



MATERIAL SAFETY DATA SHEET

Metal Rescue™ Rust Remover Liquid

1.	SUBSTANCE / PREPARATION AND COMPANY IDENTIFICATION
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PRODUCT NAME : **Metal Rescue™ Rust Remover Bath**

PRODUCT USE : WATER BASED RUST REMOVER LIQUID, COMPLEXING AGENT

COMPANY IDENTIFICATION : ARMOR Protective Packaging®
951 Jones Street, Howell, MI 48843

TELEPHONE NUMBER : (800) 365-1117

NFPA 704M/HMIS RATING

HEALTH : 0/0 FLAMMABILITY : 0/0 REACTIVITY : 0/0 OTHER :

0 = Insignificant 1 = Slight 2 = Moderate 3 = High 4 = Extreme

2.	COMPOSITION/INFORMATION ON INGREDIENTS
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Hazardous Ingredients	CAS #	% (w/w)
This product is not hazardous under 29 CFR 1910.1200		

3.	HAZARDS IDENTIFICATION
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Classification of the substance/preparation

EU Dangerous Preparations Directive
1999/45/EC. Not classified as dangerous

Human health effects

On the basis of available information, this material is not expected to produce any significant adverse health effects when recommended use instructions are followed.

Environmental effects

On the basis of available information, this material is not expected to produce any significant adverse environmental effects when recommended use instructions are followed.

4.	FIRST AID MEASURES
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General - Grossly contaminated clothing: Wash before re-use.

Eye contact - Rinse immediately with plenty of water. Continue for at least 15 minutes. Obtain medical advice if there are persistent symptoms.

Skin contact - Wash with plenty of water.

Inhalation - Remove patient to fresh air.

Ingestion - Give water to drink. Obtain medical advice

5.	FIRE FIGHTING MEASURES
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Extinguishing media - Water spray, foam, dry chemical, or carbon dioxide

Exposure hazards - None known

Combustion products – Carbon monoxide (CO), carbon dioxide, phosphorus oxides (P_xO_y), phosphines

Protective equipment - Firefighters, and others exposed, wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions - Use personal protection recommended in section 8

Methods for cleaning up - Contain large spills with dikes and transfer the material to appropriate containers for reclamation or disposal. Absorb remaining material or small spills with an inert material and then place in a chemical waste container. Flush spill area with water.

Environmental precautions - Keep out of drains and water courses

7. HANDLING AND STORAGE

Handling - Avoid contact with eyes. Use in ventilated areas. Follow good industrial practices.

Engineering measures - Provide natural or mechanical ventilation to minimize exposure.

Storage - Freeze sensitive. Stable under normal conditions of handling and storage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limit - No specific occupational exposure limit has been established.

Respiratory protection - Avoid breathing vapor or mist. Use approved respiratory protection equipment when airborne exposure is excessive.

Hand protection - Although this product does not present a significant skin concern, minimize skin contamination by following good industrial practice. Wearing protective gloves is recommended during repeated use.
Suitable materials : PVC, nitrile (rubber).

Eye protection - Does not cause significant eye irritation or eye toxicity requiring special protection. Use good industrial practice to avoid eye contact.

Skin protection - Although this product does not present a significant skin concern, minimize skin contamination by following good industrial practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE	Clear Liquid	pH (100 %)	6.5 - 7.5
ODOR	Bland	VAPOR PRESSURE	20 mm Hg @ 70 F
SOLUBILITY IN WATER	Complete	EVAPORATION RATE	<1 (BuAc = 1)
SPECIFIC GRAVITY	1.02	VAPOR DENSITY	0.6 (Air = 1)
DENSITY	8.5 lb/gal	VOC CONTENT	0% EPA Method 24

International HQ

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10. STABILITY AND REACTIVITY

Conditions to avoid - Do not expose to extreme temperatures.

Materials to avoid - None known

Hazardous polymerization does not occur

Non flammable aqueous solution

Hazardous decomposition products – Carbon monoxide (CO), carbon dioxide, phosphorus oxides (PxOy), phosphines

11. TOXICOLOGICAL INFORMATION

SENSITIZATION:

This product is not expected to be a sensitizer.

