

SAFETY DATA SHEET



Date issued : 03/09/2016
SDS number : 5412
Date revised : 07/17/2024
Revision number : 4

PASSIVE 8LD

1. Identification

Product code: 5412
Product identifier: PASSIVE 8LD
Relevant identified uses: Stainless Steel Passivation Solution

Manufacturer / Supplier

John-Henry Enterprises, Inc.
800 Central Ave.
Jefferson, LA 70121

Emergency contact: H. Zeller

Emergency Phone: 504-888-8989

Web: www.john-henry.com

Emergency telephone number (24 hour)

US/Canada: 800-535-5053

2. Hazard identification

Classification of the substance or mixture

Health hazards:

Eye Corrosion, Category 1

Skin Corrosion, Category 1

Physical hazards:

Corrosive to Metals, Category 2

Label elements

CORROSIVE: Causes severe irritation and can cause burns and permanent damage to eyes. Causes moderate to severe irritation and possibly burns to skin. Burns may develop after exposure. Mists and spray can irritate eyes, nose, throat, and respiratory system. Ingestion can cause severe irritation, burns and tissue damage to mouth, throat, esophagus, and stomach. May be harmful or fatal if swallowed.



Severe
Irritant/Corrosive



Health
hazard

Signal word: DANGER

Hazard statement(s)

H318: Causes serious eye damage.

H314: Causes severe skin burns and eye damage.

H301: Toxic if swallowed.

H335: May cause respiratory irritation.

H290: May be corrosive to metals.

Precautionary statement(s)

Supplemental label elements:

P102: Keep out of reach of children.

P103: Read carefully and follow all instructions.

P202: Do not handle until all safety precautions have been read and understood.

Prevention:

P262: Do not get in eyes, on skin, or on clothing.

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P220: Keep away from clothing and other combustible materials.

P281: Use personal protective equipment as required.

P264: Wash ... thoroughly after handling.

Response:

P363: Wash contaminated clothing before reuse.

6156HX6P: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (See First Aid Section for more details)

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

0505GPKQ: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. (See First Aid Section for more detailed information).

2647OCLL: IF SWALLOWED: Immediately call a POISON CENTER, doctor, or other qualified medical personnel. (See First Aid Section for more information) Rinse mouth. Do NOT induce vomiting.

Storage:

75990X3S: Keep only in original container. Store in a cool, well-ventilated space. Keep container tightly closed.

Potential health effects

Eye: Corrosive to the eyes and may cause severe damage including tissue destruction and/or blindness.

Skin: Contact causes severe skin irritation and possible burns. Development of burns and ulcers may be delayed.

Skin absorption: Skin absorption can damage target organs and may be fatal.

Ingestion: Causes irritation and burns to mouth, throat, esophagus, and gastrointestinal system. May cause gastrointestinal discomfort, including nausea, vomiting, diarrhea, etc, and may be fatal.

Inhalation: Mists or sprays can be moderately to severely irritating to eyes and respiratory tract.

Target organ statement: Lungs, mucous membranes, respiratory tract, skin, eyes, and teeth

3. Composition/information on ingredients

Chemical name	% w/w	CAS No.
Nitric Acid	20 - 25	7697-37-2
Hydrofluoric Acid	3 - 4	7664-39-3
Other ingredients are not hazardous or are present at levels that do not present a significant hazard.	> 70	000-00-1

4. First-aid measures

Eye: Treat eye contact and a medical emergency (call 911). Gently hold eyelids open and immediately flush eyes with water for at least 15 minutes or until pain eases. Remove contact lenses if possible. Cover eyes loosely with sterile dressing and SEEK IMMEDIATE MEDICAL ATTENTION.

Skin: Remove contaminated clothing and footwear. Flush off with copious amounts of running water. Treat exposed areas with a cold solution containing 1% benzethonium chloride for at least thirty minutes. Seek medical attention if irritation persists, worsens, or if burns and ulcers develop.

Ingestion: Get immediate medical attention (call 911). Rinse mouth with water. Do not induce vomiting unless instructed to do so by poison center or physician. Give patient water and milk of magnesia or other antacid tablets unless unconscious or convulsing. Keep patient warm and comfortable. Treat for shock.

Inhalation: If affected by vapors, spray or mist, move to fresh air. Seek medical attention if symptoms persist or worsen. Give oxygen if breathing is difficult and seek prompt medical attention.

