

SECTION I**SPECIALITY GRADES : GREASES**

Product	NLGI Grade	Base Oil	Thickener	Usable Temp. Range °C	Characteristics & Applications
MOLYGREASE XL	3/2	Mineral	Lithium	0 to + 140	Lithium based grease containing approx. 10% MoS ₂ . Meets minimum Timken value of 20 kgs. Useful as excellent anti-seize grease. Also used in bearings of motors upto 50 HP under shock load conditions and as a lubricant for furnace doors, bakery conveyors etc. which are exposed to high temperatures.
MOLYGREASE LL	3	Mineral	Lithium	0 to + 140	Contains approx. 50% MoS ₂ . The Lithium grease essentially acts as the body / carrier for the MoS ₂ . Used commonly as an effective anti-seize compound on bolts, nuts and other parts exposed to high temperatures. May be used for sliding friction with heavy loads, but not to be used in ball and roller bearings.
WFL-GREASE	2/1	Low volatile mineral oil	Lithium-complex	-20 to + 180	Formulated for use in Modison Kipp, USA. Wheel Flange lubricators in Railways.
WFC-GREASE	00/000	Low volatile mineral oil	Calcium	-50 to + 110	Formulated for use in De-Limon, Germany, Wheel Flange lubricators in Indian Railways.
LIKOP 1650	2	High viscosity mineral oil	Lithium complex	-10 to + 180	Lithium complex grease with good EP properties for use in rolling and sliding bearings exposed to high mechanical, dynamic and thermal loads. Recommended for cement plant roller bearings.

BALMEROL®*The Best in the Long Run***SECTION I****SPECIALITY GRADES : GREASES**

Product	NLGI Grade	Base Oil	Thickener	Usable Temp. Range °C	Characteristics & Applications
LICOM 3M	2	Low volatile mineral oil	Lithium-complex	-20 to + 180	Lithium complex grease with MoS ₂ and can withstand high temperatures and loads.
LUBSILON	2/3	Silicone	Inorganic	-40 to + 220	A silicone base grease with non-melting inorganic thickener. It is white in colour and can be used in precision equipment and electronic components.
LUBSIL	2/3	Silicone	Inorganic	-40 to + 220	Premium non-melting silicone grease for use as a valve lubricant cum sealant. Formulated with ingredients generally recommended as safe for lubricants coming in incidental food contact. Characterised by low vapour pressure, high dropping point and outstanding water repellency and is chemically inert. Designed for performance at low temperatures encountered in ice cream industry. Can be used as a food grade grease. Also as a valve sealant.
AUTOSIL GREASE	2/1	Silicone	Inorganic	-40 to + 250	Premium grade silicone base synthetic grease for medium and slow sliding speed applications. Fully compatible with plastic & rubber parts, conveyor systems and electrical motor bearings. Recommended for use in auto electrical parts in contact with rubber and plastic materials e.g. automotive clutch wire. Also recommended for radiator cooling fans, conveyor systems in electric motor bearings.

SECTION I**SPECIALITY GRADES : GREASES**

Product	NLGI Grade	Base Oil	Thickener	Usable Temp. Range °C	Characteristics & Applications
SILIKOTE 77	2	Silicone	Lithium	-40 to + 150	Premium grade lithium grease in polyphenylmethyl siloxane base oil fortified with synergistic additives. Suitable for lubrication of all types of anti-friction ball and roller bearings operating under high to moderate loads and low to medium speeds. Finds applications in rail brake valve system where rubber parts are encountered. Also suitable for kiln pre-heater fans, radiator cooling fans, textile driers and electric motor bearings
SILIKOTE 77 M	2/1	Silicone	Lithium	-40 to + 150	Lithium base grease in polyphenylmethyl silicone base oil fortified with MoS ₂ and microflux additives. Compatible with many types of elastomers and plastics. Anti-friction ball and roller bearings operating under moderate loads and slow speed and subjected to wear and extremes of temperatures. Finds application in kiln pre-heater fans, plastic gears and bearings as well as rubber parts, brake piston of disc brakes and brake anchor plates, textile driers and conveyor systems.
SILIKOTE F1	2	Silicone	Inorganic	-40 to + 220	Highly water-resistant silicone paste meets specification IS:7648-1975 Type A. Used as a dielectric compound for application as insulator in non-spark type high voltage electric cables.

