

SAFETY DATA SHEET

Section 1: Product and Company Identification

Product Identifier: PowerWeld Zinc Galv with Bright Finish (Aerosol)

Product Use: Repairs hot-dip galvanizing with a bright finish

Item Code: PW6066

Supplier Name:PowerWeld Inc.Supplier Address:2501 Beech Street

Valparaiso, IN 46383

Supplier Web Address: www.powerweldinc.com

Supplier Phone: 219-462-8700

1-800-826-9073

Manufacturer: KCI, Inc.

Manufacturer Address: 1721 Toal Street

Charlotte, NC 28206

Manufacturer Web Address: www.kciincorporated.com

Manufacturer Phone: 780-372-8435

Emergency Phone: CHEMTREC (24-hour) 1800-424-9300

Prepared By: PowerWeld Inc.
Preparation Date: 12 June 2023

WHMIS Classification: Not a controlled product

Section 2: Hazard Identification

Classification: Acute toxicity, oral Category 4
Skin corrosion/irritation Category 2

Serious eye damage/eye irritation Category 2A Germ cell mutagenicity Category 1B Carcinogenicity Category 1B Reproductive toxicity (the unborn child) Category 2 Specific target organ toxicity (single exposure) Category 3 Specific target organ toxicity (repeated exposure) Category 1 Flammable aerosols Category 1 Gases under pressure Liquefied Gas Hazardous to the aquatic environment, acute hazard Category 2

Label Elements: Danger







Hazardous to the aquatic environment, long-term hazard





Category 3

Hazard Statements

H222 Extremely flammable aerosol.

H280 Contains gas under pressure; may explode if heated.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye damage.

H336 May cause drowsiness or dizziness.

- H340 May cause genetic defects.
- H350 May cause cancer.
- H360 May damage fertility or the unborn child.
- H373 May cause damage to organs (central nervous system, eyes, kidney, liver, respiratory system and skin) through prolonged or repeated exposure.
- H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P210 Keep away from heat/sparks/open flames/hot surfaces No smoking.
- P211 Do not spray on an open flame or other ignition source.
- P251 Pressurized container: Do not pierce or burn, even after use.
- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P264 Wash face, hands and any exposed skin thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P271 Use only outdoors or in a well-ventilated area.
- P273 Avoid release to environment.
- P280 Wear protective gloves/protective clothing/eye protection /face protection.
- P306+ IF EXPOSED OR CONCERNED:
- P313 Get medical advice/attention.
- P305+ IF IN EYES:
- P351+ Rinse cautiously with water for several minutes.
- P338 Remove contact lenses, if present and easy to do. Continue rinsing.
- P302+ IF ON SKIN:
- P352 Wash with plenty of soap and water.
- P332+ IF SKIN IRRITATION OCCURS:
- P313 Get medical advice/attention.
- P337+ IF EYE IRRITATION PERSISTS:
- P313 Get medical advice/attention.
- P304+ IF INHALED:
- P340 Remove person to fresh air and keep comfortable for breathing
- P312 Call a POISON CENTER or doctor/physician if you feel unwell.
- P301+ IF SWALLOWED:
- P310 Immediately call a POISON CENTER or doctor/physician.
- P331 Do NOT induce vomiting.
- P362 Take off contaminated clothing and wash before reuse.
- P391 Collect spillage. Hazardous to the aquatic environment.
- P405 Store locked up.
- P403+ Store in a well-ventilated place.
- P233 Keep container tightly closed.
- P410+ Protect from sunlight.
- P412 Do not expose to temperatures exceeding 50°C/122°F.
- P501 Dispose of contents/container to an approved waste disposal plant.

Other Hazards:

41.58% of the mixture consists of component(s) of unknown acute oral

39.04% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment.

