

Safety Data Sheet

DryWired® Rust Protect Emulsion

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: DryWired® Rust Protect Emulsion
Recommended Use: Water-based dispersion for corrosion inhibiting coating
Supplier: DryWired®
Address: 5569 W. Washington Blvd.
 Los Angeles, CA 90016
Phone: 1-800-581-4528
Revised On: 10/22/19
Emergency Phone: US: 1-800-535-5053, International: 1-352-323-3500

SECTION 2: HAZARDS IDENTIFICATION

Hazard classification: Classified as hazardous according to OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Health		Environmental	Physical
Serious Eye Damage	Category 1	Not applicable.	Not applicable.
Skin Irritation	Category 2		
Reproductive toxicity	Category 1B		
Skin sensitisation	Category 1		

GHS Label elements:

Signal word: Danger



Hazard Statements	Precautionary Statements
H315 Causes skin irritation H317 May cause an allergic skin reaction H318 Causes serious eye damage. H360 May damage fertility or the unborn child.	P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P264 Wash skin thoroughly after handling. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P281 Use personal protective equipment as required. P302 + P352 IF ON SKIN: wash with plenty of soap and water. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308 + P313 IF exposed or concerned: Get medical advice/attention. P333 + P313 IF SKIN irritation or rash occurs: Get medical advice/attention. P362 Take off contaminated clothing and wash before reuse. P363 Wash contaminated clothing before reuse. P405 Store locked up. P501 Dispose of contents/ container to an approved waste disposal plant.

Hazards not otherwise classified: Lachrymator (a substance that irritates the eyes and causes tears to flow).

SECTION 3: COMPOSITION/ INFORMATION ON INGREDIENTS

Chemical Characterization: Mixtures

INGREDIENT	CAS No.	Weight %
1-methyl-2-pyrrolidone	872-50-4	<5.00
2-dimethylaminoethanol	108-01-0	<1.50

All other materials are considered to be nonhazardous, proprietary, or are below cutoff values according to OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 4: FIRST AID MEASURES

Description of first aid measures:



Safety Data Sheet

DryWired® Rust Protect Emulsion

Inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

Skin Contact: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs, get medical advice/attention.

Eye Contact: Rinse with water for at least 15 minutes. Remove contact lenses. Continue rinsing. If eye irritation persists, get medical advice/attention.

If Swallowed: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Most important symptoms and effects, both acute and delayed: The most important known symptoms and effects are described in the labeling (see section 2) and/or in section 11.

Indication of any immediate medical attention and special treatment required: No further relevant information available.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture: Carbon oxides, Nitrogen oxides (NOx).

Advice for firefighters: Wear self-contained breathing apparatus for firefighting if necessary.

Further information: Use water spray to cool unopened containers.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up: Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

Reference to other sections: For personal protection see section 8. For disposal see section 13.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling: Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Precautions: section 2.

Conditions for safe storage, including any incompatibilities: Keep container closed when not in use. Protect against frost and freezing.

Specific End Uses: No further relevant information available other than the use mentioned in Section 1.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters: Components with workplace control parameters:

Component	CAS No.	Value	Control Parameters	Basis
N-methyl-2-pyrrolidone	872-50-4	TWA	10.000 ppm	USA. Workplace Environmental Exposure Levels (WEEL)
		Remarks: Skin		

Biological occupational exposure limits:

Component	CAS No.	Value	Biological Specimen	Parameters	Basis
N-methyl-2-pyrrolidone	872-50-4	100.0 mg/l	Urine	5-Hydroxy-Nmethyl-2-pyrrolidone	ACGIH - Biological Exposure Indices (BEI)
		Remarks: Skin			

Derived No Effect Level (DNEL):

Application Area	Exposure Routes	Health Effect	Value
Workers	Skin Contact	Acute Systemic Effects	208mg/kg BW/d
Workers	Inhalation	Acute Systemic Effects	80 mg/m3
Workers	Skin Contact	Long-term Systemic Effects	19.8mg/kg BW/d
Workers	Inhalation	Long-term Systemic Effects	40 mg/m3

Predicted No Effect Concentration:

Compartment	Value
Water	5 mg/l
Soil	0.138 mg/kg



Safety Data Sheet

DryWired® Rust Protect Emulsion

Marine Water	0.025 mg/kg
Fresh Water	0.25 mg/l
Fresh Water Sediment	0.805mg/kg
Onsite Sewage Treatment Plant	10 mg/l

Appropriate engineering controls: Wash hands before breaks and immediately after handling the product.

