

Aluminum Cleaner AC-2

SDS Number: 110

Revision Date: 12/27/2014

Page 1 of 10

1 PRODUCT AND COMPANY IDENTIFICATION

Manufacturer

ABC CO Products of Sacramento
 P.O. Box 188469
 Sacramento, CA 95818

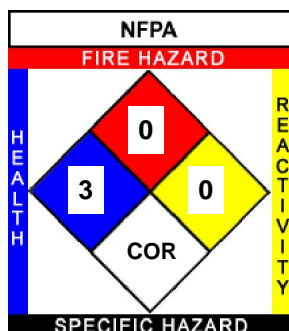
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Product Name: Aluminum Cleaner AC-2
Revision Date: 12/27/2014
Version: 1
SDS Number: 110
Common Name: Mild Alkaline Cleaner
CAS Number: MIXTURE
Product Code: ABCO J-2
Chemical Family: Mild Alkaline Cleaner
Chemical Formula: *** PROPRIETARY ***
Product Use: Cleaning of Aluminum
Emergency Phone: +1-800-424-9300 (CHEMTREC)

2 HAZARDS IDENTIFICATION

NFPA:
 HMIS III:

Health = 3, Fire = 0, Reactivity = 0
 H*3/F0/PH0



HMIS III	
HEALTH	✓ 3
FLAMMABILITY	0
PHYSICAL HAZARDS	0
PERSONAL PROTECTION F Safety Glasses, Gloves, Apron, Dust Respirator	

PERSONAL PROTECTION INDEX								
A		G						
B		H						
C		I						
D		J						
E		K						
F		X	Consult your supervisor or S.O.P. for "SPECIAL" handling directions					
A		n		O		p		
t		u		w		y		
		z						

Aluminum Cleaner AC-2

SDS Number: 110

Revision Date: 12/27/2014

Page 2 of 10

GHS Signal Word:

DANGER

GHS Hazard Pictograms:



GHS Classifications:

- Health, Acute toxicity, 4 Oral
- Health, Acute toxicity, 2 Oral
- Health, Aspiration hazard, 2
- Health, Acute toxicity, 5 Dermal
- Health, Skin corrosion/irritation, 1 B
- Health, Respiratory or skin sensitization, 1 Skin
- Health, Specific target organ toxicity - Single exposure, 3
- Health, Reproductive toxicity, 1
- Environmental, Hazards to the aquatic environment - Chronic, 2

GHS Phrases:

- H302 - Harmful if swallowed
- H300 - Fatal if swallowed
- H305 - May be harmful if swallowed and enters airways
- H313 - May be harmful in contact with skin
- H314 - Causes severe skin burns and eye damage
- H317 - May cause an allergic skin reaction
- H335 - May cause respiratory irritation
- H360 - May damage fertility or the unborn child
- H411 - Toxic to aquatic life with long lasting effects

GHS Precautionary Statements:

- P201 - Obtain special instructions before use.
- P202 - Do not handle until all safety precautions have been read and understood.
- P260 - Do not breathe dust/fume/gas/mist/vapors/spray.
- P264 - Wash skin thoroughly after handling.
- P270 - Do not eat, drink or smoke when using this product.
- P271 - Use only outdoors or in a well-ventilated area.
- P273 - Avoid release to the environment.
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.
- P301+310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- P303+361+353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P305+351+338 - IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
- P308+313 - IF exposed or concerned: Get medical advice/attention.
- P321 - Specific treatment (see supplementary first aid instructions on this label).
- P332+313 - If skin irritation occurs: Get medical advice/attention.
- P337+313 - If eye irritation persists: Get medical advice/attention.
- P363 - Wash contaminated clothing before reuse.

Aluminum Cleaner AC-2

SDS Number: 110

Revision Date: 12/27/2014

Page 3 of 10

P391 - Collect spillage. Hazardous to the aquatic environment.
 P403+233 - Store in a well ventilated place. Keep container tightly closed.
 P405 - Store locked up.
 P501 - Dispose of contents/container to an approved waste disposal plant.