SECTION I**SPECIALITY GRADES : GREASES**

Product	NLGI Grade	Base Oil	Thickener	Usable Temp. Range °C	Characteristics & Applications
ULTRAGREASE HT 250	2	Silicone	Non-soap	-25 to + 225	Fully synthetic high temperature grease suitable for all types of bearings at high temperature and extreme conditions. It contains highly stable synthetic oil with unionised solids and synergistically balanced additives. Recommended for textile, plastic, paper machines, ovens, furnaces and is resistant to water, alkalis and acids.
LIPOPOL HWR 105	2/1	Low volatile mineral oil	Lithium	0 to + 140	Premium quality lithium based EP grease with high degree of adhesion, water resistance, corrosion resistance, outstanding mechanical stability and pumpability for centralised systems. Used in a variety of applications for automotive, industrial, construction, agriculture and mining operations. Specific applications include all automotive and fleet universal joints, steel mill roll-neck bearing service, wet end of paper machine and marine applications.
CALPLEX L1	1/0	Low volatile mineral oil	Calcium complex	-20 to + 150	Calcium based complex grease formulated with synergistic additive system for lubrication upto 150°C under normal to heavy loads. The complex soap enables the grease to retain its structure and imparts excellent shear stability and surface adhesion. Recommended for use as roll-neck grease for centralised lubrication systems.

SECTION I**SPECIALITY GRADES : GREASES**

Product	NLGI Grade	Base Oil	Thickener	Usable Temp. Range °C	Characteristics & Applications
NEUTRO GH 1	1	Low volatile mineral oil	Lithium Calcium	-20 to + 120	Extremely stringy and shear stable grease used for sliding parts of Gas Holder Columns in Steel Plants.
ALFALUBE 2	2	Low volatile mineral oil	Lithium Complex	-10 to + 180	Lithium complex based grease fortified with Molybdenum Disulphide to impart excellent EP property. Recommended for use in rolling and sliding bearings exposed to high mechanical, dynamic and thermal loads.
SUPERTEC PD	2,1,0,00,000	Low volatile mineral oil	Lithium	-20 to + 130	Recommended for all types of anti-friction ball and roller bearings working at high loads and high speeds (Dm.n factor 900,000 to 1000,000) under shock or vibrating conditions. Also for gear boxes and worm gears designed for fluid greases and prone to developing abrasive wear or pitting or fretting corrosion.
MULTIGREASE RB PLUS	2/1	Low volatile mineral oil	Lithium Calcium	-20 to + 140	A life high performance grease with EP additives, thickened with Lithium-Calsium soap thickener. For cartridge type taper roller bearings used in rolling stocks of Indian Railways.
OLITEC LL EP	1,2,3	Low volatile mineral oil	Lithium	-20 to + 130	Suitable for general purpose lubrication and centralised systems for all types of anti-friction ball and roller bearings operating at moderately high speeds (Dm.n factor 250, 000 to 600,000) and under heavy shock loads or in excessively wet and contaminated environments.

SECTION I**SPECIALITY GRADES : GREASES**

Product	NLGI Grade	Base Oil	Thickener	Usable Temp. Range °C	Characteristics & Applications
LIPLEX 320	1	Mineral oil	Lithium Complex	-20 to 180	Premium lithium complex soap grease formulated with EP, anti-wear, antioxidant and corrosion inhibitors. Extremely resistant to water washout and formulated with high viscosity oil to provide elasto-hydro-dynamic lubrication. Recommended for steel mill bearings exposed to large amount of water. It is recommended for bearings operating under heavy and shock loads e.g. mining draglines, excavators, drills, haul trucks and rock crushers. Suitable for centralised lubrication system.
LIPLEX T2	2	Low volatile mineral oil	Lithium Complex	-20 to + 180	Red coloured lithium complex grease with micro-sized PTFE particles to provide additional protection at high temperature. Reduces co-efficient of friction to very low levels. Recommended for lubrication of all types of ball and roller bearings, wheel and castor bearings, sleeves and journals, ball and universal joints.
HYTEC 2/EP 2	2	Low volatile mineral oil	Non-soap inorganic	-20 to 180	Recommended for all types of anti-friction ball and roller bearings operating under high thermal stresses such as in paint ovens, hot air blower fans, steam heated calendars and drying cylinders in textile, paper, plastic, wood, leather and other industries and equipments subjected to hostile environments.