39.04% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

Section 3: Composition/Information on Hazardous Ingredients

| HAZARDOUS INGREDIENTS | CAS NUMBER | APPROXIMATE CONCENTRATION (%)* |
|--|------------|--------------------------------|
| Acetone | 67-64-1 | 30 - 40 |
| Propane | 74-98-6 | 10 - 20 |
| Zinc | 7440-66-6 | 10 - 20 |
| N-Butane | 106-97-8 | 5 - 10 |
| Propylene glycol methyl ether acetate | 108-65-6 | 5 - 10 |
| Toluene | 108-88-3 | 5 – 10 |
| Aluminum | 7429-90-5 | 1 - 5 |
| Xylene | 1330-20-7 | 1 – 5 |
| Aliphatic hydrocarbon | 64742-82-1 | 0.1 - 1 |
| Ethyl benzene | 100-41-4 | 0.1 - 1 |
| Zinc oxide | 1314-13-2 | 0.1 - 1 |
| Other components below reportable levels | | 1 - 5 |

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

Section 4: First-aid Measures

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for

breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Ingestion: Not likely, due to the form of the product. Rinse mouth. If vomiting occurs,

keep head low so that stomach content doesn't get into the lungs. Get medical

advice/attention if you feel unwell.

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists. No specific first aid measures

noted.

Skin Contact: No adverse effects due to skin contact are expected. Wash off immediately

with plenty of soap and water. Remove contaminated clothing. Get medical

attention immediately if symptoms occur.

Symptoms: May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe

eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. Prolonged

exposure may cause chronic effects.

NOTE: If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. In all severe cases, contact physician immediately. Local telephone operators can provide number of regional poison control centre.

Section 5: Fire-fighting Measures

Flammable: Yes, flammable

Means of Extinction: Alcohol resistant foam. Water fog. Dry chemical powder. Dry sand. Carbon

dioxide (CO2). DO NOT use a solid water stream as it may scatter and spread

fire.

Auto-ignition Temperature: Not available

Hazardous Combustion Products: Explosion Data Sensitivity to Mechanical Impact: Explosion Data Sensitivity to

Static Discharge:
Special Equipment:

Precautions for Fire Fighters:

Not available

Not available

Yes

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Use shielding to protect fire-fighters from bursting containers.

Contents under pressure. Pressurized container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed. In case of fire: Stop leak if safe to do so. Do not move cargo or vehicle if cargo

In case of fire: Stop leak if safe to do so. Do not move cargo or vehicle if cargo has been exposed to heat. Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

Use standard fire fighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes.

Extremely flammable aerosol. Contents under pressure. Pressurized container may explode when exposed to heat or flame.

Section 6: Accidental Release Measures

Protective Equipment: Emergency Procedures:

Leak or Spill Procedure:

See Section 8

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Wear appropriate protective equipment and clothing during cleanup. Do not breathe mist or vapor. Emergency personnel need self-contained breathing equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area until gas has dispersed. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent product from entering drains. Following product recovery, flush area with water.

For small spills, wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.

Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

Section 7: Handling and Storage

Handling Procedures and Equipment:

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Do not breathe mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Pregnant or breast-feeding women must not handle this product. Should be handled in closed systems, if possible. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

Storage Requirements:

Level 2 Aerosol. Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122°F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Secure cylinders in an upright position at all times, close all valves when not in use. Store in a well-ventilated place.

Incompatibilities:

Strong acids. Acids. Strong oxidizing agents. Nitrates. Halogens. Fluorine. Chlorine.

Section 8: Exposure Controls/Personal Protection

Exposure Limits:

