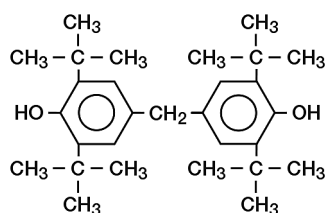


ETHANOX® 4702 & 4710 Lubricant Antioxidants

DESCRIPTION

ETHANOX 4702 lubricant antioxidant is SI Group's premier multi-ring phenolic antioxidant for engine oil and industrial lubricants. It is a highly effective additive for suppressing the formation of acidic and insoluble products of oil oxidation. Engine applications include passenger car, heavy duty diesel, medium speed diesel, natural gas, aviation, two stroke, marine, and automatic transmission fluids. Industrial uses include turbine, compressor, hydraulic, slideway, quench and gear oils, metalworking fluids, and greases. ETHANOX 4710 lubricant antioxidant is a non-dusting version.



4,4'-methylenebis (2,6-di-tertiary-butylphenol)

FEATURES AND BENEFITS

- High hindered phenolic antioxidant activity
- Low volatility ensures optimum lubricant performance at high temperatures
- Inhibits deposit and sludge formation in the 1000-hour TOST and the CMA thermal stability test
- Synergistic with zinc dithiophosphates and alkylated diphenylamines
- Nonreactive with copper, iron, lead, and silver
- Reduces total deposits in the TEOST MHT-4

TYPICAL PHYSICAL PROPERTIES*		
	4702	4710
Appearance	Yellow powder	Yellow powder
Molecular Weight	424.7	424.7
Vapor Pressure, at 20°C, mm	< 0.001	< 0.001
Melting Point, °F (°C)	309 (154)	309 (154)
Boiling Point, at 10 mm, °F (°C)	482 (250)	482 (250)
Flash Point (COC), °F (°C), min.	388 (170)	388 (170)
Bulk Density, at 20°C, lb/ft ³	33	33

*Presented for information purposes only. To obtain a copy of the sales specifications, FDA status, or user guidelines for this product please contact an SI Group representative.

ETHANOX® 4702 & 4710 Lubricant Antioxidants

CAS: 118-82-1

MITI: 4-39

SOLUBILITY (Wt% at 25°C)	
Toluene	33
Petroleum Ether	8
Ethyl Alcohol	6
Isooctane	4
Water	Insoluble
10% NaOH	Insoluble

SHIPPING INFORMATION						
Container Information	Ton pak	M pak	Dual pak	Drum*	25lb	5lb
Net Contents, lb	2000	1000	100	100	25	5
Tare wt, lb, approx.	100	90	4	9	5	1.2
Dimensions:						
Height, in.	44	22	11	33	21	10
Diameter, in.	48	48	24	16	12	9
Depth, in.	40	40	16	31	20	9
Volume, ft ³	48.9	24.4	2.4	4.9	1.1	0.3

2000lb net (ton pak) – 40 paper bags in a corrugated box, banded to a wooden pallet

1000lb net (M pak) – 20 paper bags in a corrugated box, banded to a wooden pallet

100lb net (dual pak) – 2 paper bags in a corrugated box

100lb net (26-gal. drum)*

25lb net (8-gal. drum)*

5lb net (2-gal. drum)*

*drums are nonreturnable

Shipping Classifications

Proper Shipping Name: Not Regulated for Transportation

ETHANOX® 4702 & 4710 Lubricant Antioxidants

SAFETY AND HANDLING INFORMATION

ETHANOX 4702 and 4710 lubricant antioxidants are free-flowing solids with relatively high melting points. A convenient procedure to follow in blending ETHANOX 4702 lubricant antioxidant in oils is to make a slurry in a volume of oil equal to about 10% of the final blend.

ETHANOX 4702 and 4710 lubricant antioxidants are practically non-toxic when given orally to rats (LD50 is greater than 24g/kg). Dermal toxicity is quite low (LD50 for rabbits is greater than 1.5g/kg). Because of their low vapor pressure, they do not present a significant inhalation hazard. They are not eye irritants or skin irritants. Exercise good personal hygiene when handling these materials.

Crystalline compounds containing phenolic groups are known to have severe dust explosivity ratings.

For specific information on the toxicology and safe handling of this product, please refer to the material safety data sheet (MSDS). Copies are available upon request.