



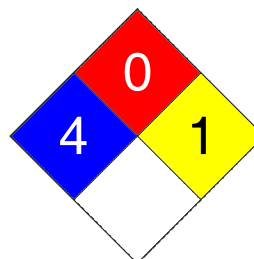
MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product Name Dynamic Muriatic Acid - AA681200 & AA681300
CAS # Mixture
Product Use Acid cleaner
Manufacturer Dynamic Paint Products Inc.
7040 Financial Drive
Mississauga, ON L5N 7H5 CA
Phone: 1-905-812-9319
Emergency Phone: 1-613-996-6666 (CANUTEC)

LEGEND HMIS/NFPA	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

Health	/ 4
Flammability	0
Physical Hazard	1
Personal Protection	C



2. Hazards Identification

Emergency Overview DANGER -- CORROSIVE
Very toxic.

Potential short term health effects

Routes of exposure Eye, Skin contact, Inhalation, Ingestion.

Eyes Causes chemical burns. May cause blindness.

Skin Causes chemical burns.

Inhalation Harmful if inhaled. May cause respiratory tract irritation or chemical burns.

Ingestion Harmful if swallowed. May cause chemical burns to mouth, throat and stomach.

Target organs Eyes. Respiratory system. Skin.

Chronic effects Prolonged or repeated exposure to dilutions can cause drying, defatting and dermatitis.

Signs and symptoms Symptoms are prostration, gasping, pallor, and uncoordinated movements. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. The product causes burns of eyes, skin and mucous membranes.

3. Composition/Information on Ingredients

Ingredient(s)	CAS #	Percent
Hydrochloric acid	7647-01-0	10 - 30

4. First Aid Measures

First aid procedures

Eye contact Immediately flush with cool water. Remove contact lenses, if applicable, and continue flushing for 15 minutes. Obtain medical attention immediately.

Skin contact Immediately flush with cool water for 15 minutes while removing contaminated clothing and shoes. Discard or wash well before reuse. Obtain medical attention if irritation persists.

Inhalation If symptoms develop, move victim to fresh air. If symptoms persist, obtain medical attention. If breathing has stopped, trained personnel should administer CPR immediately.

Ingestion Do not induce vomiting. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration.

Notes to physician Symptoms may be delayed.

General advice

Keep out of reach of children. Avoid contact with eyes and skin. Immediate medical attention is required. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting Measures

Flammable properties	Not flammable by WHMIS criteria.
Extinguishing media	
Suitable extinguishing media	Treat for surrounding material.
Unsuitable extinguishing media	Not available
Protection of firefighters	
Specific hazards arising from the chemical	Not available
Protective equipment for firefighters	Firefighters should wear full protective clothing including self contained breathing apparatus.
Hazardous combustion products	May include and are not limited to: Hydrogen chloride. Chlorine gas.
Explosion data	
Sensitivity to mechanical impact	Not available
Sensitivity to static discharge	Not available

6. Accidental Release Measures

Personal precautions	Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.
Methods for containment	Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas.
Methods for cleaning up	Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labelled containers. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice. Never return spills in original containers for re-use. Large Spills: Wet down with water and dike for later disposal. After removal flush contaminated area thoroughly with water.

7. Handling and Storage

Handling	Use good industrial hygiene practices in handling this material. Do not get this material in your eyes, on your skin, or on your clothing.
Storage	Keep out of the reach of children. Store in a closed container away from incompatible materials.