Environmental Hazards: Not to be expected if handled and used properly. Environmental hazard assignment applies to concentrated product only. When this product is used at the dilutions recommended by ABCO Products of Sacramento, it attributes minimal to no environmental hazards, acute or chronic, to the aquatic environment.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

Cas #	Percentage	Chemical Name
1303-96-4	<60%	Borates, tetra, sodium salts (decahydrate)
7758-29-4	<20%	Triphosphoric acid, pentasodium salt
10101-89-0	<20%	Trisodium Phosphate Dodecahydrate
25155-30-0	<5%	Benzenesulfonic acid, dodecyl-, sodium salt
72379-24-9	<5%	Amines, C12-14-tert-alkyl, ethoxylated, sulfates, sodium salts
N/A	<5%	Proprietary, non-hazardous, non-regulated
None	0-5%	Trade Secret*

*The specific chemical identities of the ingredients of this mixture labeled as "Trade Secret" are considered to be proprietary and are withheld in accordance with the provisions of 29CFR1910.1200 Sect. (i) Trade Secrets.

4 FIRST AID MEASURES

Inhalation: Give oxygen or artificial respiration if needed. If symptoms develop, move victim to fresh air. If symptoms persist, obtain medical attention.

Skin Contact: Take off contaminated clothing and shoes immediately. Wipe/brush off as much chemical as possible from skin BEFORE flushing skin with water (water will react exothermically with large amounts of residual dry chemical, potentially causing more severe burns). Promptly flush skin with water for at least 15 minutes to ensure all chemical is removed. If reddening develops and/or persists, obtain medical attention.

Eye Contact: Flush with large amounts of water for at least 15 minutes, lifting upper and lower lids occasionally. Get immediate medical attention. Continue rinsing eyes during transport to hospital.

Ingestion: Rinse mouth with water. Give 3-4 glasses of water or milk to dilute stomach contents. Do NOT induce vomiting. Material can enter lungs (aspiration hazard) during swallowing or vomiting resulting in lung inflammation or other lung injury. If vomiting occurs, give more water or milk. Never give anything by mouth to an unconscious person. Get immediate medical attention. Show this Safety Data Sheet to the physician in attendance.

Most important symptoms and effects, both acute and delayed:

The most important known symptoms and effects are described in the labelling (see Section 2) and/or Section 11. This material has as aspiration hazard. Any potential danger from aspiration must be weighed against possible oral toxicity when determining whether to induce vomiting. Consider activated charcoal and/or gastric lavage.

Indication of any immediate medical attention and special treatment needed:

No data available.

5 FIRE FIGHTING MEASURES

Aluminum Cleaner AC-2

SDS Number: 110

Revision Date: 12/27/2014

Page 4 of 10

Flammability:	No data available
Flash Point:	DNA
Flash Point Method:	DNA
Burning Rate:	No data available
Autoignition Temp:	No data available
LEL:	DNA
UEL:	DNA

Extinguishing Media:

Water Spray
Water Fog
Carbon Dioxide
Alcohol-Resistant Foam
Dry Chemical

Special Hazards Arising From the Substance or Mixture:

Borane/Boron Oxides
Carbon Oxides
Nitrogen Oxides (NO_x)
Phosphorous Oxides
Sodium Oxides
Sulfur Oxides

Advice for Firefighters:

Firefighters should wear full-face, positive-pressure respirators.

Further Information:

If incinerated, may release toxic fumes.
Use water spray to cool unopened containers.
When material becomes wet and is simultaneously exposed to reactive metals (Zinc & Aluminum) and their alloys (Brass, etc.), Hydrogen gas may be produced. Hydrogen is flammable and potentially explosive. Use caution.
Do NOT use high volume water jet to extinguish fire, as the force of the water jet may cause fire to spread.
See Section 7 for more information on safe handling.
See Section 8 for more information on personal protection equipment.
See Section 13 for disposal information.

6**ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures:**

Use personal protective equipment, including dust respirator.
Avoid dust formation.
Avoid breathing dust.
Keep from contacting skin or eyes.
Avoid breathing vapors, mist or gas.
Ensure adequate ventilation.
Evacuate personnel to safe areas.

Environmental precautions:

Prevent further release (leakage/spillage) if safe to do so.
Do not allow product to enter drains.
Do not allow to drain to environment.

Aluminum Cleaner AC-2

SDS Number: 110

Revision Date: 12/27/2014

Page 5 of 10

Methods and materials for containments and cleaning up:

Pick up and arrange disposal without creating dust.
Sweep up, shovel or collect spillage with an electrically protected vacuum cleaner.
Place contaminated material into suitable, closed containers for disposal.
Dispose of contaminated material according to Section 13.
After spillage has been collected, area may be flushed with water or wet-brushed.
Ensure adequate ventilation.

