

# SAFE

## FOOD GRADE ALUMINUM COMPLEX EXTREME PRESSURE GREASE

### PRODUCT DESCRIPTION:

Chem and Lube's **Safe** is a white, non-toxic, USDA H-1 category grease for the lubrication of machinery used to produce, process, package and/or transport food, beverage, and pharmaceuticals where incidental contact with the product may occur. All the components in **Safe** are in accordance with the U.S. Food and Drug Administration regulation 21 CFR 178.3570 and is acceptable as a lubricant with incidental food contact by the USDA for use in official establishments operating under the Federal Meat and Poultry Products Inspection Program.

**Safe** is a heavy duty grease manufactured using a blend of highly-refined, high purity U.S.P. white mineral oils thickened with an aluminum complex soap gel system produced by a state-of-the-art manufacturing and homogenizing process.

Food handling equipment is particularly difficult to properly lubricate because of the limitation on the type of ingredients that can be used in a food grade formulation. **Safe** is the answer to this problem!

**Safe** EP Food Machinery Grease contains a proprietary blend of solid additives for extreme pressure and antiwear. These additives result in a 4-Ball EP Weld of 315 kg., an unusually high value for Food Machine Grease.

**Safe** EP Food Machinery Grease is a U.S.D.A. H-1 rated Aluminum Complex Food Machinery Grease. It is resistant to water and most sterilizing chemicals used in the Food Processing Industry.

**Safe** has an operating temperature range of -10° to + 350° F which will meet the requirements of the majority of equipment used by the food industry. It exhibits good pumpability at low temperatures, making it useful in cold box applications. **Safe** easily passes the ASTM D-1743 Rust Test. Oxidation stability is enhanced by a combination of food grade oxidation inhibitors for long-lasting lubrication.

Aluminum complex greases exhibit excellent mechanical stability—they remain the same as when they were placed in the bearing. **Safe** does not soften and run-out under prolonged, severe working conditions.

**Safe** contains a special food grade, shear-stable, high molecular weight tackifier agent that increases its adhesive and cohesive properties preventing leakage or spatter from bearings and other lubricated surfaces.

## **APPLICATIONS:**

Industrial plain (sliding motion-journal, sleeve, guide) and anti-friction or rolling contact (ball, roller, needle) type bearings: Grease-lubricated gears and couplings; Cams; Slides; Pumps; Food mixers; Bottlers; Canners; Packagers; Filters; Wrappers; Tablet/Capsule Presses.

The USDA inspects the Meat and Poultry processing industries. Other industries adhering to USDA regulations include: Beverage Plants, Breweries, Canneries (fruits, vegetables, seafood), Sugar and Confectionery Products, Grain Products, Bakeries, Fats and Oils, Pharmaceuticals, Cosmetic and Personal Care Products, Pet Food Products.

## **TYPICAL PROPERTIES**

NLGI GRADE		0	1	1.5	2
PROPERTY	TEST METHOD				
Penetration Worked	D-217	355 – 385	310 – 340	285 – 315	265 – 295
Thickener Type		Aluminum Complex	Aluminum Complex	Aluminum Complex	Aluminum Complex
Thickener %	D-128	4 – 6	5 – 7	6 – 9	6 – 9
Color		White	White	White	White
Texture		Smooth Slight Tac	Smooth Slight Tac	Smooth Slight Tac	Smooth Slight Tac
Dropping Point °F, Min	D-2265	425	450	475	475
Viscosity, @ 40° C cSt	D-455	160	160	160	160
@ 100° C cSt	D-445	14	14	14	14
@ 100° F SUS	D-445	800	800	800	800
@ 210° F SUS	D-445	75	75	75	75
Viscosity Index	D-2270	90	90	90	90
Timken OK Load - #	D-2509	35	35	35	35
4 Ball Weld, kg.	D-2596	315	315	315	315
Load Wear Index	D-2596	39	39	39	39
Rust	D-1743	Pass	Pass	Pass	Pass
Water Spray Off % Loss	D-4049				17
Water Wash Out, %, @ 175° F	D-1264				2.5