

Section 1: Product and Company Identification

<i>Product Identifier:</i>	PowerWeld Nuclear Developer
<i>Product Use:</i>	Non-Destructive Dye Penetrant Developer
<i>Item Code:</i>	PW2500
<i>Supplier Name:</i>	PowerWeld Inc.
<i>Supplier Address:</i>	2501 Beech Street Valparaiso, IN 46383
<i>Supplier Web Address:</i>	www.powerweldinc.com
<i>Supplier Phone:</i>	219-462-8700 1-800-826-9073
<i>Emergency Phone:</i>	CHEMTREC (24-Hour) 1-800-424-9300
<i>Prepared By:</i>	PowerWeld Inc.
<i>Preparation Date:</i>	22 December 2020
<i>OSHA Regulatory Status:</i>	Regulated
<i>WHMIS Classification:</i>	-A, B-5, D-2B

Section 2: Hazard Identification

<i>Classification:</i>	Skin corrosion/irritation	Category 2
	Serious eye damage/irritation	Category 2A
	Specific target organ toxicity (single exposure)	Category 3
	Specific target organ toxicity (repeated exposure)	Category 2
	Flammable aerosols	Category 1
	Gases under pressure	Compressed Gas

Label Elements:



Signal Word (GHS)

Danger

Hazard Phrases

- H222 Extremely flammable aerosol
- H280 Contains gas under pressure; may explode if heated
- H315 Causes skin irritation
- H319 Causes serious eye irritation
- H335 May cause respiratory irritation
- H336 May cause drowsiness
- H373 May cause damage to organs through prolonged or repeated exposure

Precautionary Phrases

- 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.
- P271 Use only outdoors in a well-ventilated area.
- P280 Wear protective gloves/eye protection/face protection.
- P302+ IF ON SKIN:
- P352 Wash with plenty of soap and water.
- P304+ IF INHALED:
- P340 Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P305+ IF IN EYES:
- P351+ Rinse cautiously with water for several minutes.
- P312 Call a POISON CENTRE or doctor/physician if you feel unwell.
- P338 Remove contact lenses, if present and easy to do so. Continue rinsing.
- P332+ If skin irritation occurs:
- P313 Get medical advice/attention.
- P337+ If eye irritation persists:
- P313 Get medical advice/attention.
- P362 Take off contaminated clothing and wash before reuse.
- P403 Store in a well-ventilated place.
- P405 Store locked up.
- P410 Protect from sunlight.
- P411 Do not expose to temperatures exceeding 50°C / 122°F

Other Hazards:

Not applicable

Section 3: Composition/Information on Hazardous Ingredients

HAZARDOUS INGREDIENTS	CAS NUMBER	APPROXIMATE CONCENTRATION (%)
Isopropyl Alcohol	67-63-0	15 - 40
Propane / Isobutane / N-Butane	68476-86-8	10 - 30
Acetone	67-64-1	10 - 30
Zinc Stearate	67762-34-9	5 - 10
Surface Treated Silica	68611-44-9	1 - 5

Section 4: First-aid Measures

- Inhalation:* Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and transport to nearest medical facility for additional treatment.
- Ingestion:* Do NOT induce vomiting. Call physician immediately. Never give anything by mouth to an unconscious person. Risk of product entering the lungs on vomiting after ingestion.
- Eye Contact:* Immediately flush upper and lower eyelids with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Rest eyes for 30 minutes. If redness, burning, blurred vision or swelling persists, visit nearest medical facility for additional treatment.
- Skin Contact:* Wash off immediately with soap and water. Do not use ointments. Wash contaminated clothing before reuse. If skin irritation persists, contact a physician.
- Symptoms:* Treat symptomatically.

NOTE: In all severe cases, contact physician immediately. Local telephone operators can provide number of regional poison control centre.

Section 5: Fire-fighting Measures

<i>Flammable:</i>	Flammable aerosol
<i>Means of Extinction:</i>	Water fog; foam; dry chemical; alcohol-resistant foam; carbon dioxide (CO ₂). Do not use a solid water stream as it may scatter and spread fire.
<i>Auto-ignition Temperature:</i>	Not available
<i>Hazardous Combustion Products:</i>	Carbon oxides
<i>Explosion Data Sensitivity to Mechanical Impact:</i>	Not available
<i>Explosion Data Sensitivity to Static Discharge:</i>	Not available
<i>Special Equipment:</i>	Not available
<i>Precautions for Fire Fighters:</i>	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.

Section 6: Accidental Release Measures

<i>Protective Equipment:</i>	See Section 8
<i>Emergency Procedures:</i>	Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
<i>Leak or Spill Procedure:</i>	Ensure adequate ventilation. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Use a non-combustible inert absorbent (ie. vermiculite, sand or earth, etc.) to soak up the product and place into a container for proper disposal.

Section 7: Handling and Storage

<i>Handling Procedures and Equipment:</i>	Avoid contact with eyes. Avoid breathing vapours or mists. Contents under pressure. Do not puncture or incinerate cans. Do not stick pin or any other sharp object into opening on top of can.
<i>Storage Requirements:</i>	Store in area below 120°F (49°C). Do not incinerate or burn containers. Ensure canister is in a secure place to prevent accidental puncture. Always ensure canister is capped when not in use. Keep out of the reach of children.
<i>Incompatibilities:</i>	Incompatible with oxidizing agents.