| COMPONENTS | CAS NUMBER | ACGIH TLV | NIOSH | OSHA PEL |
|-----------------------|------------|--------------------------|---|---------------------------------------|
| Acetone | 67-64-1 | STEL: 750 ppm | TWA: 590 mg/m ³ | PEL: 2400 mg/m ³ |
| | | TWA: 500 ppm | 250 ppm | PEL: 1000 ppm |
| | | | Ceiling: 1800 mg/m ³ | |
| | | | TWA: 5 mg/m³ (welding | |
| Aliphatic hydrocarbon | 64742-82-1 | TWA: 1000 ppm | fume or pyrophoric | |
| | | | powder) | |
| | | TWA: 1 mg/m ³ | E mg/m² (ragniyahla) | PEL: 5 mg/m³ (fume) |
| Aluminum | 7429-90-5 | (respirable | 5 mg/m³ (respirable) 10 mg/m³ (dust) | PEL: 5 mg/m ³ (total dust) |
| | | fraction) | 10 mg/m² (dust) | FEE. 13 mg/m² (total dust) |
| | | | STEL: 545 mg/m ³ | |
| Ethyl benzene | 100-41-4 | TWA: 20 ppm | 125 ppm | PEL: 435 mg/m ³ |
| Ethyl benzene | 100 41 4 | 1 W11. 20 ppiii | TWA: 435 mg/m ³ | PEL: 100 ppm |
| | | | 100 ppm | |
| N-Butane | 106-97-8 | STEL: 1000 ppm | TWA: 1900 mg/m ³ | |
| | | | TWA: 800 ppm | PEL: 1800 mg/m ³ |
| Propane | 74-98-6 | | 1800 mg/m^3 | PEL: 1000 mg/m ² |
| | | | 1000 ppm | 1 EE. 1000 ppiii |
| | | | STEL: 560 mg/m ³ | |
| Toluene | 108-88-3 | TWA: 20 ppm | 150 ppm | Ceiling: 300 ppm |
| | | | TWA: 375 mg/m ³ | TWA: 200 ppm |
| | | | 100 ppm | |
| Xylene | 1330-20-7 | STEL: 150 ppm | | PEL: 435 mg/m ³ |
| | | TWA: 100 ppm | | PEL: 100 ppm |
| | | | | |

STEL: 10 mg/m³

(respirable fraction) TWA: 2 mg/m³

Ceiling: 15 mg/m³ (dust) STEL: 10 mg/m³ (fume) TWA: 5 mg/m³ (fume) 5 mg/m³ (dust) PEL: 5 mg/m³ (respirable fraction)
PEL: 5 mg/m³ (fume)

PEL: 15 mg/m³ (total dust)

(respirable fraction)

Engineering Controls: Good general ventilation (typically 10 air changes per hour) should be used.

Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when

handling this product.

Personal Protective Equipment: <u>Eve/Face Protection</u> – Safety glasses with side-shields (or goggles).

<u>Skin and Body Protection</u> – Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier. Wear

appropriate chemical resistant clothing.

Respiratory Protection – If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

<u>Hygiene Measures</u> – When using do not smoke. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove

contaminants.

Section 9: Physical and Chemical Properties

Zinc oxide

Physical State: Aerosol

Odour and Appearance: Solvent scent, opaque grey in colour

Odour Threshold (ppm):Not availablepH:Not availableMelting Point:Not available

1314-13-2

Freezing Point: $-305.68 \,^{\circ}\text{F} \,(-187.6 \,^{\circ}\text{C})$ estimated Boiling Point: $-43.78 \,^{\circ}\text{F} \,(-42.1 \,^{\circ}\text{C})$ estimated Flashpoint: $-156.0 \,^{\circ}\text{F} \,(-104.4 \,^{\circ}\text{C})$ estimated

Upper Flammable Limit (% by volume): 12.8% estimated Lower Flammable Limit (% by volume): 1.8% estimated

Vapor Pressure: 2200.03 hPa estimated

Vapor Density:Not availableRelative Density:Not availableSolubility:Not availablePartition Coefficient:Not available

Auto-Ignition Temperature: 550 °F (287.78 °C) estimated

Decomposition Temperature:Not availableViscosity:Not availableDensity:6.83 lbs/gal

Flammability Class: Flammable IA estimated Heat of Combustion (NFPA 30B): 26.89 kJ/g estimated

Percent Volatile: 81.72% Specific Gravity: 0.82

VOC: 380.852661g/l Material

3.1783695 lbs/gal Material 599.484616 g/l Regulatory

Section 10: Stability and Reactivity

Chemical Stability: Stable under recommended storage conditions.

