



## EMS Alumi-Brite

SYNTHETIC ACID ALUMINIUM CLEANER AND BRIGHTENER

- 100% Synthetic Acid
- Non-D.O.T. Regulated
- Non-Fuming
- Non-Corrosive
- Brightens Aluminum
- Safe on Paint
- Safe on Glass
- Provides Anti-Stick Coat
- One Step, No Neutralizing

EMS Alumi-Brite is the world's only aluminum brightener and cleaner that is formulated without hydrofluoric or any other corrosive acid or caustic. Alumi-Brite blends our OSHA & EPA compliant surfactants and detergents with EMS' SynTech®, the world's only synthetic acid.

The result is a product that has near identical brightening properties to the harshest acids, yet is safe to the touch, the truck and equipment. Alumi-Brite does not etch the surface of the metal to "brighten," a process that eventually leaves your aluminum dull and grey. Rather, it removed contaminants from the pores of the metal, allowing the natural brightening properties of the metal to shine through.

And because Alumi-Brite is non-corrosive, it is safe to use anywhere on your truck and cab. This also means that Alumi-Brite does not release trace metals like traditional acids during the washing process.

Our newest Alumi-Brite fomulation also boasts the benefits of SynGuard, our safe but potent fluorosurfactant. Similar to additives like Dupont's Teflon®, SynGuard provides exceptional anti-stick properties making it more difficult for stains to adhere to the truck's surfaces

Alumi-Brite carries a triple-zero HMIS score, is non-D.O.T. regulated, and has earned a USDA Authorized Category Code of A3 deeming it safe for use in and around food processing plants and equipment. It is 100% biodegradable, water soluble, non-toxic, non-butyl and non-flammable. Alumi-Brite is also NSF certified A1, A2, A4, A5, A8 & C1.

Its performance has earned Alumi-Brite the recommendation of truck manufacturers in a variety of industries. Contact EMS to learn more.

The formula and its ingredients meet or exceed the EPA's Safer Choice program requirements for both the safety of the environment and the user.

syn tech®



## Technical Data

BIODEGRADABLE: Yes/100%	FLAMMABILITY: Non-Flammable
FORM: Liquid	BOILING POINT: 212° F
ODOR: Mild Soapy Odor	SOLUBILITY IN WATER: 100%
COLD STABILITY: 18° F	VOCs: None
DETERGENCY: Excellent	VOLATILE BY VOLUME: N/A
PHOSPHATES: None	CARCINOGENS: None
WETTING ABILITY: Excellent	SHELF LIFE: 1 Year

## Brightening Properties

Aluminum Brightening Properties with 3 Minute Exposure

Acid	Brightening Score
HF (hydrofluoric)	92.5
<b>Alumi-Brite</b>	<b>90.1</b>
HCl (Muriatic)	86.3
Sulfamic	73.0
Formic	71.1
Phosphoric	70.9
Citric	0.0
Lactic	0.2
Acetic	0.1
Glycolic	0.2
Gluconic	0.1
Rydlyme	0.3
Oxalic	0.0
Malic	0.4

### Test Conditions

200 grams of 5% active solution

5 sq. inches of 7075-Y6 corroded aluminum saturated in a test solution for 3 Minutes @ 70° F

Clearly, Alumi-Brite out performs acids when it comes to brightening aluminum, except HF (hydrofluoric) which is highly corrosive and extremely harmful to humans.

## DOT STATEMENT

Non-D.O.T. Regulated/Non-D.O.T. Hazardous  
EXEMPT as per 49 CFR 173.154(d) (1) <6.25 mmpy

D. O. T. classifies a material to be corrosive and hazardous if it has a corrosion rate that exceeds 6.25 mmpy on SAE C1020 carbon steel or 7075- Y6 Aluminum.

## Dilution Specification

Please refer to the product label.

## Toxicity Studies

Toxicity Limits: Test Procedure OECD 202, 48 hr. LC 50 and LD 50 (rat oral NON-TOXIC)

Mutagenicity Limits: OECD Guidelines Sec. 471 Chemicals:  
NON-MUTAGENIC

### Dermal Irritation & Corrosion

A modified Draize method was used as described in OECD Guidelines for the Testing of Chemicals Sec. 404 and complies with the requirements of OECD Principles of GLP, Annex revised as of July 1992.

Alumi-Brite is classified as a "Non-Skin Irritant".

### Biodegradation & Aquatic Safety

Test Procedure: Hach Reactor Digestion Method for Waste Water and Sea Water. Hach Reactor Digestion Method is a semi-micro adaptation of the Standard Methods.

Alumi-Brite is 100% Biodegradable.

## Classifications & Approvals

D.O.T., IMO, IATA , IMDG - Non-Regulated

TDG - Non-Regulated to and through Canada

SARA 313 311/312 - This product does not contain any ingredients that are subject to the reporting requirements.

California Prop 65 - This product does not contain any ingredients known to the state of California to cause cancer, birth defects or any other reproductive harm.

FDA - Recognized as Safe (GRAS)

USDA Authorization

A1, A2, A4, A8, C3

NSF Authorization

A1, A2, A4, A5, A8, C1

Additional Studies & Results: When tested, Alumi-Brite showed no potential for the generation of Carbon Dioxide under NIOSH 7903 OSHA & ACGIH testing protocols governing workplace environments.