Indication of immediate medical attention and special treatment needed, if necessary: Treat symptomatically. Glycerine can be applied to skin burns to relieve pain and stop further damage. Observe for toxic effects resulting from inhalation and/or skin contact and treat appropriately. This product contains acidic fluoride compounds. Take appropriate protective and preventive measures.

Additional information: First aider protection: Wear safety glasses, impermeable gloves, and, if necessary, an acid absorbing respirator or SCBA when rescuing and treating victims. Mouth-to-mouth resuscitation may be dangerous. Take appropriate protective measures.

5. Fire-fighting measures

Flammable class: Not Applicable - Water based product with no flashpoint.

General hazard: Product is a moderate oxidizer. Avoid exposure of concentrated product to organic materials. May accelerate combustion of burning materials.

Suitable extinguishing media: Water

Hazardous combustion products: Toxic acidic fumes

Explosion hazards: Containers can burst if exposed to flames or high temperatures releasing acidic, oxidizing steam and mists.

Fire fighting procedures: Wear self-contained breathing apparatus when fighting chemical fires. Use water fog or spray to cool containers and/or disperse product vapors.

6. Accidental release measures

Small spill: Wear recommended PPE. Ventilate the area and remove uninvolved personnel. Contain and absorb spilled material (do not use organic absorbents such as paper. Use clay or other inorganic absorbents. Dispose of contaminated absorbant properly. Wash spill area with water.

Large spill: Wear appropriate PPE. Remove uninvolved personnel from area. Stop flow. Contain spill and keep from entering sewer or surface waterways. Collect spill into suitable, properly labeled containers for use or disposal. Do not absorb spilled material with organic absorbents (i.e.; paper). Rinse spill area with water.

Environmental precautions

Water spill: Do not discharge to or allow to enter surface waterways, drains, or public sewers

7. Handling and storage

Precautions for safe handling: Avoid contact with eyes and skin. Avoid exposure to mists or sprays. Read and understand product label and SDS before handling any chemical. Always wear recommended personal protective equipment. Follow label cautions and instructions.

Conditions for safe storage: Store in original containers in well ventilated area away from oxidizable organic materials (paper, fabric), concentrated alkalis, ammonia, and reducing agents. Keep containers closed when not in use. Store out of direct sunlight and away from sources of heat.

8. Exposure controls/personal protection

Exposure controls

Chemical name	Control parameters			
	Occupational exposure limit values			
	Type		ppm	mg/m ³
Nitric Acid	OSHA PEL	TWA	2	5
	ACGIH TLV	TWA	2	5.2
		STEL		4
Hydrofluoric Acid	OSHA PEL	TWA	3	
	ACGIH TLV	TWA	0.5	

Appropriate engineering controls: Maintain sufficient ventilation in storage and use areas to prevent the accumulation of product vapors, fumes, spray, or mists. Provide local exhaust for enclosed areas.

Individual protection measures, such as personal protective equipment

Eye / face protection: Wear safety glasses or goggles and face shield (recommended) when handling.

Skin protection - hand protection: Wear rubber, latex, or other chemical resistant gauntlet gloves and boots

Respiratory protection: Use with adequate ventilation. Wear a NIOSH approved acid absorbing, air purifying respirator where fumes, mists or spray are excessive or exceed exposure limits.

Skin protection - other: Wear chemically resistant full length apron and impermeable boots when handling.

Occupational hygiene practices: Wash thoroughly before eating, drinking, smoking, or using the facilities after handling any chemical product.

Other use precautions: Working eyewash stations and safety showers should be located in or near all areas where chemicals are stored or used.

9. Physical and chemical properties

Appearance: clear, colorless liquid

Odor: acidic

pH: < 2

Notes: (5% in water)

Freezing point: less than 32 deg F (0 deg C)

Initial boiling point and boiling range: greater than 212 deg F

Flash point: No flashpoint

Vapor pressure: Same as water (approximately)

Relative vapor density: Same as water (approximately)

Relative density: 1.105 to 1.115

Solubility: Complete in all proportions.

Percent volatiles: 78 - 82% (w/w)

10. Stability and reactivity

Reactivity: Reactive with alkaline materials. Reacts with metals. Reacts (oxidizes) with organic materials.

Dangerous polymerization: No

Conditions to avoid: Avoid exposure to sources of heat

Possibility of hazardous reactions: Reacts with metals such as aluminum or zinc (releases hydrogen, a flammable gas). Reacts vigorously with concentrated acids (generating heat and steam). Reacts with organic materials and may cause or accelerate combustion.