Possible Hazardous Reactions: None under normal processing.

Conditions to Avoid: Heat. Avoid temperatures exceeding the flash point. Contact with

incompatible materials.

Materials to Avoid (Incompatibilities): Strong acids. Acids. Strong oxidizing agents. Nitrates. Halogens. Ammonia.

Amines. Isocyanates. Fluorine. Caustics. Chlorine.

Conditions of Reactivity: Not available

Hazardous Decomposition By-Products: No hazardous decomposition products are known

Hazardous Polymerization: Does not occur

Section 11: Toxicological Information

Skin Contact: Irritating to skin. Prolonged skin contact may defat the skin and produce

dermatitis.

Skin Absorption: Not available

Eye Contact: Causes serious eye irritation.

Inhalation: May cause damage to organs through prolonged or repeated exposure by

inhalation. May cause drowsiness and dizziness. Headache. Nausea,

vomiting. Prolonged inhalation may be harmful.

Ingestion: Not acutely toxic. Aspiration into the lungs during swallowing may cause

serious lung damage which may be fatal.

Effects of Acute Exposure: Harmful if swallowed. Narcotic effects. May cause drowsiness and dizziness.

Effects of Chronic Exposure: May cause damage to organs through prolonged or repeated exposure.

Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. Chronic hydrocarbon abuse has been associated with irregular heart rhythms and potential cardiac arrest. Prolonged skin contact

may defat the skin and produce dermatitis.

Irritancy of Product: Irritating to skin and eyes.

Sensitization to Product: Not available

Carcinogenicity: Suspected of causing cancer. Ethyl benzene (Group 2B), Xylene (Group 3).

Reproductive Effects: Components in this product have been shown to cause birth defects and

reproductive disorders in laboratory animals. Suspected of damaging

fertility or the unborn child.

Respiratory Sensitization:

Toxicological Data:

Not available

| COMPONENTS | CAS NUMBER | DERMAL LD50 | INHALATION LC50 | ORAL LD50 |
|-----------------------|------------|--|---|---|
| Acetone | 67-64-1 | Rabbit: > 15,800 mg/kg | Rat: 76 mg/l. 4 hrs | Mouse: 3000 mg/kg Rat: 5800 mg/kg |
| Aliphatic hydrocarbon | 64742-82-1 | | Rat: 61 mg/l, 4 hrs | Rat: > 25 ml/kg |
| Ethyl benzene | 100-41-4 | Rabbit: 17,800 mg/kg | | Rat: 3500 mg/kg |
| N-Butane | 106-97-8 | | Mouse: 680 mg/l, 2 hrs Rat: 658 mg/l, 4 hrs | |
| Propane | 74-98-6 | | Rat: > 1442.847 mg/l 15 min | |
| Toluene | 108-88-3 | Rabbit: 12,124 mg/kg Rabbit: 14.1 ml/kg | Mouse: 5320 ppm, 8 hrs Mouse: 400 ppm, 24 hrs Rat: 26,700 ppm, 1 hr Rat: 8000 ppm, 4 hrs | Rat: 2.6 g/kg |
| Xylene | 1330-20-7 | Rabbit: > 43 g/kg | Mouse: 3907 mg/l, 6 hrs Rat: 6350 mg/l, 4 hrs | Mouse: 1590 mg/kg Rat: 3523 – 8600 mg/kg |
| Zinc | 7440-66-6 | | | Rat: 630 mg/kg |
| Zinc oxide | 1314-13-2 | | Mouse: > 5.7 mg/l, 4 hrs | Mouse: 7950 mg/kg Rat: > 5 g/kg |

