

MATERIAL SAFETY DATA SHEET

I. PRODUCT IDENTIFICATION

Product Name: AMCO 444 White CAS number: N/A - mixture
Chemical Name & Synonyms: N/A - mixture
Appearance: Smooth white paste with no characteristic odor.
Use: General purpose welding flux.
Manufacturer: Force Industries Division Tel. 610-647-3575
EMERGENCY PHONE No. CALL CHEMTREC (800) 424-9300 * Available 24 Hours

II. CHEMICAL COMPOSITION

<u>Material</u>	<u>SARA III</u>	<u>CAS Number</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Boric Acid	-----	10043-35-3	10 mg/m ³	10 mg/m ³
Borax	-----	1303-96-43	5 mg/m ³	1 mg/m ³

This mixture includes a compound which contains boron oxide B₂O₃. When used as intended fumes of B₂O₃ may be given off which are hazardous.

Others, if any, are non-hazardous and are claimed as trade secret.

Hazard Rating: HMIS: (H = 0 F = 0 R = 0 PE = C) NFPA: (H = 0 F = 0 R = 0)

III. POTENTIAL HEALTH EFFECTS AND HEALTH HAZARD DATA

Target organ statement: WARNING: May be harmful if swallowed; irritating to skin and eyes.

Effects of Chronic Exposure: Coughing, erythema, nausea.

Effects of Acute Overexposure

Swallowing: Nausea, vomiting and diarrhea

Skin Absorption/Contact: Boron is not absorbed through skin. Mild dermatitis or irritation. Existing skin disorders may be aggravated

Inhalation: Irritation to respiratory system. Sneezing and coughing. Pre-existing lung disorders will be aggravated.

Eye Contact: Irritation to eye surfaces.

IV. EMERGENCY AND FIRST AID PROCEDURES

Swallowing: Call a physician, or your poison control center.

Skin: Promptly flush with water for at least 15 minutes to remove all residue. If rash develops, call a physician.

Inhalation: Remove to fresh air. If fumes are inhaled, call a physician.

Eyes: Flush with water at least 15 minutes. Get medical attention.

V. FIRE AND EXPLOSION DATA

Flash point (°F): N/A

Flammable limits in air: LOWER: N/A UPPER: N/A (% by volume)

Extinguishing media: Does not support combustion. Be aware of other materials in surrounding area to determine if water, fog, foam or CO₂ may be used.

Special fire fighting procedures: None

Unusual fire and explosion hazards: None

VI. REACTIVITY INFORMATION

Stability considerations / Conditions to avoid: Stable / None

Hazardous polymerization / Conditions to avoid: None / None

Incompatibility / Materials to avoid: Acetic anhydride, elemental potassium.

Hazardous combustion or Decomposition products: None

VII. SPILL AND LEAK RESPONSE

Steps to be taken if material is released or spilled: Contain spill, absorb, sweep-up. Remove to chemical sewer. Flush area to chemical sewer.

Waste disposal method: Dispose of in accordance with all federal, state and local regulations.

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VIII. SPECIAL PROTECTION INFORMATION

Respiratory protection: If the work station is not ventilated to remove all dusts and fumes, use a NIOSH approved mask.

Ventilation: Maintain air flow away from user to exhaust all dust and fumes, so that the TLV is never exceeded.

Protective gloves: Chemical Impervious

Eye protection: Chemical safety goggles

Other protective equipment: Full protective equipment normally used in a soldering operation so as to prevent any contact. Review operations to avoid contact with hazardous gas, liquids or solids. See also:
29 CFR 1910.132 - 29 CFR 1910.140. Personal Protective Equipment.
29 CFR 1910.251 - 29 CFR 1910.257. Welding, Cutting and Brazing.

IX. STORAGE, HANDLING AND SPECIAL PRECAUTIONS

Precautions to be taken in handling and storage: Store flux at ambient conditions. Keep under extremely dry and controlled conditions. Wash thoroughly after handling to remove all residue.

Other precautions: Remove and professionally wash contaminated clothing before re-use.

X. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point (°F @ 760 mmHg):	N/A	Specific gravity (H ₂ O = 1 @ 72°F):	1.37
Percent volatiles by volume:	N/A	Solubility in water:	Moderate
Evaporation rate (butyl acetate = 1):	N/A		

XI. OPTIONAL INFORMATION

Department of Transportation: DOMESTIC GROUND

Proper shipping name: Not a regulated product

Hazard Class: N/A

ID & Packing Group No. N/A

ERG Guide Number: N/A

Toxic Substance Control Act: All components of this compound are listed within the TSCA inventory.

SARA Title III Program: RCRA. None of the components of this compound are listed in 40CFR 261.
SARA. None of the components of this compound are listed in 40CFR 372.
CERCLA. None of the components of this compound are listed in 40CFR 302.

Hazard Communication Program: Hazardous warnings and training requirements as mandated for corrosive material.

State Right-to-Know Programs:

Pennsylvania: This product contains the following chemicals listed in PA Code Title 34, Hazardous Substance List: Borax

California: This product contains the following compounds subject to the reporting and labeling requirements of Proposition 65: None

NOTES: NA=Not Applicable NE=Not Established H=Health
F=Fire R=Reactivity PE=Personal Equipment

While we believe all information presented herein is accurate and reliable, the data are not to be taken as a guarantee or representation of any kind for which Force Industries assumes legal responsibility. They are offered solely for your consideration, investigation, and verification.