CARCINOGENICITY:

None of the substances in this product are listed as carcinogens by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP) or the American Conference of Governmental Industrial Hygienists (ACGIH).

No toxicity studies have been conducted on this product, but data obtained for similar components are summarised below.

Acute animal toxicity data

Oral LD50 ,rat, > 2.850 mg/kg ,

Dermal LD50 , rat, > 5.000 mg/kg ,

Eye irritation rabbit, Slightly irritating to eyes but not sufficient for classification. 24 h

Skin irritation rabbit, Slightly irritating to skin but not sufficient for classification. 4 h

12. ECOLOGICAL INFORMATION

No toxicity studies have been conducted on this product, but data obtained for similar components are summarised below.

Environmental Toxicity:

Invertebrates 48 h EC50 Water flea (*Daphnia magna*) 527 mg/l; 48 h LC50 Midge larvae (*Chironomus* sp.) 8.910 mg/l

Fish 96 h LC50 Rainbow trout (*Oncorhynchus mykiss*) 368 mg/l; 96 h LC50 Bluegill sunfish (*Lepomis macrochirus*) 868 mg/l

Algae 14 d EC50 Algae 13 mg/l 96 h EC50 Algae (*Selenastrum capricornutum*) 9,16 mg/l

Algal growth inhibition is due to ability of this product to complex materials not to toxicity per se.

Environmental fate

Biodegradation Closed Bottle(OECD 301D) BOD30/COD 5 % Degrades after acclimatization

Zahn-Wellens(OECD 302B) Dissolved Organic Carbon removed 33 % 28 d Modified SCAS(OECD 302A) Dissolved Organic Carbon removed 90 %

Bioconcentration factor (BCF) - Not expected to bioaccumulate.

Based on our hazard characterization, the potential environmental hazard is: Low

In accordance with the criteria of the EEC, this product is not to be marked as environmentally dangerous

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13. DISPOSAL CONSIDERATIONS

If this product becomes a waste, it is not a hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA) 40 CFR 261, since it does not have the characteristics of Subpart C, nor is it listed under Subpart D.

As a non-hazardous waste, it is not subject to federal regulation. Consult state or local regulation for any additional handling, treatment or disposal requirements.

14. TRANSPORT INFORMATION

LAND TRANSPORT (ROAD/RAIL) :	PRODUCT IS NOT REGULATED FOR TRANSPORTATION
AIR TRANSPORT (ICAO/IATA) :	PRODUCT IS NOT REGULATED FOR TRANSPORTATION
MARINE TRANSPORT (IMDG/IMO) :	PRODUCT IS NOT REGULATED FOR TRANSPORTATION

15. REGULATORY INFORMATION

NATIONAL REGULATIONS, USA :

OSHA HAZARD COMMUNICATION RULE, 29 CFR 1910.1200: Based on our hazard evaluation, none of the substances in this product are hazardous.

CERCLA/SUPERFUND, 40 CFR 117, 302: Notification of spills of this product is not required.

SARA/SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (TITLE III) - SECTIONS 302, 311, 312, AND 313: This product is not reportable. It does not contain substances listed in Appendix A and B as an Extremely Hazardous Substance and does not contain substances on the List of Toxic Chemicals. The substances in this preparation are included on or exempted from the TSCA 8(b) Inventory (40 CFR 710)

NATIONAL REGULATIONS, CANADA:

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS): This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contain all the information required by the CPR.

WHMIS CLASSIFICATION: Non - Toxic

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) : The substances in this preparation are listed on the Domestic Substances List (DSL), are exempt, or have been reported in accordance with the New Substances Notification Regulations.

EC label - EU Dangerous Preparations Directive 1999/45/EC: None.

16. OTHER INFORMATION

This product material safety data sheet provides health and safety information. The product is to be used in applications consistent with our product literature. Individuals handling this product should be informed of the recommended safety precautions and should have access to this information. For any other uses, exposures should be evaluated so that appropriate handling practices and training programs can be established to insure safe workplace operations. Please consult your local sales representative for any further information.

Prepared By: Technical Department

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