Reference to other sections:

Comply with federal, state and local regulations on reporting spills.
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for information on proper disposal.

7**HANDLING AND STORAGE****Handling Precautions:**

Avoid formation of dust or aerosols.
Avoid breathing vapors, mist or dust.
Avoid contact with eyes, skin, or clothing.
Keep containers closed when not in use.
Do not expose containers to open flame, excessive heat, or direct sunlight.
Do not puncture or drop containers.
Handle with care and avoid spillage on the floor.
Keep material out of reach of children.
Keep material away from incompatible materials.
Wash thoroughly after handling.
Ensure adequate ventilation.

Storage Requirements:

Keep away from heat, sparks and flames.
Do not store in direct sunlight.
Store away from strong acids, strong bases, strong oxidizing agents, strong reducing agents, Alkali metals, water.
If material becomes wet, it becomes corrosive to some metals. Store away from reactive metals (Zinc & Aluminum) and their alloys (Brass, etc.), galvanized surfaces, Tin & Tin Oxides, Cast Iron and Steel.

8**EXPOSURE CONTROLS/PERSONAL PROTECTION****Engineering Controls:**

All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94). Use local exhaust at filling zones and where leakage and dust formation is probable. Use mechanical (general) ventilation for storage areas. Use appropriate ventilation as required to keep Exposure Limits in Air below TLV & PEL limits.

Personal Protective Equip:

Eye/face protection:

When using material use safety glasses, gloves, apron and dust respirator according to HMIS PP, F. All safety equipment should be tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin protection:

Handle with gloves made from Neoprene, Nitrile or Buna rubber. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact. Dispose of contaminated gloves according to applicable laws and

Aluminum Cleaner AC-2

SDS Number: 110

Revision Date: 12/27/2014

Page 6 of 10

laboratory practices.

Body Protection:

Chemically resistant gloves, apron, safety glasses and dust respirator are recommended. Type of protective equipment should be selected based on concentration amount and conditions of use of this material.

Respiratory protection:

Full-face dust/vapor respirator may be required as backup to engineering controls when proper engineering controls are not in place to keep TLV and PEL limits below defined thresholds.

Control of environmental exposure:

Prevent leakage or spillage if safe to do so. Do not let material enter drains.

Components with workplace control parameters:

Component(s): Borates, tetra, sodium salts (decahydrate); Trisodium Phosphate Dodecahydrate

CAS No(s): 1303-96-4; 10101-89-0

USA OSHA Table Z-1 Limits for Air Contaminants (TWA): 10 mg/m³

USA ACGIH (STEL/TLV): 6 mg/m³

USA ACGIH (TWA/TLV): 2 mg/m³

USA NIOSH Recommended Exposure Limits (TWA): 5 mg/m³

USA Workplace Environmental Exposure Levels (STEL/WEEL): 5 mg/m³

USA ACGIH - Inhalable Fraction - (TWA): 10 mg/m³

USA ACGIH - Respirable Fraction - (TWA): 3 mg/m³

USA OSHA - Total Dust - (TWA): 15 mg/m³

USA OSHA - Respirable Fraction - (TWA): 5 mg/m³

Biological occupational exposure limits:

Contains no substances with biological occupational exposure limits values.

9

PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White, Granular Powder	Odor:	Characteristic
Physical State:	Solid	Molecular Formula:	MIXTURE
Odor Threshold:	Not determined	Solubility:	100%
Particle Size:	No data available	Softening Point:	Not determined
Spec Grav./Density:	DNA	Percent Volatile:	DNA
Viscosity:	Not determined	Heat Value:	Not determined
Sat. Vap. Conc.:	DNA	Freezing/Melting Pt.:	Not determined
Boiling Point:	Not determined	Flash Point:	DNA
Flammability:	(solid, gas): Not determined	Octanol:	Not determined
Partition Coefficient:	Not determined	Vapor Density:	(air = 1): Not determined
Vapor Pressure:	(mm Hg @ 20 °C): DNA	VOC:	DNA
pH:	@ 1%: > 11.5	Bulk Density:	Not determined
Evap. Rate:	DNA	Auto-Ignition Temp:	Not determined
Molecular weight:	MIXTURE	UFL/LFL:	DNA
Decomp Temp:	Not determined		