Personal protective equipment:

Eye/face protection: Safety goggles are recommended. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection: Handle with gloves. Gloves must be inspected prior to use. 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. Wash and dry hands. Check glove manufacturer recommendations for use with specific chemicals.

Body Protection: Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White liquid	Odour:	Little to none, amine-like.
Odour Threshold:	No data available.	pH:	7-8
Melting Point/Freezing Point:	0°C	Initial Boiling Point/Boiling Point Range:	100°C
Flash Point:	No data available.	Evaporation Rate:	No data available.
Flammability (solid, gas):	No data available.	Upper/Lower Flammability of Explosive Limits:	No data available.
Vapour Pressure:	2.3 kPa	Vapour Density:	No data available.
Relative Density:	1.06 g/ml	Solubility:	Fully miscible.
Partition Coefficient: n-octanol & water:	No data available.	Auto-Ignition Temperature:	No data available.
Decomposition Temperature:	No data available.	Viscosity:	30-200 mPa.s

Other Information: No further relevant information available.

SECTION 10: STABILITY AND REACTIVITY

Reactivity: No data available.

Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions: No data available.

Conditions to avoid: Direct sunlight. Freeze/thaw conditions. Extreme temperatures.

Incompatible materials: Strong acids. Strong bases.

Hazardous decomposition products: No data available. In the event of fire: see section 5

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity: 1-methyl-2-pyrrolidone (872-50-4): LD50 oral: rat, 3914mg/kg; LDLO Inhalation: Rat 4h >5100ppm; LD50 Dermal: Rabbit, 8000mg/kg. 2-dimethylaminoethanol (108-01-0): LD50 oral: rat, male and female, 1182.7mg/kg; LC50 Inhalation: Rat, male, 4h, 6.1mg/l; LD50 Dermal: Rabbit, male, 1219mg/kg.

Skin corrosion/irritation: 1-methyl-2-pyrrolidone (872-50-4): Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2). 2-dimethylaminoethanol (108-01-0): Skin - Rabbit, Result: Corrosive - 1h (OECD Test Guideline 404).

Serious eye damage/eye irritation: 1-methyl-2-pyrrolidone (872-50-4): Eyes – Rabbit, Result: Eye irritation. 2-dimethylaminoethanol (108-01-0): Eyes – Rabbit, Result: Corrosive (OECD Test Guideline 405).

Respiratory or skin sensitisation: 2-dimethylaminoethanol (108-01-0): Buehler Test - Guinea pig, Result: Does not cause skin sensitisation.



Safety Data Sheet

DryWired® Rust Protect Emulsion

Germ cell mutagenicity: 2-dimethylaminoethanol (108-01-0): Hamster, ovary, Result: negative. Mouse - male and female, Result: negative (OECD Test Guideline 474).

Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: 1-methyl-2-pyrrolidone (872-50-4): Damage to fetus not possible.

Specific target organ toxicity - single exposure: 1-methyl-2-pyrrolidone (872-50-4): Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure: No data available.

Aspiration hazard: No data available.

Additional Information: 1-methyl-2-pyrrolidone (872-50-4): RTECS: UY5790000. Prolonged or repeated exposure can cause: Vomiting, Diarrhea, Abdominal pain, Rats exposed to 1-methyl-2-pyrrolidinone at a concentration of 1 mg/L as an aerosol for 10 days showed depletion of hematopoietic cells in the bone marrow and atrophy of the lymphoid tissues of the thymus, spleen, and lymph nodes. Bone marrow - Irregularities - Based on Human Evidence. 2-dimethylaminoethanol (108-01-0): Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. Cough, Shortness of breath, Headache, Nausea, Stomach - Irregularities - Based on Human Evidence.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: Toxicity to fish:

1-methyl-2-pyrrolidone (872-50-4): LC50 - other fish - 4,000 mg/l - 96 h; LC50 - Leuciscus idus (Golden orfe) - > 500 mg/l - 96 h

