



Blue Wolf Aluminum Brightener

(BW-ABG)





Safety Data Sheet (SDS) Blue Wolf Aluminum Brightener (BW-AB)

SDS Revision
Date: 05/18/2021

1. Identification

1.1. Product identifier

Product Identity

Blue Wolf Aluminum Brightener (BW-AB)

SDS Number

BWABSDS-01

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use

Aluminum Brightener/Cleaner

1.3. Details of the supplier of the safety data sheet

Company Name

Blue Wolf Sales and Service
219 Industrial Park Road
Bluefield, Virginia 24605

Emergency

CHEMTREC (USA)

(800) 424-9300

Customer Service: Blue Wolf Sales and Service

855-803-1417

2. Hazard(s) identification

2.1. Classification of the substance or mixture

Acute Tox. 3;H301

Toxic if swallowed.

Acute Tox. 2;H310

Fatal in contact with skin.

Acute Tox. 4;H332

Harmful if inhaled.

Skin Corr. 1B;H314

Causes severe skin burns and eye damage.

2.2. Label elements



Danger

H301 Toxic if swallowed.

H310 Fatal in contact with skin.

H314 Causes severe skin burns and eye damage.

H332 Harmful if inhaled.

[Prevention]:

P261 Avoid breathing dust, fume, gas, mist, vapors, spray.

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

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves, eye protection, face protection.

[Response]:

P301+310 IF SWALLOWED: Immediately call a POISON CENTER, doctor or physician.

P302+350 IF ON SKIN: Gently wash with soap and water.



Safety Data Sheet (SDS) Blue Wolf Aluminum Brightener (BW-AB)

SDS Revision
Date: 05/18/2021

P303+361+353 IF ON SKIN (or hair): Remove, take off immediately all contaminated clothing. Rinse skin with water, shower.

P304+312 IF INHALED: Call a poison center or doctor or physician if you feel unwell.

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

P321 Specific treatment (see information on this label).

P363 Wash contaminated clothing before reuse.

[Storage]:

P405 Store locked up.

[Disposal]:

P501 Dispose of contents or container in accordance with local and national regulations.

3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Phosphoric acid CAS Number: 0007664-38-2	1 - 5	Skin Corr. 1B;H314: C ≥ 25 % Skin Irrit. 2;H315: 10 % ≤ C < 25 % Eye Irrit. 2;H319: 10 % ≤ C < 25 %	----
Nonylphenol polyethylene glycol ether CAS Number: 0127087-87-0	1 - 5	Eye Dam. 1;H318 Acute Tox. 4;H302 Skin Irrit. 2;H315	----
HYDROGEN FLUORIDE CAS Number: 0007664-39-3	1 - 5	Acute Tox. 2;H330 Acute Tox. 1;H310 Acute Tox. 2;H300 Skin Corr. 1A;H314 C ≥ 7 % Skin Corr. 1B;H314: 1 % ≤ C < 7 % Eye Irrit. 2;H319: 0,1 % ≤ C < 1 %	----
2-Butoxy-ethanol CAS Number: 0000111-76-2	1 - 5	Acute Tox. 4;H332 Acute Tox. 4;H312 Acute Tox. 4;H302 Eye Irrit. 2;H319 Skin Irrit. 2;H315	----

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

*PBT/vPvB - PBT-substance or vPvB-substance.

The full texts of the phrases are shown in Section 16.

Section 4. First aid measures

4.1. Description of first aid measures

General

In all cases of doubt, or when symptoms persist, seek medical attention.
Never give anything by mouth to an unconscious person.

Inhalation

Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

Eyes

Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.



Safety Data Sheet (SDS) Blue Wolf Aluminum Brightener (BW-AB)

SDS Revision
Date: 05/18/2021

Skin	Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothes and shoes. After rinsing, massage in a 2.5% calcium gluconate gel until pain is relieved. If pain persists, contact physician immediately.
Ingestion	If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.
4.2. Most important symptoms and effects, both acute and delayed	
Overview	No specific symptom data available. Treat symptomatically. Check section 2.2 (GHS Label Elements) for further details.
Inhalation	Toxic if inhaled.
Skin	Fatal in contact with skin. Causes severe skin burns and eye damage.
Ingestion	Toxic if swallowed.

Section 5. Fire-fighting measures

5.1. Extinguishing media

Recommended extinguishing media; alcohol resistant foam, CO₂, powder, water spray.
Unsuitable extinguishing media: Do not use; water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: Explosive hydrogen gas can be liberated on contact with metals, such as zinc, tin or aluminum. Hydrogen gas can result in explosive hazards in confined spaces.