Percent Phosphorous: 6.48%

Aluminum Cleaner AC-2

SDS Number: 110

Revision Date: 12/27/2014

Page 7 of 10

10 STABILITY AND REACTIVITY

Stability:	Product is stable under normal conditions.
Conditions to Avoid:	Incompatibilities, flames, ignition sources.
Materials to Avoid:	Strong acids, strong bases, strong oxidizing agents, strong reducing agents, Alkali metals, water. If material becomes wet, it becomes corrosive to some metals such as reactive metals (Zinc & Aluminum) and their alloys (Brass, etc.), galvanized surfaces, Tin & Tin Oxides, Cast Iron and Steel.
Hazardous Decomposition:	Borane/Boron Oxides, Carbon Oxides, Nitrogen Oxides (NOx), Phosphorous Oxides, Sodium Oxides and Sulfur Oxides.
Hazardous Polymerization:	Will not occur.

11 TOXICOLOGICAL INFORMATION

Component(s): Borates, tetra, sodium salts (decahydrate); Triphosphoric acid, pentasodium salt; Trisodium Phosphate Dodecahydrate; Benzenesulfonic acid, dodecyl-, sodium salt; Amines, C12-14-tert-alkyl, ethoxylated, sulfates, sodium salts; Trade Secret

CAS No(s): 1303-96-4; 7758-29-4; 10101-89-0; 25155-30-0; 72379-24-9; None

Acute Toxicity:

LD50 Oral - Rat: 438 mg/kg

LD50 Dermal - Rabbit: > 2,000 mg/kg

LD50 Intraperitoneal - Mouse: 430 mg/kg

LDLo Intravenous - Rabbit: 1,580 mg/kg

LC50 Inhalation - Rat (4 h): > 0.39 mg/l (4 h)

Skin Corrosion/Irritation: Rabbit skin (4 h) - Irritating to skin.

Serious Eye Damage/Eye Irritation: Rabbit eyes (24 h) - Serious eye irritant.

Respiratory or Skin Sensitation: Human skin - Certain reactions were observed for sensitive people.

Germ Cell Mutagenicity: Oral - Drosophila melanogaster: 11 pph - Sex chromosome loss and non-disjunction.

Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by IARC.

ACGIH: No component 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 component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive Toxicity:

Fetotoxicity - Presumed human reproductive toxicant.

NOEL teratogenicity Oral - Rat: 50 mg/kg - Effects on development were observed.

Specific Target Organ Toxicity - Single Exposure: No data available.

Aluminum Cleaner AC-2

SDS Number: 110

Revision Date: 12/27/2014

Page 8 of 10

Specific Target Organ Toxicity - Repeated Exposure: No data available.**Aspiration Hazard:** No data available.**Additional Information:**

Component: Borates, tetra, sodium salts (decahydrate); RTECS: VZ2275000

Component: Triphosphoric acid, pentasodium salt; RTECS: YK4750000

Component: Trisodium Phosphate Dodecahydrate; RTECS: TC9575000

Component: Benzenesulfonic acid, dodecyl-, sodium salt; RTECS: DB6825000

12**ECOLOGICAL INFORMATION****Component(s):** Borates, tetra, sodium salts (decahydrate); Triphosphoric acid, pentasodium salt; Trisodium Phosphate Dodecahydrate; Benzenesulfonic acid, dodecyl-, sodium salt; Amines, C12-14-tert-alkyl, ethoxylated, sulfates, sodium salts; Trade Secret**CAS No(s):** 1303-96-4; 7758-29-4; 10101-89-0; 25155-30-0; 72379-24-9; None**Toxicity:***Toxicity to fish:*

LC50 - Oncorhynchus mykiss (Rainbow Trout): 3.2 -5.6 mg/l (96 h)

LC50 - Lepomis macrochirus (Bluegill): 1.0 mg/l (96 h)

Mortality NOEC - Oncorhynchus mykiss (Rainbow Trout): 3.1 mg/l (72 h)

Mortality LOEC - Oncorhynchus mykiss (Rainbow Trout): 5.6 mg/l (72 h)

