

SAFETY DATA SHEET

Product Name: **METALGUARD A81**SDS No.: 801
Issue Date: 03/07/2016
Version No.: 14

SECTION 1: COMPANY AND PRODUCT IDENTIFICATION

Product Name: METALGUARD A81
*Heavy-duty conventional antifreeze additive package***Company Name:** WEBA Technology Corp.
1213 N. Sherman Ave #351
Madison, WI 53704 USA**For More Information Call:** Tel: 608-819-8806
Fax: 608-237-2054
msds@webacorp.com
SDS on-line: www.webacorp.com**In Case of Emergency Call:** CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day,
7 Days/Week)

SECTION 2: HAZARDOUS IDENTIFICATION

OSHA Hazards: Corrosive, Target organ effect**Target Organs:** Kidney, Liver, Eyes, Skin, Mucous membranes, Respiratory system, Cardiovascular system**Signal Words:** Danger**Pictograms:****GHS Classification:**

Skin corrosion	Category 1
Serious eye damage	Category 1

GHS Label Elements, including precautionary statements:**Hazard Statements:**

H314	Causes severe skin burns and eye damage.
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Precautionary Statements:

P260	Do not breathe dusts or mists.
P264	Wash hands thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do not induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor/physician.
P363	Wash contaminated clothing before reuse.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local regulations.

Potential Health Effects

Eyes	Causes severe eye burns.
Inhalation	May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
Skin	May be harmful if absorbed through skin. Causes skin burns.
Ingestion	May be harmful if swallowed.

NFPA Ratings

Health	3
Flammability	0
Reactivity	0
Specific hazard	N/A

HMIS Ratings

Health	3
Fire	0
Reactivity	0
Personal	C

0 =minimal 1= slight 2=moderate 3= serious 4= severe

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight %	CAS #	EINECS# / ELINCS#
Boric Acid	10-15	10043-35-3	233-139-2
Sodium Nitrate	<10	7631-99-4	231-554-3
Sodium Nitrite	10-20	7632-00-0	231-555-9
Sodium Tolytraizole	5-10	64665-57-2	265-004-9
Potassium Hydroxide	15-25	1310-58-3	215-181-3
Deionized Water	20-30	7732-18-5	231-791-2
Antifoam	<1	9003-11-6	N/A
Dye (may be with or without)	<1	N/A	N/A

The exact percentage of composition has been withheld as trade secrets of WEBA Technology. This is acceptable in accordance with Paragraph (i) of 29 CFR §1910.1200

SECTION 4: FIRST-AID MEASURES

Eyes	Rinse with plenty of water for at least 15 minutes and seek medical attention immediately.
Inhalation	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately.
Skin	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention immediately.
Ingestion	Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention immediately.

**All treatments should be based on observed signs and symptoms in the patient.*

SECTION 5: FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media	Product is not flammable. Use water, fog, foam, carbon dioxide or dry chemical on fires involving this product. Use appropriate media for adjacent fire. Cool unopened containers with water.
Special protective equipment and precautions for firefighters	Do not release runoff from fire control methods to sewers or waterways. Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face piece operated in pressure-demand or positive-pressure mode. Full protective equipment including self-contained breathing apparatus should be used during a fire. During emergency conditions, overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Seek medical attention.
Specific hazards arising from the chemical	Closed containers may rupture or explode due to steam pressure build-up when exposed to extreme heat. Water may be used to cool closed containers. May emit toxic fumes (oxides of sodium and nitrogen) under fire conditions. (See also Stability and Reactivity section).

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	See section 8 for recommendations on the use of personal protective equipment.
Environmental precautions	Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements.
Methods and materials for containment and cleaning up	Absorb spill with noncombustible absorbent material, then place in a suitable container for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling:

See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use.

Conditions for safe storage, including any incompatibilities:

Store in cool, dry well ventilated area. Store only in containers that are resistant to alkaline solutions. Keep away from incompatible materials (see section 10 for incompatibilities).

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure controls:

Potassium Hydroxide	2 mg/m ³	CEIL	ACGIH
	2 mg/m ³	CEIL	NIOSH
Boric Acid	2 mg/m ³	TLV	ACGIH
	6 mg/m ³	STEL	ACGIH

TWA: Time Weighted Average over 8 hours of work.

TLV: Threshold Limit Value over 8 hours of work.

REL: Recommended Exposure Limit

PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit during x minutes.

IDLH: Immediately Dangerous to Life or Health

WEEL: Workplace Environmental Exposure Levels

CEIL: Ceiling

Personal Protection

Eyes	Wear chemical safety glasses or goggles, and face shield if splashing is likely to occur.
Inhalation	Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator.
Skin	Wear nitrile or rubber gloves, and full body covering. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Other	Not Available

Other Recommendations

Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area. Avoid contact with skin, eyes and clothing. Do not take internally. Clean up spills immediately. Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)	Clear, yellow liquid.
Odor	Light chemical odor.
Odor threshold	Not Available
pH	11.0-12.0
Melting point/freezing point	Not Available
Initial boiling point and boiling range	>100 °C (>212 °F)
Flash point	Not Flammable
Evaporation rate	Not Available
Flammability (solid, gas)	Not Flammable
Upper/lower flammability or explosive limit	Not Explosive
Vapor pressure	10 mmHg at 20 °C (68 °F)
Vapor density	>2.0 (air = 1)
Specific gravity	1.173-1.183 at 21 °C (70 °F)
Solubility (ies)	Completely soluble in water.
Partition coefficient: n-octanol/water	Not Available
Auto-ignition temperature	Not Available
Decomposition temperature	Not Available
Percent volatile by Volume	NIL