Section 12: Ecological Information

Aquatic and Terrestrial Toxicity:

| COMPONENTS | CAS NUMBER | TOXICITY TO CRUSTACEA | TOXICITY TO FISH |
|-----------------------|-------------------|--|--|
| Acetone | 67-64-1 | EC50 Water flea (Daphnia magna): 21.6 – 23.9 mg/l, 48 hrs | LC50 Rainbow trout (Oncorhynchus mykiss): 4740 – 6330 mg/l, 96 hrs |
| Aliphatic hydrocarbon | 64742-82-1 | EC50 Water flea (Daphnia pulex): 2.7 – 5.1 mg/l, 48 hrs | LC50 Rainbow trout (Oncorhynchus mykiss): 8.8 mg/l, 96 hrs |
| Aluminum | 7429-90-5 | | LC50 Rainbow trout (Oncorhynchus mykiss): 0.16 mg/l, 96 hrs |
| Ethyl benzene | 100-41-4 | EC50 Water flea (Daphnia magna): 1.37 – 4.4 mg/l, 48 hrs | LC50 Fathead minnow (Pimephales promelas): 7.5 – 11 mg/l, 96 hrs |
| Toluene | 108-88-3 | EC50 Water flea (Daphnia magna): 5.46 – 9.83 mg/l, 48 hrs | LC50 Coho salmon (Oncorhynchus kisutch): 8.11 mg/l, 96 hrs |
| Xylene | 1330-20-7 | | LC50 Bluegill (Lepomis macrochirus): 7.711 – 9.591 mg/l, 96 hrs |
| Zinc | 7440-66-6 | EC50 Water flea (Daphnia magna): 2.8 mg/l, 48 hrs | LC50 Rainbow trout (Oncorhynchus mykiss): 0.56 mg/l, 96 hours |
| Zinc oxide | 1314-13-2 | | LC50 Fathead minnow (Pimephales promelas): 2246 mg/l, 96 hrs |

Persistence and Degradability: Not available

Bio-accumulative Potential: Partition coefficient n-octanol / water (log Kow)

Acetone -0.24
Aliphatic hydrocarbon 3.16 - 7.15
N-Butane 2.89
Propane 2.36
Toluene 2.73
Xylene 3.12 - 3.2

Soil Mobility: Not available

Section 13: Disposal Considerations

NOTE: Always dispose of waste in accordance with local, provincial and federal regulations.

Safe Handling: Do not re-use empty containers.

Methods of Disposal: Collect and reclaim or dispose in sealed containers at licensed waste disposal

site. Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling

or disposal. Do not re-use empty containers.

Section 14: Transportation Information

UN Identification Number: UN1950
Proper Shipping Name: Aerosols
Hazardous Class or Division: 2.1

Packing Group: Limited quantity

Section 15: Regulatory Information

California Proposition 65: This product contains chemicals known to the State of California to cause

cancer - Ethyl benzene (11 June 2004); Silica, crystalline quartz (1 October

1998)

U.S. State Right to Know: Acetone (California, Massachusetts, New Jersey, Pennsylvania, Rhode Island)

Aliphatic hydrocarbon (California)

Aluminum (California, Massachusetts, New Jersey, Pennsylvania, Rhode

Island)

Ethyl benzene (California, Massachusetts, New Jersey, Pennsylvania, Rhode

Island)

N-Butane (California, Massachusetts, New Jersey, Pennsylvania, Rhode

(Island

Propane (Massachusetts, New Jersey, Pennsylvania, Rhode Island)

Toluene (California, Massachusetts, New Jersey, Pennsylvania, Rhode Island) Xylene (California, Massachusetts, New Jersey, Pennsylvania, Rhode Island) Zinc (California, Massachusetts, New Jersey, Pennsylvania, Rhode Island) Zinc oxide (Massachusetts, New Jersey, Pennsylvania, Rhode Island)

Section 16: Other Information

HMIS® Ratings: Health, 2

Flammability, 4

Physical hazard, 0

NFPA Ratings: Health, 2

Flammability, 4

Physical hazard, 0

Preparation Date: 12 June 2023
Date of Last Revision: 12 June 2023

This SDS format is in accordance with GHS. PowerWeld Inc. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Product use and conditions of use are beyond the control of PowerWeld. Warranty of materials is limited to test results of product performance as detailed in certificates of compliance. Interpretation of test results is the responsibility of enduser. No other warranties, expressed or implied, are made.