



Product Data Sheet

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 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, as well as off-shore and marine 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.

TIMKEN® MILL GREASE

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

Product: TIMKEN Mill Grease NLGI Grade 1



Product Data Sheet

TIMKEN® MILL GREASE (NLGI Grade 1.5) Lubricating Grease

Part Numbers

GR181D	180 kg (400 lb) drum
GR181B	tote quantities available

Product Description and Intended Use

Timken Mill Grease is an NLGI No. 1½ high performance lubricating grease used when resistance to water washout and broad operating temperatures are absolutely necessary. The formulation of this product provides 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, as well as off-shore and marine 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.

TIMKEN® MILL GREASE

Product Specifications – Typical

Color	Tan
NLGI Grade	1½
Penetration, Unworked ASTM D 217	290-315
Penetration, Worked 60 Strokes, ASTM D 217	290-315
Penetration Change, 100000 Strokes, ASTM D 217	+/- 5 %
Wheel Bearing, ASTM D 1263, Modified 325°F (163° C)	0.4 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

Product: TIMKEN Mill Grease NLGI Grade 1.5



Product Data Sheet

TIMKEN® MILL GREASE (NLGI Grade 2) Lubricating Grease

Part Numbers

GR182G	5 kg (11 lb) pail
GR182P	16 kg (35.3 lb) pail
GR182K	55 kg (121.3 lb) keg
GR182D	180 kg (400 lb) drum
GR182B	tote quantities available

Product Description and Intended Use

Timken Mill Grease is an NLGI No. 2 high performance lubricating grease used when resistance to water washout and broad operating temperatures are absolutely necessary. The formulation of this product provides 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, as well as off-shore and marine 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.

TIMKEN® MILL GREASE

Product Specifications – Typical

Color	Tan
NLGI Grade	2
Penetration, Unworked ASTM D 217	265-295
Penetration, Worked 60 Strokes, ASTM D 217	265-295
Penetration Change, 100000 Strokes, ASTM D 217	+/- 5 %
Wheel Bearing, ASTM D 1263, Modified 325°F (163° C)	0.4 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	2.75
Salt Fog Test, B-117, hours	+2,500
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

Product: TIMKEN Mill Grease NLGI Grade 2



Product Data Sheet

TIMKEN® TACKY MILL GREASE (NLGI Grade 2) Lubricating Grease

Part Numbers

GR183D	180 kg (400 lb) drum
GR183B	tote quantities available

Product Description and Intended Use

TIMKEN Tacky Mill Grease is an NLGI No. 2 high performance lubricating grease used when resistance to water washout and broad operating temperatures are absolutely necessary. The formulation of this product provides 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, as well as off-shore and marine applications. It contains no heavy metals or other environmentally undesirable additives.

Product Application

TIMKEN Tacky 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 Tacky 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.

TIMKEN® TACKY MILL GREASE

Product Specifications – Typical

Texture	Tacky
Color	Tan
NLGI Grade	2
Penetration, Unworked ASTM D 217	265-295
Penetration, Worked 60 Strokes, ASTM D 217	265-295
Penetration Change, 100000 Strokes, ASTM D 217	+/- 5 %
Wheel Bearing, ASTM D 1263, Modified 325°F (163° C)	0.4 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	2.75
Salt Fog Test, B-117, hours	+2,500
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

Product: TIMKEN Tacky Mill Grease NLGI Grade 2