



THIS APPLIES TO UNDILUTED MATERIAL ONLY!

**Safety Data Sheet**  
**APW ANTI-RUST<sub>518</sub>**  
SDS Revision Date: 07/31/2020

**1. Product and Company Name**

**1.1. Product identifier**

**Product Identity** APW ANTI-RUST<sub>518</sub>  
**Alternate Names** NA ID NO: 518.20

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

**Intended use** See Product Label.  
**Application Method** See Technical Data Sheet

**1.3. Details of the supplier of the safety data sheet**

**Company Name** Hydrus Detergents  
2621 7<sup>th</sup> Avenue South  
Estherville, IA. 51334

**1.4 Medical and Emergency Spill Information**

**FOR EMERGENCY SPILL, LEAK, FIRE, EXPOSURE CALL 24/7** CHEMTREC (800) 424-9300  
Outside U.S. (703) 527-3887

**Customer Service: Hydrus Detergents** PHONE: (712) 765-1060  
FAX: (712) 765-1062

**2. Hazard identification of the product**

**2.1. Classification of the substance or mixture**

Acute Tox. 5;H303 May be harmful if swallowed. (Not adopted by US OSHA)  
Skin Corr. 1B;H314 May cause severe skin burns and eye damage.  
Eye Dam. 1;H318 May cause serious eye damage.

**2.2. Label elements**

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.



**Warning**

H313 May be harmful in contact with skin.  
H314 May severe skin burns and eye damage.  
H318 Causes serious eye damage.

**[Prevention]:**

P260 Do not breathe mist/vapors/spray.  
P264 Wash thoroughly after handling.  
P280 Wear protective gloves/eye protection/face protection.

**[Response]:**

P301+330+331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303+361+353 IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.  
P305+351+338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.  
P363 Wash contaminated clothing before reuse.

**[Storage]:**

P405 Store locked up.

**[Disposal]:**

P501 Dispose of contents / container in accordance with local / national regulations.

### 3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %
Morpholine CAS Number: 0000110-91-8	05 - 15

### 4. First aid measures

#### 4.1. Description of first aid measures

##### General

In all cases of doubt, or when symptoms persist, seek medical attention.

Never give anything by mouth to an unconscious person.

**NOTES TO PHYSICIAN:** All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

##### Inhalation

If breathing is difficult move to fresh air.

##### Eyes

Allow streaming water to flow over the face while blinking both eyes for 15 minutes for optimum irrigation. Get medical attention.

##### Skin

Wash off immediately. Seek medical attention if irritation persists.

##### Ingestion

Do NOT induce vomiting. Give water or milk of Magnesia. Seek immediate medical attention.

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

##### Overview

IMMEDIATE CONCERNS: CAUTION: May cause eye burns or skin irritation.

POTENTIAL SIDE AFFECTS

EYES: Could cause eye damage if not treated immediately.

SKIN: May be irritant if not rinsed off.

INGESTION: May be an irritant.

INHALATION: Avoid mist, may be an irritant.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Irritation or burns.

SKIN: Mist can cause skin irritation.

INGESTION: Can cause irritation to the stomach.

INHALATION: Avoid mist, can be an irritant.

ACUTE TOXICITY: Irritation may be caused with exposure to mist.

##### Inhalation

NA

##### Eyes

May cause serious eye damage.

##### Skin

Maybe harmful in contact with skin. (Not adopted by US OSHA) Can cause severe skin burns and eye damage.

### 5. Fire-fighting measures

**5.1. Extinguishing media:** Water, carbon dioxide, foam, dry chemical.

#### 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: Carbon Monoxide, Carbon Dioxide, Nitrous Oxide.

Toxic gases may be emitted when heated to decomposition.

Avoid breathing dust / fume / gas / mist / vapors / spray.

#### 5.3. Advice for fire-fighters

Respiratory and eye protection are required for fire-fighting personnel. Full protective equipment (Bunker Gear) and self-contained breathing apparatus (SCBA) should be used for all indoor fires and any significant outdoor fires.

