



A member of the Avesta Sheffield Group

# MATERIAL SAFETY DATA SHEET

## Avesta Neutralizing Agent 501

### SECTION I - Manufacturer/Product Identification:

**Manufacturer's (Distributor's) Name**

Avesta Welding Products, Inc.  
3176 Abbott Road  
Orchard Park, NY 14127

**Emergency Telephone Number**

(800) 424-9300 [Chemtrec]

**Information Telephone Number**

(716) 827-4400

**Trade Name:** Avesta Neutralizing Agent 501

**Classification:** NA

**Product Type:** Neutralizing Agent 501 is used for neutralizing the corrosive effects of pickling paste.

**Date Prepared:** 06/19/98

**Revision:** 3

**Prepared By:** *San Sattufeld*

### SECTION II - Hazardous Ingredients Information:

The dusts/mists, and gases that are produced during normal are discussed in Section V.

**HAZARDOUS COMPONENTS<sup>1</sup>:**

**(Specific Chemical Identity; Common Name):**

	<b>CAS Number</b>	<b>SARA<sup>2</sup></b>	<b>OSHA PEL<sup>3</sup> (mg/m<sup>3</sup>)</b>	<b>ACGIH TLV<sup>4</sup> (mg/m<sup>3</sup>)</b>	<b>NOTES</b>	<b>PERCENT<sup>5</sup> By Weight</b>
Zinc Carbonate	471-34-1		5	NA <sup>6</sup>	Resp. Dust	40
			15	5	Total Dust	
Calcium Hydroxide	1305-62-0		5	NA	Resp. Dust	33
			15	5	Total Dust	
Sodium Carbonate	497-19-8		NA	NA		10
Non-ionic Tenside	NA		NA	NA		3

**Notes:**

1. The term "Hazardous" should be interpreted as defined and required in the OSHA Hazard Communication Standard (29 CFR 1910.1200) and does not necessarily imply the existence of any hazard. Any components at concentrations equal to or greater than 0.1 percent are listed in this Section, according to OSHA 29 CFR 1910.1200.
2. An asterisk (\*) after the Chemical Abstract Service (CAS) Number indicates a toxic chemical subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (SARA) and 40 CFR Part 372.
3. These permissible exposure levels (PELs) are based on OSHA's rulemaking (29 CFR 1910 Subpart Z) adopted on May 29, 1971, and are the current regulatory limits.
4. These values are based on the American Conference of Governmental Industrial Hygienists (ACGIH) 1997 TLVs.
5. Approximate percent by weight values.
6. NA = Not Applicable, Not Available.

### SECTION III - Physical/Chemical Characteristics:

<b>BOILING POINT:</b>	208.4°F (98°C)	<b>VAPOR DENSITY (Air = 1):</b>	1.3 g/cm <sup>3</sup> at 68°F
<b>MELTING POINT:</b>	32°F (0°C)	<b>VAPOR PRESSURE at 20°C ( Butyl Acetate = 1):</b>	NA
<b>RELATIVE GRAVITY:</b>	1.4	<b>EVAPORATION RATE:</b>	NA
<b>MASS:</b>	1.5 kg/liter	<b>APPEARANCE AND ODOR:</b>	White liquid/paste with a faint odor.
<b>pH:</b>	11 at 68°F (20°C)		
<b>SOLUBILITY IN WATER:</b>	100% at 68°F (20°C)		

**SECTION IV - Fire and Explosion Hazard Data:**

FLASH POINT (Method Used):  
 FLAMMABLE LIMITS:  
 EXTINGUISHING MEDIA:

NA  
 LEL: NA UEL: NA  
 Water, carbon dioxide (CO<sub>2</sub>) or extinguishing media suitable for surrounding fire.

SPECIAL FIRE FIGHTING PROCEDURES:

If involved in fire, firefighters may need to wear chemical resistant clothing. Use a self-contained breathing apparatus or an air-purifying respirator with high-efficiency particulate filters when it has been confirmed through air monitoring that it is safe to do so. Move containers away from fire area or keep cool with water.

UNUSUAL FIRE AND EXPLOSION HAZARDS: This product is not flammable, combustible or explosive and will not burn. The product will emit carbon dioxide, calcium oxides (CaO<sub>x</sub>) and sodium oxides (Na<sub>2</sub>O) in the presence of intense heat/fire. This product is not sensitive to either mechanical impact or static discharge. Will ignite with Fluorine (F<sub>2</sub>).

