SAFETY DATA SHEET

Revision Date 15-March-2021 **Version** 2.1

1. IDENTIFICATION

Product identifier

Product Name ARMOR ER100

Recommended use of the chemical and restrictions on use

Recommended Use Concrete Surface Preparation.
Uses advised against No Data

Details of the supplier of the safety data sheet

Distributor Address
Foundation Armor 10 Howe Drive Amherst, NH 03031

Emergency telephone number

Company Phone Number 866-306-0246
24 Hour Emergency Phone Number 800-424-9300 (United States & Canada) 1-703-527-3887 (International)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Label elements

Emergency Overview

Danger!

Hazard statements
Causes severe eye burns.
Causes severe skin burns.
Harmful if ingested.
May cause cancer

Appearance Transparent Blue Liquid **Physical state** liquid **Odor** Cherry - Slightly Acidic Odor

Precautionary Statements - Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Do not breathe dust/fume/gas/mist/vapors/spray
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink, or smoke when using this product
Wear protective gloves/protective clothing/eye protection/face protection
IF SWALLOWED: Rinse mouth. DO NOT induce vomiting.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF exposed or concerned: Get medical advice/attention.
IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.
Dispose of contents/container to an approved waste disposal plant.

Precautionary Statements - Storage
Store in a well-ventilated place. Keep container tightly closed.
Keep from freezing.

Precautionary Statements - Disposal
Dispose of contents/container in accordance with local/regional/national regulations.

Hazards not otherwise classified (HNOC)

Other Information

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Chemical Name	CAS No.	Weight-%	Trade Secret
Non-hazardous ingredient(s)	-	95-99	*
Hydrochloric acid	7647-01-0	10 - 30	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice Get medical attention immediately. Remove contaminated clothing and shoes. Take a copy of the Safety Data Sheet when going for medical treatment.

Eye contact IF IN EYES: If contact with eyes, immediately hold eyelids apart and flush with plenty of water for at least 15 min.

Skin contact IF ON SKIN: Wash off with soap and plenty of water. If skin irritation occurs: Get medical advice or attention.

Inhalation IF INHALED: If inhaled remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult give oxygen. Seek immediate medical attention/advice.

Ingestion IF SWALLOWED: If swallowed, do not induce vomiting. If swallowed, give victim several glasses of water. If vomiting does occur, give additional fluids.

Most important symptoms and effects, both acute and delayed

Symptoms Eye, Skin, and Respiratory Irritation.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically. For additional information, see Safety Data Sheet.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

This material does not present any unusual fire or explosion hazards. Material does not burn. Use extinguishing measures appropriate to the source of fire.

Unsuitable extinguishing media Not Applicable.

Specific hazards arising from the chemical
Not Applicable.

Explosion data
Sensitivity to Mechanical Impact Not available.
Sensitivity to Static Discharge Not sensitive.

Protective equipment and precautions for firefighters
Wear self-contained breathing apparatus and protective suit.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Wear personal protection equipment (see section 8). Avoid contact with eyes and skin. Avoid inhaling mists and vapors. Keep unprotected persons away.

Environmental precautions

Environmental precautions See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment Absorb with liquid-binding material (sand, diatomite, acid binders, and universal binders.) Use neutralizing agent. Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.

Methods for cleaning up Collect spillage.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Ensure good ventilation/exhaustion at the workplace. Avoid contact with aluminum and other metals. Reactions with aluminum, particularly foil, may generate flammable hydrogen gas. Use, store and transfer only with acid resistant plastic containers, DO NOT USE aluminum or any other metal container.

Conditions for safe storage, including any incompatibilities

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

Incompatible materials Bases, amines, alkali metals, metals - especially aluminum, permanganates, Fluorine, metal acetylides, hexalithium disilicide, and bleach.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region-specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Hydrochloric acid 7647-01-0	Ceiling: 2 ppm	(vacated) Ceiling: 5 ppm (vacated) Ceiling: 7 mg/m^3	IDLH: 50 ppm Ceiling: 5 ppm

		Ceiling: 5 ppm Ceiling: 7 mg/m^3	Ceiling: 7 mg/m^3

Appropriate engineering controls

Engineering Controls General/Local Ventilation Recommended.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin and body protection Wear impervious protective clothing, including boots, gloves, lab coat, apron, or coveralls, as appropriate, to prevent skin contact. Wear chemical resistant gloves at minimum. Wash skin immediately upon contact. Wash hands at mealtime and end of shift.

