STD | TWA - 8 Hrs | | STEL - 15 Min | | Notes |
|------------------------|-----|-------------|---------------|---------------|---------------|-------|
| BUTYL ACETATE -norm | WEL | 150 ppm | 724 mg/m3 | 200 ppm | 966 mg/m3 | |
| ETHYLBENZENE | WEL | 100 ppm(Sk) | 441 mg/m3(Sk) | 125 ppm(Sk) | 552 mg/m3(Sk) | |
| HYDROCARBON PROPELLANT | WEL | 600 ppm | 1430 mg/m3 | 750 ppm | 1780 mg/m3 | |
| ISOBUTYL METHYL KETONE | WEL | 50 ppm(Sk) | 208 mg/m3(Sk) | 100 ppm(Sk) | 416 mg/m3(Sk) | |
| PROPAN-2-OL | WEL | 400 ppm | 999 mg/m3 | 500 ppm | 1250 mg/m3 | |
| XYLENE | WEL | 50 ppm(Sk) | 220 mg/m3(Sk) | 100 ppm(Sk) | 441 mg/m3(Sk) | |

WEL = Workplace Exposure Limit.

ZINC GALVA

PROPAN-2-OL (CAS: 67-63-0)

DNEL

| | | | | |
|----------|-------------|-----------|------------------|---------------|
| Industry | Dermal | Long Term | Systemic Effects | 888 mg/kg/day |
| Industry | Inhalation. | Long Term | Systemic Effects | 500 mg/m3 |
| Consumer | Dermal | Long Term | Systemic Effects | 319 mg/kg/day |
| Consumer | Oral | Long Term | Systemic Effects | 26 mg/kg/day |
| Consumer | Inhalation. | Long Term | Systemic Effects | 89 mg/m3 |

PNEC

| | | |
|------------------------|-------|-------|
| Freshwater | 140.9 | mg/l |
| Marinewater | 140.9 | mg/l |
| Intermittent release | 140.9 | mg/l |
| Sediment (Freshwater) | 552 | mg/kg |
| Sediment (Marinewater) | 552 | mg/kg |
| STP | 2251 | mg/l |
| Soil | 28 | mg/kg |

8.2. Exposure controls

Protective equipment



Engineering measures

No specific ventilation requirements noted, except this product must not be used in a confined space without good ventilation.

Hand protection

For prolonged or repeated skin contact use suitable protective gloves. Use protective gloves made of: Rubber, neoprene or PVC.

Eye protection

Wear approved chemical safety goggles where eye exposure is reasonably probable.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

| | |
|------------|--------------------|
| Appearance | Aerosol. |
| Colour | Grey. |
| Odour | Ketonic. |
| Solubility | Insoluble in water |

9.2. Other information

No information required.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No specific reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Not determined.

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials To Avoid

No incompatible groups noted.

10.6. Hazardous decomposition products

Fire or high temperatures create: Carbon dioxide (CO₂). Carbon monoxide (CO).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

ZINC GALVA

Inhalation

Vapours may cause drowsiness and dizziness.

Ingestion

Gastrointestinal symptoms, including upset stomach.

Skin contact

Repeated exposure may cause skin dryness or cracking.

Eye contact

Irritation of eyes and mucous membranes.

Toxicological information on ingredients.

PROPAN-2-OL (CAS: 67-63-0)

Toxic Dose 1 - LD 50

4700 mg/kg (oral rat)

Toxic Dose 2 - LD 50

>2000 mg/kg (oral-rbt)

Toxic Conc. - LC 50

46.5 ppm/4h (inh-rat)

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

The product contains a substance which is very toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

12.1. Toxicity

Acute Toxicity - Fish

Not determined.

Ecological information on ingredients.

PROPAN-2-OL (CAS: 67-63-0)

48 hours > 100 mg/l *Leuciscus idus* (Golden orfe)

EC 50, 48 Hrs, *Daphnia*, mg/l

>100

IC 50, 72 Hrs, *Algae*, mg/l

>100

12.2. Persistence and degradability

Degradability

The product is expected to be biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential

The product does not contain any substances expected to be bioaccumulating.

12.4. Mobility in soil

Mobility:

The product is insoluble in water and will spread on the water surface.

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

Not determined.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

ZINC GALVA

Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

UN No. (ADR/RID/ADN) 1950

UN No. (IMDG) 1950

UN No. (ICAO) 1950

14.2. UN proper shipping name

Proper Shipping Name AEROSOLS

14.3. Transport hazard class(es)

ADR/RID/ADN Class Class 2.1: Flammable gases.

IMDG Class 2.1

ICAO Class/Division 2.1

Transport Labels



14.4. Packing group

ADR/RID/ADN Packing group 5F

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant



14.6. Special precautions for user

Tunnel Restriction Code (D)

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

Statutory Instruments

Control of Substances Hazardous to Health.

Guidance Notes

Workplace Exposure Limits EH40.

EU Legislation

Dangerous Preparations Directive 1999/45/EC.

15.2. Chemical Safety Assessment

SECTION 16: OTHER INFORMATION

| | |
|------------------------|----------|
| Revision Date | 26/09/12 |
| Revision | 1.1 |
| Supersedes date | 04/11/10 |

Risk Phrases In Full

| | |
|--------|--|
| R15 | Contact with water liberates extremely flammable gases. |
| R12 | Extremely flammable. |
| R10 | Flammable. |
| R20/21 | Harmful by inhalation and in contact with skin. |
| R20 | Harmful by inhalation. |
| R11 | Highly flammable |
| R36/37 | Irritating to eyes and respiratory system. |
| R36 | Irritating to eyes. |
| R38 | Irritating to skin. |
| R66 | Repeated exposure may cause skin dryness or cracking. |
| R17 | Spontaneously flammable in air. |
| R67 | Vapours may cause drowsiness and dizziness. |
| R50/53 | Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |

Hazard Statements In Full

| | |
|--------|--|
| EUH066 | Repeated exposure may cause skin dryness or cracking. |
| H220 | Extremely flammable gas. |
| H222 | Extremely flammable aerosol. |
| H225 | Highly flammable liquid and vapour. |
| H226 | Flammable liquid and vapour. |
| H250 | Catches fire spontaneously if exposed to air. |
| H260 | In contact with water releases flammable gases which may ignite spontaneously. |
| H304 | May be fatal if swallowed and enters airways. |
| H312 | Harmful in contact with skin. |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |
| H336 | May cause drowsiness or dizziness. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |

Disclaimer

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.