8. Exposure Controls / Personal Protection

Exposure limit values	
Ingredient(s)	Exposure limit values
Hydrochloric acid	ACGIH-TLV Ceiling: 2 ppm
Engineering controls	Use only under good ventilation conditions or with respiratory protection.
Personal protective equipment	
Eye/Face protection	Wear chemical goggles.
Hand protection	Rubber gloves. Confirm with a reputable supplier first.
Skin and body protection	Rubber apron recommended.
Respiratory protection	Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

9. Physical and Chemical Properties

Appearance	Clear.
Colour	Colourless-light yellow
Form	Liquid
Odour	Acidic
Odour threshold	Not available
Physical state	Liquid
pH	1
Freezing point	Not available
Boiling point	81.1111 °C (178.00 °F)
Pour point	Not available
Flash point	None
Evaporation Rate	Not available
Flammability limits in air, lower, % by volume	Not available
Flammability Limits in Air, Upper, % by Volume	Not available
Vapour pressure	Not available
Vapour density	1.3
Specific gravity	1.16 @ 21°C
Octanol/water coefficient	Not available
Solubility (H2O)	Complete
Auto-ignition temperature	Not available
Viscosity	Water thin

10. Stability and Reactivity

Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Do not mix with other chemicals.
Incompatible materials	Reacts with soft metals producing flammable hydrogen gas. Reacts vigorously with alkaline material.
Hazardous decomposition products	May include and are not limited to: Hydrogen chloride. Chlorine gas.
Possibility of hazardous reactions	Hazardous polymerisation does not occur.

11. Toxicological Information

Component analysis - LC50

Ingredient(s)	LC50
Hydrochloric acid	935 ppm mouse; 3124 mg/l/4h rat

Component analysis - Oral LD50

Ingredient(s)	LD50
Hydrochloric acid	900 mg/kg rabbit; 700 mg/kg rat

Effects of acute exposure

Eye	Causes chemical burns. May cause blindness.
Skin	Causes chemical burns.
Inhalation	Harmful if inhaled. May cause respiratory tract irritation or chemical burns.
Ingestion	Harmful if swallowed. May cause chemical burns to mouth, throat and stomach.
Sensitisation	Non-hazardous by WHMIS criteria.
Chronic effects	Non-hazardous by WHMIS criteria.

Carcinogenicity	Non-hazardous by WHMIS criteria.	
ACGIH - Threshold Limit Values - Carcinogens		
Hydrochloric acid	7647-01-0	A4 - Not Classifiable as a Human Carcinogen
IARC - Group 3 (Not Classifiable)		
Hydrochloric acid	7647-01-0	Monograph 54 [1992]
Mutagenicity	Non-hazardous by WHMIS criteria.	
Reproductive effects	Non-hazardous by WHMIS criteria.	
Teratogenicity	Non-hazardous by WHMIS criteria.	
Synergistic Materials	Not available	

12. Ecological Information

Ecotoxicity	Because of the low pH of this product, it would be expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems.	
Ecotoxicity - Freshwater Fish Species Data		
Hydrochloric acid	7647-01-0	96 Hr LC50 Gambusia affinis: 282 mg/L [static]
Environmental effects	Not available	
Aquatic toxicity	Not available	
Persistence and degradability	Not available	
Bioaccumulation/accumulation	Not available	
Partition coefficient	Not available	
Mobility in environmental media	Not available	
Chemical fate information	Not available	
Other adverse effects	Not available	

13. Disposal Considerations

Waste codes	Not available
Disposal instructions	Review federal, provincial, and local government requirements prior to disposal.
Waste from residues / unused products	Not available
Contaminated packaging	Not available

14. Transport Information

Transportation of Dangerous Goods (TDG - Canada)

Basic shipping requirements:

Proper shipping name	Hydrochloric acid
Hazard class	8
UN number	UN1789
Packing group	II



15. Regulatory Information

Canadian federal regulations	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.	
Canada - WHMIS - Ingredient Disclosure List		
Hydrochloric acid	7647-01-0	1 %
WHMIS classification	Class D - Division 1A, Class E - Corrosive Material	
WHMIS status	Controlled	

WHMIS labeling



Inventory Status

Country(s) or region	Inventory Name	On Inventory (Yes/No)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

Disclaimer

Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

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Prepared by

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Other Information

For an updated MSDS, please contact the supplier/manufacturer listed on the first page of the document.