Respiratory protection Use respiratory protection unless adequate local exhaust ventilation is provided, or exposure assessment demonstrates that exposures are within recommended exposure guidelines. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	liquid		
Appearance	Transparent Blue Liquid	**Odor**	Cherry - Slightly Acidic Odor
Color	blue	**Odor threshold**	No data available

Property	**Values**	**Remarks • Method**
pH	1.5-2.5	
Melting point / freezing point	Not Applicable/ 32° F	
Boiling point / boiling range	100 °C	
Flash point	Not Applicable	CC (closed cup)
Evaporation rate	Not Available	
Flammability (solid, gas)	Not Relevant	
Flammability Limit in Air		
Upper flammability limit:	Not Available	
Lower flammability limit:	Not Available	
Vapor pressure	Not Available	
Vapor density	Not Available	
Relative density	Not Available	
Water solubility	Soluble in water	
Solubility in other solvents	Not Available	
Partition coefficient	Not Available	
Autoignition temperature	Not Available	
Decomposition temperature	Not Available	
Kinematic viscosity	Not Available	
Dynamic viscosity	Not Available	
Explosive properties	Not Available	
Oxidizing properties	Not Available	

Other Information

Softening point	Not Relevant
Molecular weight	Not Available
VOC Content (%)	Not Applicable

Density Not Available
Bulk density Not Available

10. STABILITY AND REACTIVITY

Reactivity
Not Available

Chemical stability
Stable.

Possibility of Hazardous Reactions
No data available.

Conditions to avoid
None known.

Incompatible materials
Bases, amines, alkali metals, metals - especially aluminum, permanganates, Fluorine, metal acetylides, hexalithium disilicide, and bleach.

Hazardous Decomposition Products
None Known.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation Direct contact and vapor inhalation.

Eye contact Direct contact.

Skin contact Direct contact.

Ingestion Direct contact.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Hydrochloric acid 7647-01-0	= 700 mg/kg (Rat)	> 5010 mg/kg (Rabbit)	= 3124 ppm (Rat) 1 h

Information on toxicological effects

Symptoms May cause drowsiness or dizziness if inhaled. May cause respiratory irritation. Causes serious eye irritation. Causes skin irritation.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Irritating to skin.
Serious eye damage/eye irritation Irritating to eyes.
Irritation Irritating to eyes, respiratory system and skin.
Sensitization No data available.
Germ cell mutagenicity No data available.
Carcinogenicity This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Chemical Name	ACGIH	IARC	NTP	OSHA
Hydrochloric acid 7647-01-0	-	Group 3	-	-

Reproductive toxicity Not Available.

STOT - single exposure Not Available.
STOT - repeated exposure Not Available.
Aspiration hazard Not Available.

Numerical measures of toxicity - Product Information

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Hydrochloric acid 7647-01-0	-	282: 96 h Gambusia affinis mg/L LC50 static	-

Persistence and degradability
No data available.

Bioaccumulation
No data available.

Other adverse effects No data available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Must not be disposed of together with household garbage. Do not allow product to reach waterways or storm sewers. Disposal must be made in accordance with local, state, and federal regulations.

Contaminated packaging Dispose of in accordance with federal, state, and local regulations.

14. TRANSPORT INFORMATION

DOT UN1760, Hydrochloric Acid, N.O.S., 8, III
Marine pollutant No available data.
Description Ground Transportation Only: ORM-D in containers of less than 4 liters.

IATA UN1760, Hydrochloric Acid, N.O.S., 8, III

IMDG UN1760, Hydrochloric Acid, N.O.S., 8, III

15. REGULATORY INFORMATION

International Inventories
TSCA Does not comply
DSL/NDSL Does not comply
EINECS/ELINCS Does not comply
ENCS Does not comply
IECSC Does not comply
KECL Does not comply
PICCS Does not comply
AICS Does not comply

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)
Does not apply

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Hydrochloric acid 7647-01-0	5000 lb	-	-	X

CERCLA
Does not apply

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Hydrochloric acid 7647-01-0	5000 lb	5000 lb	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65
This product does not contain chemicals known to the state of California to cause birth defects or other reproductive harm

U.S. State Right-to-Know Regulations

U.S. EPA Label Information

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA	**Health hazards**	1	**Flammability**	1	**Instability** 3	**Physical and Chemical Properties**	-
HMIS	**Health hazards**	1	**Flammability**	1	**Physical hazards** 3	**Personal protection**	-

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Revision Note
No data available

Disclaimer
The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered 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 materials or in any process, unless specified in the text.

End of Safety Data Sheet