



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 60: Drinking Water Treatment Chemicals -Health Effects at a maximum dosage of 89 mg/L.

PROPERTIES

Chemical Formula:	Na ₂ Al ₂ O ₄
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 ₂ O ₃ :	24.6 - 25.4
% Na ₂ O:	18.8 - 19. 8
% Na ₂ Al ₂ O ₄ :	39.6 - 40.8
Molar Ratio (Na ₂ O / Al ₂ O ₃):	1.25 - 1.29
Iron (Fe):	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