



ALDON CORPORATION

MATERIAL SAFETY DATA SHEET

1533 W. Henrietta Rd.
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(716) 226-6177

MSDS No. BB 402
Effective Date January 30, 1999

SECTION V HEALTH HAZARD DATA

BB 402

Threshold Limited Value

Hydrochloric Acid: TLV-TWA 5 ppm ceiling (ACGIH 1992-93).
OSHA-PEL 5 ppm ceiling.

Effects of Overexposure

Due to the high dilution of this solution it is not considered to be a hazardous material. Contact with skin and eyes may produce irritation. Ingestion may be harmful. To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated. Exercise appropriate procedures to minimize potential hazards.

Emergency and First Aid Procedures

SKIN: Flush with water, then wash with soap and water. **EYES:** Flush thoroughly with water, lifting upper and lower eyelids occasionally. If irritation persists, get medical attention. **INGESTION:** If swallowed, if conscious, give one or two glasses of water to drink and call physician. Never give anything by mouth to an unconscious person. **INHALATION AS MIST:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

SECTION VI REACTIVITY DATA

| Stability | Unstable | Conditions to Avoid | Excessive temperature to cause evaporation. |
|-----------|----------|---------------------|---------------------------------------------|
| | Stable | | |

| Incompatibility (Materials to Avoid) | Acids, alkalies, and air will change the buffer's ability. |
|--------------------------------------|------------------------------------------------------------|
|--------------------------------------|------------------------------------------------------------|

| Hazardous Decomposition Products | Thermal decomposition will yield carbon dioxide and/or carbon monoxide and chlorine gas. |
|----------------------------------|------------------------------------------------------------------------------------------|
|----------------------------------|------------------------------------------------------------------------------------------|

| Hazardous Polymerization | | Conditions to Avoid |
|--------------------------|----------------|---------------------|
| May Occur | Will Not Occur | Not applicable. |
| | X | |

SECTION VII SPILL OR LEAK PROCEDURES

| Steps to be taken in case material is released or spilled | Flush to sewer with copious amounts of water. Wash spill area with soap and water. |
|-----------------------------------------------------------|---------------------------------------------------------------------------------------|
|-----------------------------------------------------------|---------------------------------------------------------------------------------------|

| Waste Disposal Method | Discharge, treatment, or disposal may be subject to Federal, State or Local laws. These disposal guidelines are intended for the disposal of catalog-size quantities only. |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Flush to sewer with copious amounts of water.

SECTION VIII SPECIAL PROTECTION INFORMATION

| Respiration Protection (Specify Type) | None needed in normal laboratory handling. If misty conditions prevail, work in a ventilation hood or wear a NIOSH/MSHA-approved dust mask or respirator. |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|

| Ventilation | Local Exhaust | None required. | Special | No. |
|-------------|----------------------|----------------|---------|-----|
| | Mechanical (General) | None required. | Other | No. |

| Protective Gloves | Rubber. | Eye Protection | Chemical safety glasses. |
|-------------------|---------|----------------|--------------------------|
|-------------------|---------|----------------|--------------------------|

| Other Protective Equipment | Goggles, lab coat, proper gloves, and eye wash station. |
|----------------------------|---------------------------------------------------------|
|----------------------------|---------------------------------------------------------|

SECTION IX SPECIAL PRECAUTIONS

| Precautions to be Taken in Handling & Storing | Store in a cool, dry place. Wash thoroughly after handling. Keep container tightly closed when not in use. |
|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------|
|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------|

| Other Precautions | Read label on container before using. Do not wear contact lenses when working with chemicals. |
|-------------------|-----------------------------------------------------------------------------------------------|
|-------------------|-----------------------------------------------------------------------------------------------|

Remove and wash contaminated clothing.

For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

| Revision | No. 3 | Date | 1/30/99 | Approved | Michael Raszeja | Chemical Safety Coordinator | MR |
|----------|-------|------|---------|----------|-----------------|-----------------------------|----|
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The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. * Hazardous Materials Industrial Standards. Printed on recycled paper.

SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

| Product | BUFFER SOLUTION (pH 2) |
|-------------------|-------------------------|
| Chemical Synonyms | Buffer aqueous solution |
| Formula | Mixture. |
| Unit Size | up to 20 Lt. |
| C.A.S. No. | Mixture. |

CHEMTREC
800-424-9300
Day 716-226-6177

NFPA HAZARD RATING
LEAST SLIGHT MODERATE HIGH EXTREME
0 1 2 3 4

HMIS *
0 1 2 3 4

SECTION II INGREDIENTS OF MIXTURES

| Principal Component(s) | % | TLV Units |
|-----------------------------------------|--------|-------------------|
| Potassium Chloride: (CAS No. 7447-40-7) | 0.37% | None established. |
| Hydrochloric Acid: (CAS No. 7647-01-0) | 0.033% | See Section V. |
| Water: (CAS No. 7732-18-5) | 99.4% | None established. |

CAUTION! USE IN KEEPING WITH GOOD LABORATORY PRACTICES.

SECTION III PHYSICAL DATA

| | | | |
|------------------------|-------------------------------------------------|-----------------------------------------|--------------|
| Melting Point (°F) | Approx. 0°C (32°F) | Specific Gravity (H ₂ O = 1) | Approx. 1 |
| Boiling Point (°F) | Approx. 100°C (212°F) | Percent Volatile by Volume (%) | 99.4% |
| Vapor Pressure (mm Hg) | 14 (water) | Evaporation Rate (Water = 1) | Slightly <1. |
| Vapor Density (Air=1) | 0.7 (water) | | |
| Solubility in Water | Complete. | | |
| Appearance & Odor | Clear, water white, water like liquid; no odor. | | |

SECTION IV FIRE AND EXPLOSION HAZARD DATA

| Flash Point (Method Used) | Non-combustible. | Flammable Limits in Air % by Volume | N/A | Lower | Upper |
|---------------------------|-----------------------------------------------------------|-------------------------------------|-----|-------|-------|
| Extinguisher Media | Use any media suitable for extinguishing supporting fire. | | | | |

SPECIAL FIREFIGHTING PROCEDURES

In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective clothing.

UNUSUAL FIRE AND EXPLOSION HAZARDS

In fire conditions, water may evaporate from this solution, which may cause hazardous decomposition products to be produced as dust or fume.

D.O.T. NON-REGULATED.

Approved by U.S. Department of Labor "essentially similar" to form OSHA-20