Avoid breathing dust, fume, gas, mist, vapors, spray.

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

5.3. Advice for fire-fighters

As with all fires, wear positive pressure, self-contained breathing apparatus, (SCBA) with a full face piece and protective clothing. Persons without respiratory protection should leave area. Wear SCBA during clean-up immediately after fire. No smoking.

ERG Guide No. 154

Section 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up

Stop the leak, if possible. Ventilate the space involved. Contain, vacuum up, place in non-sparking container for disposal. Prevent waterway contamination. Construct a dike to prevent spreading. Collect run-off and transfer to drums or tanks for later disposal. Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits.



Safety Data Sheet (SDS) Blue Wolf Aluminum Brightener (BW-AB)

SDS Revision
Date: 05/18/2021

Section 7. Handling and storage

7.1. Precautions for safe handling

Handle containers carefully to prevent damage and spillage.

Do not get in eyes, or skin or on clothing. Do not breathe mist. Keep container closed. Use only with adequate ventilation. Do not taste or swallow. Wash thoroughly after handling. To avoid rapid temperature rise, violent spattering, or explosive eruptions always add caustic to water when mixing.

Never add water to a caustic when mixing. Heat water to 80-100 F before adding product. Add small amounts of product slowly and evenly over single addition, Water should not exceed 160° F during addition.

Check section 2.2 (GHS Label Elements) for further details. – [Prevention]:

7.2. Conditions for safe storage, including any incompatibilities

Do NOT store near strong acids.

Incompatible materials: Any acidic material, ammonia, urea, oxidizable materials and metals such as nickel, copper, tin, aluminum and iron.

Check section 2.2 (GHS Label Elements) for further details. – [Storage]:

7.3. Specific end use(s)

No data available.

Section 8. Exposure controls / personal protection

8.1. Control parameters

CAS No.	Ingredient	Exposure	
		Source	Value
0000111-76-2	2-Butoxy-ethanol	OSHA	TWA 50 ppm (240 mg/m3) [skin]
		ACGIH	TWA: 20 ppm
		NIOSH	TWA 5 ppm (24 mg/m3) [skin]
0007664-38-2	Phosphoric acid	OSHA	TWA 1 mg/m3
		ACGIH	TWA: 1 mg/m3 STEL: 3 mg/m3
		NIOSH	TWA 1 mg/m3 STEL: 3 mg/m3
0007664-39-3	HYDROGEN FLUORIDE	OSHA	TWA 3 ppm
		ACGIH	Ceiling: 2 ppm
		NIOSH	TWA 3 ppm (2.5 mg/m3) C 6 ppm (5 mg/m3) [15-minute]
0127087-87-0	Nonylphenol polyethylene glycol ether	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit

8.2. Exposure controls

Respiratory

Use NIOSH/MSHA approved respirator, following manufacturer's recommendations when concentrations exceed permissible exposure limits.

Eyes

Wear safety glasses with side shields to protect the eyes. An eye wash station is suggested as a good workplace practice.

Skin

Chemical resistant clothing such as coveralls/apron and boots should be worn. Chemical impervious gloves required.

Engineering Controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.



Safety Data Sheet (SDS) Blue Wolf Aluminum Brightener (BW-AB)

SDS Revision
Date: 05/18/2021

Other Work Practices Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.
Check section 2.2 (GHS Label Elements) for further details.

Section 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Color: Pink Physical State: Liquid
Odor	Butyl Solvent and Acid Odor
Odor threshold	Not determined
pH	3.70
Melting point / freezing point	Not Measured
Initial boiling point and boiling range	Not Measured
Flash Point	> 200 °F
Evaporation rate (Ether = 1)	Not Measured
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	Lower Explosive Limit: Not Measured Upper Explosive Limit: Not Measured
Vapor pressure (Pa)	Not Measured
Vapor Density	Not Measured
Relative Density	Not Measured
Solubility in Water	Not Measured
Partition coefficient n-octanol/water (Log 5now)	Not Measured
Auto-ignition temperature	Not Measured
Decomposition temperature	Not Measured
Viscosity (cSt)	Not Measured

9.2. Other information

No other relevant information.

Section 10. Stability and reactivity

10.1. Reactivity

Hazardous Polymerization will not occur.

10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Avoid strong acids, metals and organic material such as chlorinated hydrocarbons.

10.5. Incompatible materials

Any acidic material, ammonia, urea, oxidizable materials and metals such as nickel, copper, tin, aluminum and iron.



Safety Data Sheet (SDS)
Blue Wolf Aluminum Brightener
(BW-AB)

SDS Revision
 Date: 05/18/2021

10.6. Hazardous decomposition products

Explosive hydrogen gas can be liberated on contact with metals, such as zinc, tin or aluminum. Hydrogen gas can result in explosive hazards in confined spaces.

