



**MATERIAL SAFETY DATA SHEET**  
REQUIRED UNDER SAFETY AND HEALTH REGULATION FOR SHIP REPAIRING

DATE UPDATED: AUGUST 22, 2016

**SECTION 1. ----- CHEMICAL IDENTIFICATION -----**

**Product Name** AMPD buffer concentrate  
**Product Code(s)** AB0079  
**Recommended Use** For Laboratory Use Only  
Not for Human or Animal Drug Use

**SECTION 2. ----- HAZARDS IDENTIFICATION -----**

**Emergency Overview**

**WHMIS Classification**

D2B Toxic Material Causing Other Toxic Effects Moderate skin irritant  
Moderate respiratory irritant  
Moderate eye irritant

**GHS Classification**

Corrosive to metals (Category 1)  
Skin corrosion/irritation (Category 2)  
Serious eye damage/eye irritation (Category 2A)  
Specific target organ toxicity - single exposure (Category 3), Respiratory system

**GHS Label elements, including precautionary statements**

Pictogram



Signal word Warning

Hazard statement(s)

H290 May be corrosive to metals.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.

Precautionary statement(s)

P234 Keep only in original packaging.  
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
P264 Wash skin thoroughly after handling.  
P271 Use only outdoors or in a well-ventilated area.  
P280 Wear eye protection/ face protection.  
P280 Wear protective gloves.  
P302 + P352 IF ON SKIN: Wash with plenty of water.

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P332 + P313 If skin irritation occurs: Get medical advice/ attention.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

P390 Absorb spillage to prevent material damage.

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P501 Dispose of contents/ container to an approved waste disposal plant.

**HMIS Classification**

**Health hazard:** 2  
**Flammability:** 0  
**Physical hazards:** 0

**Potential Health Effects**

**Inhalation** May be harmful if inhaled. Causes respiratory tract irritation.  
**Skin** May be harmful if absorbed through skin. Causes skin irritation.  
**Eyes** Causes eye irritation.  
**Ingestion** May be harmful if swallowed.

**SECTION 3. ----- COMPOSITION/INFORMATION ON INGREDIENTS -----**

Chemical Name	EC No.	CAS-No	Weight %
2-Amino-2-methyl-1,3-propanediol	204-100-7	115-69-5	95-100

**SECTION 4. ----- FIRST-AID MEASURES-----**

**General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**If inhaled**

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

**In case of skin contact**

Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**SECTION 5. ----- FIRE FIGHTING MEASURES -----**

**Conditions of flammability**

Not flammable or combustible.

**Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special protective equipment for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

**Hazardous combustion products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx)

**Explosion data - sensitivity to mechanical impact**

No data available

**Explosion data - sensitivity to static discharge**

No data available

**SECTION 6. ----- ACCIDENTAL RELEASE MEASURES-----**

**Personal precautions**

Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

**Environmental precautions**

Do not let product enter drains.

**Methods and materials for containment and cleaning up**

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

**SECTION 7. ----- HANDLING AND STORAGE-----**

**Precautions for safe handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

**Conditions for safe storage**

Keep container tightly closed in a dry and well-ventilated place.

hygroscopic Air sensitive. Corrosive to metals copper Aluminum Brass

**SECTION 8. ----- EXPOSURE CONTROLS/PERSONAL PROTECTION-----**

**PROTECTION Personal protective equipment**

**Respiratory protection**

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Hand 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.

**Eye protection**

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin and body protection**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Hygiene measures**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Specific engineering controls**

Use mechanical exhaust or laboratory fumehood to avoid exposure.

**SECTION 9. ----- PHYSICAL AND CHEMICAL PROPERTIES -----**

**Appearance**

Form crystalline

Colour colourless

#### **Safety data**

pH 10.5 - 11.5 at 105.1 g/l at 25 °C (77 °F)

Melting point/freezing point Melting point/range: 100 - 110 °C (212 - 230 °F) - lit.