**SECTION V - Reactivity Data:**

STABILITY:  
 Conditions To Avoid:

Stable:  X  Unstable:    
 Avoid high temperatures and ultraviolet radiation. Avoid the generation and accumulation of dust.

INCOMPATIBILITY (Materials to Avoid):

Acid compounds and water will give an exothermal reaction with heat development. Incompatible with ammonia (NH<sub>3</sub>) salts, fluorine (F<sub>2</sub>), aluminum (Al), phosphorous pentoxide (P<sub>2</sub>O<sub>5</sub>) and strong acids. Will attack some metals.

HAZARDOUS POLYMERIZATION:  
 Conditions To Avoid:

May Occur:   Will Not Occur:  X   
 None known.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Decomposition occurs only with intense heat emitting carbon dioxide (CO<sub>2</sub>) and sodium oxide (Na<sub>2</sub>O).

**SECTION VI - Health Hazard Data:**

ROUTE(S) OF ENTRY: Inhalation:  X  Skin/Eye Contact:  X  Skin Absorption:  X  Ingestion:  Unlikely

HEALTH HAZARDS (Acute and Chronic): This product has corrosive properties.

Acute (Short-Term Effects):

Respiratory System: Inhalation of dusts/mists, fumes and gases may cause respiratory tract irritation, cough and difficulty in breathing. May also cause pulmonary edema (build-up of fluid in the lungs).

Skin Contact: Corrosive to skin causing irritation, skin burns and blistering.

Eye Contact: Corrosive to eyes causing irritation, intense pain, burning of the eyes and potential for permanent damage.

Ingestion: Unintentional ingestion is not likely. However, if ingested, this product can cause corrosive damage to the gastrointestinal system.

Chronic (Long-Term Effects): Long term or repeated skin contact may result in dermatitis. No long-term effects from inhalation exposures have been established.

CARCINOGENICITY: NTP:  NA  IARC:  NA  OSHA REGULATED:  NA  CAL. PROP. 65:  NA

None of the ingredients in Avesta Neutralizing Agent are listed in the National Toxicology Program (NTP), the International Agency for Research on Cancer (IARC), OSHA or California Proposition 65 as potential carcinogens.

SIGNS AND SYMPTOMS OF EXPOSURE: Note: Symptoms may not appear immediately.

Respiratory System: Inhalation of dust/mist, fumes and gases may cause irritation of the nose, throat and lungs with coughing, sneezing and difficulty in breathing. May cause pulmonary edema (build-up of fluid in the lungs).

Skin Contact: Irritation and/or corrosive damage with burning sensation, rashes, blisters and slow-healing wounds.

Eye Contact: Irritation and/or corrosive damage with intense pain. Potential for permanent damage.

Ingestion: Severe pain and burning of the nose, throat and esophagus, stomach cramps, nausea, diarrhea and vomiting.

**SECTION VI - Health Hazard Data (Continued):****ADDITIONAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:**

Pre-existing skin conditions. Chronic respiratory disease.

**EMERGENCY AND FIRST AID PROCEDURES:** Remove victim from exposure area and call for medical aid. Employ first aid techniques recommended by the American Red Cross.**Inhalation:** If breathing is difficult, move victim to fresh air and provide oxygen. Rinse mouth and nose of victim discharging rinsed material. Do not ingest rinsed material. If breathing has stopped, provide artificial respiration. Immediately seek medical attention.**Skin Contact:** Remove contaminated clothing. Immediately rinse affected areas with plenty of water. Seek medical attention for severe skin irritation/burns.**Eye Contact:** Immediately call for medical assistance. Flush with plenty of water until medical assistance is available.**Ingestion:** Accidental ingestion is unlikely. Move individual to fresh air. Rinse mouth and nose with water discharging rinsed material. Do not induce vomiting. Have victim drink milk or water to dilute material in stomach. Seek immediate medical attention.**Information Provided for Medical Care:** Inform treating physician that injury was caused by contact with a caustic solution containing calcium carbonate, sodium carbonate and calcium hydroxide.**SECTION VII - Control Measures:**

Read and understand the manufacturers instructions and the precautionary label on the product. See American National Standard Z49.1 and OSHA Publication 2206 (29 CFR 1910), U.S. Government Printing Office, Washington D.C. 20402, for more details on many of the following:

**GENERAL CONTROLS:**

Avoid direct contact. Provide engineering and administrative controls and personal protective equipment to prevent inhalation and skin and eye contact of dusts/mists and gases from Avesta Neutralizing Agent 501.