ERG Guide No. ----

### 6. Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

#### 6.2. Environmental precautions

WATER SPILL: Use appropriate containment to avoid runoff.

LAND SPILL: Use appropriate containment to avoid runoff.

RELEASE NOTES: If spill could potentially enter any waterway, including intermittent dry creeks, contact the local authorities. If in the US, contact the US Coast Guard National Response Center toll free at 800-424-8802.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

**6.3. Methods and material for containment and cleaning up**

SMALL SPILL: Shut off leak if it can be done without injury. Pump to recovery container. Flush area with large amounts of water.  
 LARGE SPILL: Shut off leak if it can be done without injury. Pump to recovery container. Flush area with large amounts of water.

**7. Handling and storage**

**7.1. Precautions for safe handling**

HANDLING: Handle in a well ventilated area. Handle and use in a manner consistent with good industrial and/or manufacturing techniques and practices.

See section 2 for further details. - [Prevention]:

**7.2. Conditions for safe storage, including any incompatibilities**

Handle containers carefully to prevent damage and spillage.

Incompatible materials: Mineral acids and oxidizers.

STORAGE: Store in a cool dry area. Keep container closed when not in use. Freeze/thaw stable; however container may crack if frozen.

See section 2 for further details. - [Storage]:

**7.3. Specific end use(s):** Industrial Anti rust additive.

**8. Exposure controls and personal protection**

**8.1. Control parameters**

**EXPOSURE**

CAS No.	Ingredient	Source	Value
0000110-91-8	Morpholine	OSHA	TWA 220 ppm (70 mg/m3) STEL 30 ppm
		ACGIH	TWA: 20 ppm Skin
		NIOSH	TWA 20 ppm (70 mg/m3) ST 30 ppm (105 mg/m3) [skin]
		Supplier	No Established Limit

Carcinogen Data: No suspected or known carcinogens.

**8.2. Exposure controls**

- Respiratory** NA
- Eyes** Safety glasses or goggles.
- Skin** Wear overalls to keep skin contact to a minimum. Chemical resistant gloves.
- Engineering Controls** Provide adequate ventilation.
- Other Work Practices** Facilities storing or using this material should be equipped with an eyewash facility and a safety shower. Good personal hygiene practices should always be followed.

REMARKS: This product contains hazardous ingredients per OSHA 29 CFR 1910.1200. No PEL's TLV's or OEL's for this product or its ingredients are listed in the current issue of ACGIH's Guide to Occupational Exposure values nor have they been determined by the manufacturer. Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

**9. Physical and chemical properties**

<b>Appearance</b>	Brownish Pink Liquid
<b>Odor</b>	Ammonia
<b>Odor threshold</b>	Not Measured
<b>pH</b>	9.0 (5% solution)
<b>Melting point / freezing point</b>	-5 C
<b>Initial boiling point and boiling range</b>	Not Measured
<b>Flash Point</b>	>200 Deg. F. TCC
<b>Evaporation rate (Ether = 1)</b>	Not Measured
<b>Flammability (solid, gas)</b>	Not Applicable
<b>Upper/lower flammability or explosive limits</b>	<b>Lower Explosive Limit:</b> Not Measured <b>Upper Explosive Limit:</b> Not Measured
<b>Vapor pressure (Pa)</b>	>8 mm @ 70 Deg. F.

Vapor Density	(Air=1) 3
Specific Gravity	1.00
Solubility in Water	Soluble
Partition coefficient n-octanol/water (Log Kow)	Not Measured
Auto-ignition temperature	275 C
Decomposition temperature	Not Measured
Viscosity (cSt)	NA

9.2. Other information: No other relevant information.

### 10. Stability and reactivity

- 10.1. **Reactivity:** Hazardous Polymerization will not occur.
- 10.2. **Chemical stability:** Stable under normal ambient conditions of temperature and pressure.
- 10.3. **Possibility of hazardous reactions:** No data available.
- 10.4. **Conditions to avoid:** NA
- 10.5. **Incompatible materials:** Mineral acids and oxidizers
- 10.6. **Hazardous decomposition products:** Carbon Monoxide, Carbon Dioxide, Nitrous Oxide.