Section 11. Toxicological information

Acute toxicity

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
HYDROGEN FLUORIDE - (7664-39-3)	No data available	No data available	No data available	No data available	1,610.00, Rat - Category: NA
Phosphoric acid - (7664-38-2)	1,700.00, Rat - Category: 4	>2,000.00, Rabbit - Category: 5	No data available	No data available	No data available
Nonylphenol polyethylene glycol ether - (127087-87-0)	No data available	No data available	No data available	No data available	No data available
2-Butoxy-ethanol - (111-76-2)	1,414.00, Guinea Pig - Category: 4	1,200.00, Guinea Pig - Category: 4	No data available	No data available	No data available

Carcinogen Data

CAS No.	Ingredient	Source	Value
0000111-76-2	2-Butoxy-ethanol	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;
		ACGIH	A3
0007664-38-2	Phosphoric acid	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit
0007664-39-3	HYDROGEN FLUORIDE	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit
0127087-87-0	Nonylphenol polyethylene glycol ether	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit

Classification	Category	Hazard Description
Acute toxicity (oral)	3	Toxic if swallowed.
Acute toxicity (dermal)	2	Fatal in contact with skin.
Acute toxicity (inhalation)	3	Toxic if inhaled.
Skin corrosion/irritation	1B	Causes severe skin burns and eye damage.
Serious eye damage/irritation	---	Not Applicable
Respiratory sensitization	---	Not Applicable



Safety Data Sheet (SDS) Blue Wolf Aluminum Brightener (BW-AB)

SDS Revision
Date: 05/18/2021

Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

Section 12. Ecological information

12.1. Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
HYDROGEN FLUORIDE - (7664-39-3)	164.50, Salmo trutta	97.00, Daphnia magna	43.00 (96 hr), Algae
Phosphoric acid - (7664-38-2)	75.10, Oryzias latipes	101.00, Daphnia magna	101.00 (72 hr), Desmodesmus subspicatus
Nonylphenol polyethylene glycol ether - (127087-87-0)	Not Available	Not Available	Not Available
2-Butoxy-ethanol - (111-76-2)	1,474.00, Oncorhynchus mykiss	1,550.00, Daphnia magna	1,840.00 (72 hr), Pseudokirchneriella subcapitata

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

Not Measured

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects

No data available.

Section 13. Disposal considerations

13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.



Safety Data Sheet (SDS) Blue Wolf Aluminum Brightener (BW-AB)

SDS Revision
Date: 05/18/2021

Section 14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
14.1. UN number	UN2922	UN2922	UN2922
14.2. UN proper shipping name	UN2922, Corrosive liquids, toxic, n.o.s., (HYDROGEN FLUORIDE (ANHYDROUS)), 8, II	Corrosive liquids, toxic, n.o.s., (HYDROGEN FLUORIDE (ANHYDROUS))	Corrosive liquids, toxic, n.o.s., (HYDROGEN FLUORIDE (ANHYDROUS))
14.3. Transport hazard class(es)	DOT Hazard Class: 8 Sub Class: 6.1	IMDG: 8 Sub Class: 6.1	Air Class: 8 Sub Class: 6.1
14.4. Packing group	II	II	II
14.5. Environmental hazards			
IMDG	Marine Pollutant: No;		
14.6. Special precautions for user	Not Applicable		

Section 15. Regulatory information

Regulatory Overview	The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.
Toxic Substance Control Act (TSCA)	All components of this material are either listed or exempt from listing on the TSCA Inventory.
EPCRA 302 Extremely Hazardous:	
	HYDROGEN FLUORIDE (ANHYDROUS)
EPCRA 313 Toxic Chemicals:	
	2-Butoxy-ethanol
	HYDROGEN FLUORIDE (ANHYDROUS)
Proposition 65 - Carcinogens (>0.0%):	To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.
Proposition 65 - Developmental Toxins (>0.0%):	To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.
Proposition 65 - Female Repro Toxins (>0.0%):	To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.
Proposition 65 - Male Repro Toxins (>0.0%):	To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.
Proposition 65 Label Warning:	This product contains no chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.



Safety Data Sheet (SDS)
Blue Wolf Aluminum Brightener
(BW-AB)

SDS Revision
Date: 05/18/2021

Section 16. Other information

SDS Revision Date 05/10/2021

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H300 Fatal if swallowed.

H302 Harmful if swallowed.

H310 Fatal in contact with skin.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H330 Fatal if inhaled.

H332 Harmful if inhaled.

End of Document