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability	Stable.
Possibility of Hazardous Reactions	Will not occur.
Conditions to Avoid	Storage below 15.5 °C (60 °F) or above 65.5 °C (150 °F)
Incompatible Materials	Strong acids, oxidizers.
Hazardous Decomposition Products	Oxides of sodium and nitrogen.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity

Potassium Hydroxide

Skin	Not Available
Eyes	Not Available
Respiratory	Not Available
Ingestion	LD50 - Rat - 273 mg/kg

Sodium Tolyltriazole

Skin	Not Available
Eyes	Not Available
Respiratory	Not Available
Ingestion	Not Available

Sodium Nitrate

Skin	Not Available
Eyes	Not Available
Respiratory	Not Available
Ingestion	LD50 Oral - rat - 1,267 mg/kg

	LD50 Oral - rabbit - 2,680 mg/kg LDLO Oral - Child - 22.5 mg/kg
Other	LD50 Intravenous - mouse - 175 mg/kg

Sodium Nitrite

Skin	Not Available
Eyes	Not Available
Respiratory	Not Available
Ingestion	LD50 Oral - rat - 157.9 mg/kg LD50 Oral - mouse - 175 mg/kg

Boric Acid

Skin	Not Available
Eyes	Not Available
Respiratory	Not Available
Ingestion	LD50 Oral - rat - 2660 mg/kg LD50 Oral - mouse - 3450 mg/kg

Carcinogenicity

IARC	No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP	No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Signs & Symptoms of Exposure

Skin	May cause irritation.
Eyes	Eye burns, watering eyes, redness. Destructive to eye tissue on contact.
Respiratory	Depending on the concentration and duration of exposure, may cause respiratory tract irritation, a burning sensation, shortness of breath. Vapor/fumes are not generated at significant levels until temperature is elevated.
Ingestion	Severe burns and tissue perforation of mucous membranes of the mouth, throat, esophagus and stomach.

Chronic Toxicity	Sodium nitrite can cause cyanosis, headache, dizziness, nausea and methemoglobinemia.
Teratogenicity	Not Available
Mutagenicity	Not Available
Embryotoxicity	Not Available
Specific Target Organ Toxicity	Not Available
Reproductive Toxicity	Not Available
Respiratory/Skin Sensitization	Not Available

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Potassium Hydroxide

Aquatic Vertebrate	Not Available
Aquatic Invertebrate	Not Available
Terrestrial	Not Available

Sodium Tolytriazole

Aquatic Vertebrate	Not Available
Aquatic Invertebrate	Not Available
Terrestrial	Not Available

Sodium Nitrate

Aquatic Vertebrate	LC50 - Gambusia affinis (Mosquito fish) - 6,650 mg/l - 96 h
Aquatic Invertebrate	EC50 - Daphnia magna (Water flea) - 6,000 mg/l - 24 h
Terrestrial	Not Available

Sodium Nitrite

Aquatic Vertebrate	LC50 - Oncorhynchus mykiss (rainbow trout) - 0.94 - 1.92 mg/l - 96.0 h mortality NOEC - Oncorhynchus mykiss (rainbow trout) - 0.54 mg/l - 96.0 h
Aquatic Invertebrate	EC50 - Daphnia magna (Water flea) - 12.5 mg/l - 48 h
Terrestrial	Not Available

Boric Acid

Aquatic Vertebrate	Fish: LC50 (Ptychocheilus lucius) - 279 mg/l (96 hr) Fish: LC50 Lepomis macrochirus - 1021 mg/l (96 hr)
Aquatic Invertebrate	LC50 Daphnia magna - 53.2 mg/l (21 days) EC50 Daphnia magna - 133 mg/l (48 hr)
Terrestrial	Not Available

Persistence and Degradability	Biodegradable.
Bioaccumulative Potential	Not Available
Mobility in Soil	Not Available
PBT and vPvB Assessment	Not Available
Other Adverse Effects	Not Available

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Product or Residues	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product or residue.
Product Containers	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container.

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

SECTION 14: TRANSPORTATION INFORMATION

US DOT	UN1760, Corrosive liquids, n.o.s., (potassium hydroxide), 8, PG II
TDG	UN1760, CORROSIVE LIQUIDS, N.O.S., (POTASSIUM HYDROXIDE), 8, PG II
IMDG	UN1760, CORROSIVE LIQUIDS, N.O.S., (POTASSIUM HYDROXIDE), 8, PG II
Marine Pollutant	No
IATA/ICAO	UN1760, Corrosive liquids, n.o.s., (potassium hydroxide), 8, PG II

SECTION 15: REGULATORY INFORMATION

TSCA Inventory Status	All ingredients are listed on the TSCA inventory.
DSCCL (EEC)	All ingredients are listed on the DSCCL inventory.
California Proposition 65	Not Listed
SARA 302	Not Listed
SARA 304	Not Listed
SARA 311	Acute Health Hazard
SARA 312	Acute Health Hazard
SARA 313	Not Listed
WHMIS Canada	Class E: Corrosive material.

SECTION 16: OTHER INFORMATION

THIS Safety Data Sheet COVERS ALL OF THE FOLLOWING PRODUCTS:

METALGUARD A81 (NO DYE) 477800

METALGUARD A81-G3 (GREEN DYE) 478200

Revision	Date
Revision 1, Version 10	03/03/2013
Revision 1, Version 11	10/25/2013
Revision 2, Version 12	04/20/2015
Revision 3, Version 13	10/28/2015
Revision 4, Version 14	03/07/2016

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