Mortality LOEC - Pimephales promelas (Fathead Minnow): 2.0 mg/l (144 h)

Mortality NOEC - Pimephales promelas (Fathead Minnow): 1.8 mg/l (144 h)

Toxicity to daphnia and other aquatic invertebrates:

EC50 - Daphnia magna (Water Flea): 12.2 - 17.0 mg/l (48 h)

Mortality NOEC - Daphnia: 4 mg/l (7 d)

Mortality LOEC - Daphnia magna (Water Flea): 20.0 mg/l (144 h)

Mortality NOEC - Daphnia magna (Water Flea): 10.0 mg/l (144 h)

Toxicity to algae:

LC50 - Desmodesmus supspicatus (Green Algae): 158 mg/l (96 h)

Growth Inhibition LOEC - Pseudokirchneriella subcapitata: 16.0 mg/l (96 h)

Growth Inhibition NOEC - Pseudokirchneriella subcapitata: 8.0 mg/l (96 h)

Persistence and Degradability:

No data available

Bioaccumulative potential:

Bioaccumulation - Lepomis macrochirus: 64 µg/l (28 d)

Bioconcentration factor (BCF): 220

Mobility in Soil:

No data available

Results of PBT and vPvB assessment:

Not required/conducted

Other Adverse Effects:

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life. Toxic

Aluminum Cleaner AC-2

SDS Number: 110

Revision Date: 12/27/2014

Page 9 of 10

to aquatic life with long lasting effects.

13 DISPOSAL CONSIDERATIONS

Product: Hazardous wastes shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution, release into the environment or damage to people and animals. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated Packaging: Dispose of as unused product.

14 TRANSPORT INFORMATION

DOT Class: Not regulated

DOT (US)

Non-regulated material, solid

IMDG

UN Number: 3262

Class: 8

Packing Group: III

EMS-No: F-A, S-B

Proper Shipping Name: Corrosive solid, basic, inorganic, n.o.s. (Trisodium Phosphate Dodecahydrate)

Marine Pollutant: No

IATA

UN Number: 3262

Class: 8

Packing Group: III

ERG #: 154

Proper Shipping Name: Corrosive solid, basic, inorganic, n.o.s. (Trisodium Phosphate Dodecahydrate)

Marine Pollutant: No

15 REGULATORY INFORMATION

COMPONENT / (CAS/PERC) / CODES

*Borates, tetra, sodium salts (decahydrate) (1303964 <60%) MASS, NJHS, OSHAWAC, PA, SARA311/312, TSCA, TXAIR

*Triphosphoric acid, pentasodium salt (7758294 <20%) MASS, NJHS, PA, TSCA

*Trisodium Phosphate Dodecahydrate (10101890 <20%) MASS, NJHS, PA, SARA311/312, TSCA

*Benzenesulfonic acid, dodecyl-, sodium salt (25155300 <5%) CERCLA, CSWHS, MASS, NJHS, PA, SARA311/312, TSCA

*Amines, C12-14-tert-alkyl, ethoxylated, sulfates, sodium salts (72379249 <5%) TSCA

REGULATORY KEY DESCRIPTIONS

CERCLA = superfund clean up substance

CSWHS = Clean water Act Hazardous substances

MASS = MA Massachusetts Hazardous Substances List

NJHS = New Jersey Right to Know Hazardous Substances



Safety Data Sheet (SDS)

ABC CO Products of Sacramento

Aluminum Cleaner AC-2

SDS Number: 110

Revision Date: 12/27/2014

Page 10 of 10

OSHA WAC = OSHA Workplace Air Contaminants
PA = PA Right-To-Know List of Hazardous Substances
SARA 311/312 = SARA 311/312 Toxic Chemicals
TSCA = Toxic Substances Control Act
TXAIR = TX Air Contaminants with Health Effects Screening Level

16

OTHER INFORMATION

Disclaimer:

The data in this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material in any process. The information set forth herein is furnished free of charge and is based on technical data that ABCO Products of Sacramento believes to be reliable. It is intended for use by persons having technical skill and at their own discretion and risk. Since conditions of use are outside of ABCO Products of Sacramento's control, ABCO Products of Sacramento makes no warranties, expressed or implied, and assumes no liability in connection with any use of this information. Nothing herein is to be taken as a license to operate under, or a recommendation to infringe upon, any patents.

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