Boiling point 151 °C (304 °F) at 13 hPa (10 mmHg) - lit.

Flash point No data available

Ignition temperature No data available

Auto-ignition temperature No data available

Lower explosion limit No data available

Upper explosion limit No data available

Vapour pressure No data available

Density No data available

Water solubility ca.105.1 g/l at 20 °C (68 °F)

Partition coefficient: n-octanol/water No data available

Relative vapour density No data available

Odour No data available

Odour Threshold No data available

Evaporation rate No data available

#### **SECTION 10. -----STABILITY AND REACTIVITY -----**

##### **Chemical stability**

Stable under recommended storage conditions.

##### **Possibility of hazardous reactions**

No data available

##### **Conditions to avoid**

No data available

##### **Materials to avoid**

Strong oxidizing agents, Aluminum, Copper, Brass, Strong acids

##### **Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx) Other decomposition products - No data available

#### **SECTION 11. ----- TOXICOLOGICAL INFORMATION -----**

##### **Acute toxicity**

###### **Oral LD50**

LD50 Oral - Rat - 17,000 mg/kg

###### **Inhalation LC50**

No data available

**Dermal LD50**

No data available

**Other information on acute toxicity**

No data available

**Skin corrosion/irritation**

No data available

**Serious eye damage/eye irritation**

No data available

**Respiratory or skin sensitisation**

No data available

**Germ cell mutagenicity**

No data available

**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.

**Reproductive toxicity**

No data available

**Teratogenicity**

No data available

**Specific target organ toxicity - single exposure (Globally Harmonized System)**

Inhalation - May cause respiratory irritation.

**Specific target organ toxicity - repeated exposure (Globally Harmonized System)**

No data available

**Aspiration hazard**

No data available

**Potential health effects**

<b>Inhalation</b>	May be harmful if inhaled. Causes respiratory tract irritation.
<b>Ingestion</b>	May be harmful if swallowed.
<b>Skin</b>	May be harmful if absorbed through skin. Causes skin irritation.
<b>Eyes</b>	Causes eye irritation.

**Signs and Symptoms of Exposure**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**Synergistic effects**

No data available

**Additional Information**

RTECS: TY2975000

**SECTION 12. ----- ECOLOGICAL INFORMATION -----****Toxicity**

no data available

**Persistence and degradability**

no data available

**Bioaccumulative potential**

no data available

**Mobility in soil** no data available

**PBT and vPvB assessment**

no data available

**Other adverse effects**

no data available

**SECTION 13. ----- DISPOSAL CONSIDERATIONS -----**

**Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**

Dispose of as unused product.

**SECTION 14. ----- TRANSPORT INFORMATION -----**

**DOT (US)**

UN number: 3259 Class: 8 Packing group: III  
Proper shipping name: Amines, solid, corrosive, n.o.s. (2-Amino-2-methylpropane-1,3-diol)  
Reportable Quantity (RQ):  
Marine pollutant: No  
Poison Inhalation Hazard: No

**IMDG**

UN number: 3259 Class: 8 Packing group: III EMS-No: F-A, S-B Proper shipping name:  
AMINES, SOLID, CORROSIVE, N.O.S. (2-Amino-2-methylpropane-1,3-diol) Marine  
pollutant: No

**IATA**

UN number: 3259 Class: 8 Packing group: III  
Proper shipping name: Amines, solid, corrosive, n.o.s. (2-Amino-2-methylpropane-1,3-diol)

**SECTION 15. ----- REGULATORY INFORMATION -----**

**WHMIS Classification**

D2B Toxic Material Causing Other Toxic Effects Moderate skin irritant  
Moderate respiratory irritant  
Moderate eye irritant

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

**SECTION 16. ----- OTHER INFORMATION -----**

**Issuing Date** 13-Aug-2009  
**Revision Date** 22-Aug-2016  
**Revision Note** No information available.  
**Recommended Restrictions** No information available

**Disclaimer**

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its

publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of MSDS**