TIMKEN® MILL GREASE (NLGI Grade 1)
Lubricating Grease

Part Numbers
GR180G  5 kg (11 lb) pail
GR180P  16 kg (35.3 lb) pail
GR180K  55 kg (121.3 lb) keg
GR180D  180 kg (400 lb) drum
GR180B  tote quantities available

Product Description and Intended Use
TIMKEN Mill Grease is an NLGI No. 1 high performance lubricating grease used when resistance to water washout and broad operating temperatures are absolutely necessary. The formulation of this product provides unsurpassed resistance to extreme pressures and corrosion (including salt spray), as well as exceptional mechanical stability even in the presence of water. TIMKEN Mill Grease is highly recommended for steel mill and paper mill applications. It contains no heavy metals or other environmentally undesirable additives.

Product Application
TIMKEN Mill Grease can be applied from ambient temperatures of - 10° F to + 400° F (- 23° C to + 204° C) depending on lubrication system design and method of application. TIMKEN Mill Grease has an operating range of - 40° F to + 400° F (- 40° C to + 204° C) once in the application (depending on frequency of application). Follow equipment manufacturer’s recommendations concerning lubrication frequencies.

Compatibility of Grease
TIMKEN Mill Grease is generally compatible with calcium, calcium 12-OH stearate, calcium complex, calcium sulfonate, lithium, lithium complex and polyurea thickened greases. TIMKEN recommends that all grease be removed from the application prior to changing greases. Then the lubrication interval is reduced by half for the first lubrication cycle before resuming the normal lubrication interval.

Handling and Storage
Store in a dry area away from heat and open flame. See Material Safety Data Sheet for more information.

Shipping and Disposal Information
Follow governmental regulations pertaining to the shipping and disposal of this product. Do not reuse container. See Material Safety Data Sheet for more information.
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Product Specifications – Typical

Color          Tan
NLGI Grade    1
Penetration, Unworked ASTM D 217    310-340
Penetration, Worked 60 Strokes, ASTM D 217    310-340
Penetration Change, 100000 Strokes, ASTM D 217 +/- 5 %
Wheel Bearing, ASTM D 1263, Modified 325°F (163° C)    0.7 Grams
Dropping Point, ASTM D 2265     572° F (300° C)
Oxidation Stability, ASTM D 942, 100 hours at 99° C      5 psi (35 kPa)
Four-Ball Wear, ASTM D 2266, 40 kg, 1200 RPM, 75°C, Scar mm 0.45 Max.
Four-Ball EP, Weld Point, ASTM D 2596, kgf    500
Timken OK Load, ASTM D 2509, Pounds    60
Copper Strip Corrosion, ASTM D 4048     1a
Corrosion Preventive Properties, ASTM D 1743    Pass
Oil Separation, ASTM D 1742    0.2 %
Water Washout, ASTM D 1264 , 175°F (79° C), % Loss    3.00
Salt Fog Test, B-117, hours     +2,000

Base Fluid Properties:
  Viscosity @ 100° C, ASTM D 445, Centistokes    30 – 34
  Viscosity @ 40° C, ASTM D 445, Centistokes    430 – 490
  Viscosity Index    95
  Pour Point, ASTM D 97    - 12° C
  Flash Point, ASTM D 92     255° C

Date: November 18, 2008
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