Section 8: Exposure Controls/Personal Protection

Exposure Limits:

HAZARDOUS INGREDIENTS	CAS NUMBER	ACGIH TLV	OSHA PEL
Isopropyl Alcohol	67-63-0	400 ppm (STEL) 200 ppm (TWA)	400 ppm (TWA) 500 ppm (STEL) [vacated]
Propane / Isobutane / N-Butane	68476-86-8	1000 ppm	1000 ppm
Acetone	67-64-1	750 ppm (STEL) 500 ppm (TWA)	1000 ppm

<i>Engineering Controls:</i>	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.
------------------------------	--------------------------------------------------------------------------------------------------------------------------

Personal Protective Equipment:

Eyes - Safety glasses with side-shields. Where eye contact could occur, chemical splash proof goggles are recommended.

Skin - Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

General Hygiene - Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes and clothing. Wash hands and face before breaks and immediately after handling the product. Avoid breathing vapours, mist or gas.

Section 9: Physical and Chemical Properties

<i>Physical State:</i>	Aerosol
<i>Odor and Appearance:</i>	White liquid with light vanilla odor
<i>Odor Threshold (ppm):</i>	Not available
<i>Specific Gravity:</i>	0.757
<i>pH:</i>	Neutral
<i>Percentage Volatility:</i>	64.83
<i>Melting Point:</i>	Not available
<i>Freezing Point:</i>	Not available
<i>Boiling Point:</i>	Not available
<i>Flashpoint:</i>	- 141°F / - 96.4°C (based on propellant)
<i>Upper Flammable Limit (% by volume):</i>	Not available
<i>Lower Flammable Limit (% by volume):</i>	Not available

Section 10: Stability and Reactivity

<i>Chemical Stability:</i>	Stable under recommended storage conditions.
<i>Possible Hazardous Reactions:</i>	None under normal processing.
<i>Conditions to Avoid:</i>	Extreme temperatures; direct sunlight
<i>Materials to Avoid (Incompatibilities):</i>	Strong oxidizers and acids
<i>Conditions of Reactivity:</i>	No data available
<i>Hazardous Decomposition By-Products:</i>	Carbon oxides
<i>Hazardous Polymerization:</i>	Hazardous polymerization does not occur.

Section 11: Toxicological Information

<i>Skin Contact:</i>	Irritating to skin. Prolonged skin contact may defat or dry the skin and produce dermatitis. May cause frostbite.
<i>Skin Absorption:</i>	No
<i>Eye Contact:</i>	Irritating to eyes. Liquid or vapours may cause redness, burning, tearing, swelling and/or pain.
<i>Inhalation:</i>	Irritating to respiratory system. Avoid breathing vapours or mists. Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness, cessation of breathing.
<i>Ingestion:</i>	Not an expected route of exposure. Potential for asphyxiation if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
<i>Effects of Acute Exposure:</i>	Not available
<i>Effects of Chronic Exposure:</i>	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.

<i>Suggested HMIS Rating:</i>	Health [2] Flammability [4] Physical Hazard [2] Personal Protection [B]
<i>Suggested NFPA Rating:</i>	Health [2] Flammability [4] Stability [0]
<i>Irritancy of Product:</i>	Not available
<i>Sensitization to Product:</i>	Not available
<i>Carcinogenicity:</i>	There are no known carcinogenic chemicals in this product.
<i>Reproductive Effects:</i>	Not available
<i>Respiratory Sensitization:</i>	Not available
<i>Toxicological Data:</i>	<u>Isopropyl Alcohol</u>

Oral, rat – 1870 mg/kg (LD50)
Dermal, rabbit – 4059 mg/kg (LD50)
Inhalation, rat – 72600 mg/m³ [4hr]

Acetone

Oral, rat – 5800 mg/kg (LD50)
Dermal, rabbit – 20000 mg/kg (LD50)
Inhalation, rat – 50100 mg/m³ [8hr]

Section 12: Ecological Information

<i>Aquatic and Terrestrial Toxicity:</i>	Not available
<i>Persistence and Degradability:</i>	Not available
<i>Bio accumulative Potential:</i>	Not available
<i>Soil Mobility:</i>	Not available

Section 13: Disposal Considerations

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

<i>Safe Handling:</i>	Do not re-use empty containers.
<i>Methods of Disposal:</i>	Material resulting from clean-up operations may be hazardous wastes and therefore subject to local, regional and federal regulations.

Section 14: Transportation Information

<i>UN Identification Number:</i>	UN1950
<i>Proper Shipping Name:</i>	Aerosols, Flammable Limited Quantity
<i>Hazardous Class or Division:</i>	2.1
<i>Packing Group:</i>	None

Section 15: Regulatory Information

<i>Toxic Substances Control Act (TSCA):</i>	The product on this SDS, or all of its components, is listed under TSCA.
<i>SARA Title III, Section 313:</i>	The following ingredients are subject to the reporting requirements of Section 313 of Title III of the Superfund and Reauthorization Act of 1986 and 40 CFR Part 372: Isopropyl Alcohol & Zinc Stearate
<i>Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA):</i>	Reportable Quantity for Acetone = 5,000 lbs.
<i>California Proposition 65:</i>	This product does not contain any known Proposition 65 chemicals.
<i>Pennsylvania Right to Know Information:</i>	(5 most predominant ingredients / hazardous & non-hazardous) Isopropyl Alcohol, Acetone and Zinc Stearate
<i>Canadian Workplace Hazardous Materials Information System (WHMIS):</i>	This SDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the

Domestic Substances List (DSL):

information required by the CPR. WHMIS CLASS: Aerosol - A, B-5, D-2B
The product on this SDS, or all of its components, is included in the DSL.

Section 16: Other Information

<i>Preparation Date:</i>	10 June 2016
<i>Date of Last Revision:</i>	22 December 2020

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 end-user. No other warranties, expressed or implied, are made.