2-dimethylaminoethanol (108-01-0): LC50 - Leuciscus idus (Golden orfe) - > 100 - 220 mg/l - 96 h static test LC50 - Leuciscus idus (Golden orfe) - 146.63 mg/l - 96h

Toxicity to daphnia and other aquatic invertebrates:

1-methyl-2-pyrrolidone (872-50-4): EC50 - Daphnia magna (Water flea) - > 1,000 mg/l - 24 h

2-dimethylaminoethanol (108-01-0): static test EC50 - Daphnia magna (Water flea) - 98.37 mg/l - 48 h

Toxicity to algae:

2-dimethylaminoethanol (108-01-0): static test EC50 - Desmodesmus subspicatus (Scenedesmus subspicatus) - 66.08 mg/l - 72h

Toxicity to bacteria: 1-methyl-2-pyrrolidone (872-50-4): LC50 - Bacteria - > 9,000 mg/l

Persistence and degradability:

1-methyl-2-pyrrolidone (872-50-4): Result: 90 % - Readily biodegradable.

2-dimethylaminoethanol (108-01-0): aerobic - Exposure time 14 d Result: 60.5 % - Readily biodegradable.

Bioaccumulative potential: No data available.

Mobility in soil: No data available.

Other adverse effects: 2-dimethylaminoethanol (108-01-0): An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life. This product itself is not harmful to aquatic life, however, a small amount of the contained component, 2-dimethylaminoethanol, is. Please take this into account for disposal and handling.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal Methods: Should be taken to an authorized industrial waste handler. Do not allow release to the environment.

Uncleaned Packaging: Recommendation: Dispose of as unused product.

SECTION 14: TRANSPORT INFORMATION

Not regulated for transportation.

These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. DryWired® transportation classifications are based on product formulation, packaging, DryWired® policies and DryWired® understanding of applicable current regulations. DryWired® does not guarantee the accuracy of this classification information. This information applies only to transportation classification and not the packaging, labeling, or marking requirements. The original DryWired® package is



Safety Data Sheet

DryWired® Rust Protect Emulsion

certified for U.S. ground shipment only. If you are shipping by air or ocean, the package may not meet applicable regulatory requirements.

SECTION 15: REGULATORY INFORMATION

International Regulations: Contact DryWired® for more information.

US Federal Regulations: Contact DryWired® for more information.

State Regulations: Contact DryWired® for more information.

SARA 302 Components: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components: The following components are subject to reporting levels established by SARA Title III, Section 313: N-methyl-2-pyrrolidone, CAS-No. 872-50-4, Revision Date 2007-07-01.

SARA 311/312 Hazards: Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components:

N-methyl-2-pyrrolidone: CAS-No. 872-50-4, Revision Date 2007-07-01.

2-Dimethylaminoethanol: CAS-No.108-01-0, Revision Date 1993-04-24.

Pennsylvania Right To Know Components:

N-methyl-2-pyrrolidone: CAS-No. 872-50-4, Revision Date 2007-07-01.

2-Dimethylaminoethanol: CAS-No.108-01-0, Revision Date 1993-04-24.

New Jersey Right To Know Components:

N-methyl-2-pyrrolidone: CAS-No. 872-50-4, Revision Date 2007-07-01.

2-Dimethylaminoethanol: CAS-No.108-01-0, Revision Date 1993-04-24.

California Prop. 65 Components: WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm: N-methyl-2-pyrrolidone, CAS-No. 872-50-4, Revision Date 2009-02-01.

The components of this product are in compliance with the requirements of the Toxic Substances Control Act (TSCA). One of the components of this product is exempt from the TSCA Inventory listing requirements under the provisions of the TSCA Polymer Exemption (PE); 40 CFR §732.250. This product or mixture does not contain (a) toxic chemical(s) in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

SECTION 16: OTHER INFORMATION

DISCLAIMER: The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued.

DRYWIRED® MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE.

User is responsible for determining whether the product is fit for a particular purpose and suitable for user's method of use or application.

Given the variety of factors that can affect the use and application of a DryWired® product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the DryWired® product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.