### 11. Toxicological information

#### Acute toxicity

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LD50, mg/L/4hr	Inhalation Dust/Mist LD50, mg/L/4hr	Inhalation Gas LD50, ppm
Morpholine – (110-91-8)	1,450.00, Rat-Category: 4	500.00, Rabbit-Category: 3	24.00, Rat-Category: NA	No data available	8,000.00, Rat-Category: NA

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	5	May be harmful in contact with skin. (Not adopted by US OSHA)
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	1B	May cause severe skin burns and eye damage.
Serious eye damage/irritation	1	May cause serious eye damage.
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

### 12. Ecological information

#### 12.1. Toxicity

No additional information provided for this product.

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Morpholine – (110-91-8)	1.00, Danio Rerio	101.00, Daphnia Magana	28.00, (96 hr) Pseudokirchneriella subcapitata

- 12.2. **Persistence and degradability:** There is no data available on the preparation itself.
- 12.3. **Bioaccumulative potential:** Not Measured.
- 12.4. **Mobility in soil:** No data available

12.5. Results of PBT and vPvB assessment: This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects: No data available.

### 13. Disposal considerations

13.1. Waste treatment methods: Observe all federal, state and local regulations when disposing of this substance.

### 14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
14.1. UN number	Not Applicable	Not Regulated	Not Regulated
14.2. UN proper shipping name	Not Regulated	Not Regulated	Not Regulated
14.3. Transport hazard class(es)	DOT Hazard Class: Not Applicable DOT Label: ---	IMDG: Not Applicable Sub Class: Not Applicable	Air Class: Not Applicable
14.4. Packing group	Not Applicable	Not Applicable	Not Applicable
14.5. Environmental hazards			
IMDG	Marine Pollutant: No		
14.6. Special precautions for user:	No further information.		

### 15. Regulatory information

**Regulatory Overview** The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

**Toxic Substance Control Act ( TSCA)** All components of this material are either listed or exempt from listing on the TSCA Inventory.

**WHMIS Classification** D2B E

**US EPA Tier II Hazards**

Fire: No  
Sudden Release of Pressure: No  
Reactive: No  
Immediate (Acute): Yes  
Delayed (Chronic): No

**EPCRA 311/312 Chemicals and RQs (lbs.):** ( No Product Ingredients Listed)

**EPCRA 302 Extremely Hazardous :** ( No Product Ingredients Listed)

**EPCRA 313 Toxic Chemicals:** (No Product Ingredients Listed)

**Proposition 65 - Carcinogens (>0.0%):** (No Product Ingredients Listed)

**Proposition 65 - Developmental Toxins (>0.0%):** (No Product Ingredients Listed)

**Proposition 65 - Female Repro Toxins (>0.0%):** (No Product Ingredients Listed)

**Proposition 65 - Male Repro Toxins (>0.0%):** (No Product Ingredients Listed)

**N.J. RTK Substances (>1%):** Morpholine

**Penn RTK Substances (>1%):** Morpholine

### 16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

We believe this Safety Data Sheet conforms to the requirements of US OSHA 29 CFR 1910.1200, 91/155/EEC and Canadian Hazardous Products Act. We believe the information contained on this Safety Data Sheet is current and offered in good faith. The information is provided for your guidance only. Hydrus Detergents makes no warranty of any kind, express or implied, concerning the accuracy or completeness of the information and data herein. It is the user's obligation to determine the suitability of this product for a specific purpose and the conditions for safe use of the product. We reserve the right to revise this Safety Data Sheet as newer information becomes available. Hydrus Detergents makes no warranty of any kind.

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