**VENTILATION:**

Use enough local exhaust or general dilution ventilation to keep dusts/mists and gases below the PEL/TLV in the worker's breathing zone and the general area. Use a corrosion-resistant system. Train welders to keep their heads out of dust/mists and gases.

**Local Exhaust:** Provide at source of fumes.**Mechanical:** Use general mechanical ventilation to keep work area well ventilated.**Special:** Hoods if necessary.**PERSONAL PROTECTIVE EQUIPMENT (PPE):**

Protecting skin and eyes from the corrosive effects of this Avesta Neutralizing Agent 501 is of primary importance. See ANSI Standard Z49.1 for additional information.

**RESPIRATORY PROTECTION (Specific Type):**

Where local exhaust or general dilution ventilation do not keep exposures below PEL or TLV, use a NIOSH approved fullface air purifying respirator with a filter/cartridge approved for mists/fumes. Lung function tests [Pulmonary function tests (PFT)] and respirator fit testing should be provided to respirator users.

**GLOVES:** Use impervious gloves approved for use with alkaline chemicals.**CLOTHING:** Use alkaline resistant clothing sufficient to cover body parts exposed to splashes.**EYE PROTECTION:** Face shield and chemical safety goggles if fullface respirator is not worn. Provide protective screens, if needed, to shield others.**WORK/HYGIENIC PRACTICES:**

Keep head out of dusts/mists and gases. Do not breathe the dusts/mists and gases generated. Use adequate ventilation to control exposures. Avoid contact with neutralizing agent and treated surfaces with eyes, skin and clothes. Do not eat, smoke, or drink in areas where the product is used. Utilize good personal hygiene, including washing hands and face after working with Avesta Neutralizing Agent 501. Immediately remove contaminated clothing. Wash contaminated clothing with warm soap and water.

**SECTION VIII - Precautions for Safe Handling and Use:****STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:**

Ventilate the area and avoid direct contact. Wear appropriate personal protective equipment including skin and respiratory protection. Wear a self-contained breathing apparatus (SCBA) until it has been confirmed through air monitoring that a less protective respirator is adequate. Prevent spilled material from entering sewers and waterways. Contain spilled material with sand or other appropriate diking material. Recover product if possible. Cautiously neutralize the released product with an acidic material (e.g., acetic or hydrochloric acid). Combine with inert absorbent material and shovel into appropriate sealable container(s) for disposal or recovery. Properly label all containers. Wash area with soap or detergent and rinse contaminated area with large amounts of water.

**WASTE DISPOSAL METHOD:**

Prevent waste from contaminating the surrounding environment. Dispose of product, residue, liners, containers and waste material in accordance with federal, state and local regulations. Contaminated residues and water waste must be neutralized. Heavy metals resulting from the neutralizing of stainless steel should be removed. For specific labeling, packing, storage, transportation and disposal procedures, contact a consultant familiar with waste disposal regulations.

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:**

Establish and implement work policies and procedures to aid in preventing direct contact. Package material must be alkaline resistant (e.g., chemical resistant plastic). Keep container securely closed when not in use and in the upright position. Store in areas that are warm, dry, closed to unauthorized persons and where temperatures remain between 32°F (0°C) and 104°F (40°C) at all times. Store this product separate from other chemicals. Use only in well-ventilated areas to prevent the accumulation of gases. Do not breathe dusts/mists generated during use. During product use provide appropriate local exhaust or general dilution ventilation and/or personal protective equipment (PPE) to keep exposures below the PEL/TLV. Perform industrial hygiene air monitoring to determine exposure levels and to establish methods of exposure control, including ventilation and PPE.

**OTHER PRECAUTIONS:**

A filtration system for rinse water is recommended. Effluent must be separated and disposed of as alkaline waste. Use good personal hygiene and safe work practices. Provide an eye wash station on site premises with potable water. Keep out of reach of children. Always read and follow directions on product label and other product information.

**ENVIRONMENTAL HAZARDS:**

This Neutralizing Agent will increase the pH in water and should be neutralized prior to discharge. Airborne emissions, spills and releases to the environment (discharge to streams, sewer systems, ground water, surface soil, etc.) should be controlled immediately. If such potential for a spill or release exists, it is advisable to develop an emergency spill response plan.

**SECTION IX - California Proposition 65:**

**CALIFORNIA PROPOSITION 65:** This product does not contain or produce chemicals that are known to the State of California to cause cancer

**END OF MSDS**