



# Technical Data Sheet

## USALCO® 45

### Sodium Aluminate Solution, 45% Solids

USALCO 45 is an economical source of highly reactive alumina manufactured by dissolving alumina tri-hydrate (ATH) into sodium hydroxide and water. USALCO 45 is also stabilized to prevent alumina from precipitating. The use of only stringently selected raw materials and state-of-the-art manufacturing practices ensures that USALCO 45 is of the highest quality. USALCO 45 meets the specifications of the American Water Works Association Standard B405-16 and complies with the requirements of NSF/ANSI/CAN 60: Drinking Water Treatment Chemicals -Health Effects at a maximum dosage of 89 mg/L.

#### PROPERTIES

Chemical Formula:	Na <sub>2</sub> Al <sub>2</sub> O <sub>4</sub>
Appearance:	Amber Liquid
Specific Gravity @60°F:	1.54 - 1.57
Product Weight::	12.82 - 13.07 Lbs/Gal
pH (neat):	14
pH (1% solution):	>11.5
Viscosity (cps):	110 @43C 250@32C 700@ 21C 1,500@ 13C

#### SPECIFICATIONS

% Al <sub>2</sub> O <sub>3</sub> :	24.6 - 25.4
% Na <sub>2</sub> O:	18.8 - 19.8
% Na <sub>2</sub> Al <sub>2</sub> O <sub>4</sub> :	39.6 - 40.8
Molar Ratio (Na <sub>2</sub> O / Al <sub>2</sub> O <sub>3</sub> ):	1.25 - 1.29
Iron:	200 ppm, max
Silica:	200 ppm, max

#### PRINCIPAL USES

Drinking water / wastewater treatment – removal of suspended matter and phosphorus.  
Catalyst, zeolite, molecular sieve manufacturing.  
Coating for titanium dioxide pigments.  
Pulp and paper manufacturing – pitch control and sizing agent.

#### SAFETY / HANDLING

Observe caution when handling corrosive materials. Please consult the safety data sheet (SDS) for safety and handling precautions.

#### DELIVERY

275 gallon IBCs (totes), tank trucks and railcars

#### PRODUCTION

USALCO has production facilities in:

- Baltimore, Maryland
- Fairfield, Ohio
- Michigan City, Indiana
- Ashtabula, Ohio
- Port Allen, Louisiana

#### CUSTOMER SERVICE

If you have any questions concerning this material, please contact our Inside Sales Department at:

**410-918-2230** or [info@usalco.com](mailto:info@usalco.com)