Hazardous decomposition products: Acidic fumes, nitrogen oxides

Incompatible materials: Strong alkalies (bases), chlorine bleach, oxidizing and reducing agents, metals such as zinc or magnesium (releases hydrogen gas), organic materials (i.e.; paper, cloth, etc.)

11. Toxicological information

Acute toxicity

Notes: No toxicity data available for product

12. Ecological information

Environmental data: No data

13. Disposal considerations

Disposal methods: Unused or undiluted product constitutes a hazardous waste. Follow all appropriate local, state, and Federal disposal regulations. Collect and neutralize spent solutions and discharge to a waste water treatment facility.

For large spills: See Section 6

Empty container: Triple rinse container thoroughly with water and recycle.

RCRA hazard class: D002 - Corrosive (pH less than 2.5)

14. Transport information

USA Department of Transport Regulations (DOT)

UN proper shipping name: UN1760, Corrosive Liquid, n.o.s. (contains nitric acid and hydrofluoric acid), 8 (6.1), II

Reportable quantity (rq) under CERCLA: 5000 lbs (as supplied)

IMO / IMDG - International

UN proper shipping name: UN2031, NITRIC ACID SOLUTION (contains less than 70% nitric acid), 8, PG II

15. Regulatory information

UNITED STATES

Dot label symbol and hazard classification



Corrosive

SARA Section 311/312 Hazard Categories

311/312 Health hazards: Acute health hazard (eye and skin irritation/corrosion), Reactivity, fire hazard

313 reportable ingredients: Nitric acid

EPCRA Section 313 Toxic Chemicals

Chemical name	% w/w	CAS No.
Nitric Acid	20 - 25	7697-37-2
Hydrofluoric Acid	3 - 4	7664-39-3

EPCRA Section 302 Extremely Hazardous Substances

EPCRA Status: Nitric acid

Threshold quantity: 5000 bs (as

CERCLA Hazardous Substances and Reportable Quantities (RQ)

Chemical name	% w/w	CERCLA rq
Nitric Acid	20 - 25	1,000
Hydrofluoric Acid	3 - 4	100

CERCLA rq: 5000 lbs (as supplied)

EPA

EPA rq ingredient: Nitric acid

EPA rq product: 5000 lbs (as supplied)

TSCA (The Toxic Substances Control Act)

Chemical name	CAS No.
Nitric Acid	7697-37-2
Hydrofluoric Acid	7664-39-3

TSCA Status: All ingredients are included on the TSCA Inventory or are exempt

CAA 112(b) Hazardous Air Pollutants

Chemical name	% w/w	CAS No.
Nitric Acid	20 - 25	7697-37-2
Hydrofluoric Acid	3 - 4	7664-39-3

California Proposition 65: Contains no substances known to the State of California to cause cancer, birth defects, or reproductive harm.

Clean water act: CWA 311: Nitric acid

16. Other information

Reason for issue: New Address

Approved by: H. Zeller

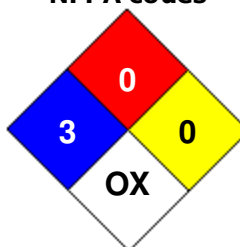
Prepared by: CSCC **Date revised:** 07/17/2024

Revision summary: This SDS replaces the 02/11/2022 SDS. Revised: **Section 1:** Reason for issue. **Section 2:** Classification of the substance or mixture, Label elements, Precautionary statement(s).

HMIS rating

Health	<input type="checkbox"/>	3
Flammability	<input type="checkbox"/>	0
Physical hazard	<input type="checkbox"/>	0
Personal protection	<input checked="" type="checkbox"/>	X

NFPA codes



General statements: Amounts given herein (other than for regulatory purposes) are typical and do not represent a specification. Unspecified or unlisted components are proprietary, do not present a hazard at levels present, are not hazardous, and/or are present at levels below reportable limits. Exact percentage values for all components are proprietary in accordance with 29 CFR 1910.1200(i)

Manufacturer disclaimer: To the best of our knowledge, the information contained herein is accurate. However, no liability whatsoever is assumed for its accuracy and/or completeness. Final determination of the suitability of any material is the sole responsibility of the user. All materials may present unknown health or physical hazards and should be used with caution. Certain hazards are described herein, but no guarantee is made that these are the only hazards associated with the material that exist.