SECTION I**SPECIALITY GRADES : GREASES**

Product	NLGI Grade	Base Oil	Thickener	Usable Temp. Range °C	Characteristics & Applications
THERMOTEC 220L	2	Synthetic oil	Non-soap inorganic	-20 to + 220	Recommended for all types of anti-friction ball and roller or plain bearings operating under high temperature conditions prevailing in baking ovens or lacquering lines, kilns in ceramic industry or heated calendars and drying cylinder bearings in paper, textile and plastic industries.
VISCOTEC 4 VISCOTEC 0	3 0	Low volatile mineral oil	Lithium + solid lubricant	-20 to + 140	A highly adherent grease formulated for lubrication of all types of large and small open gears and exposed surfaces working under heavy and shock loads and prone to extensive pitting, scaling or abrasive wear. Recommended for use in kilns, mixers, bulldozers, cranes, excavators, winches, crushing machines, crank presses, rack and worm gears in industries such as cement and sugar, in ports, mines and other heavy duty industrial applications.
ECONEX GREASE	2/1	Low volatile mineral oil	Non-soap	-20 to + 180	Electrical conducting grease developed for welding machine seam welding rolls.

SECTION I**SPECIALITY GRADES : GREASES**

Product	NLGI Grade	Base Oil	Thickener	Usable Temp. Range °C	Characteristics & Applications
HT M	2/1	Low volatile mineral oil	Non-soap	0 to + 180	HTM, HTB & LICOTEC HT are greases having excellent ability to withstand severe shock load conditions and high temperature. They have excellent resistance to water washout and are unaffected by mild acids and alkalis. HTM grease has higher load bearing capacity due to presence of MoS ₂ . Recommended for plain and anti-friction bearings operating at high temperature.
HT B	2/1	Low volatile mineral oil	Non-soap	0 to + 180	
LICOTEC HT	2	Low volatile mineral oil	Non-soap	0 to + 180	
OMINICOM 3M	2	Low volatile mineral oil	Lithium complex	-20 to + 180	High temperature EP grease containing MoS ₂ . Based on special lithium complex soap thickener in NLGI Grade 2. Specially developed for bearings used in inclined exciters of vibrating screens. Can also be recommended for bearings used in vibrating and shock load conditions and high temperature applications.
DIOLUB G30	2/1	Synthetic oil	Non-soap	0 to + 250	High performance grease made from synthetic base oil with non-soap gellants and special additives. It has excellent high temperature, antiwear and high load carrying properties. Use of solid lubricants enhances wear protection under heavily loaded sliding service conditions. Recommended for multi-purpose applications in plain and antifriction bearings, slides, gears and actuators. Specially recommended for cooler roll bearings of continuous steel casting machines.

SECTION I**SPECIALITY GRADES : GREASES**

Product	NLGI Grade	Base Oil	Thickener	Usable Temp. Range °C	Characteristics & Applications
SYNTHEX 1750	2	Synthetic oil	Lithium-Complex	-40 to + 180	A premium grade Li-Complex Soap Grease for multipurpose applications. It is recommended for lubrication of metallic as well as plastic anti-friction bearings. It finds application in hot air fan bearing, electric motor bearing & clutch release bearing in automobiles.
GREASE CCS M-HT	2/1 to 1	Semi synthetic	Organic base	0 to + 240	High performance sulphonate complex grease formulated with a semi-synthetic base oil of high viscosity index. Has all the positive attributes of a sulphonate complex grease. Retains its consistency under severe load conditions and water ingress resulting in less consumption levels. Additionally fortified with solid lubricant to provide superior performance at high temperature and under shock loads. Eliminates scope of abrasive build up at elevated temperatures. Concast bearings in steel plants, electrode shaft bearings in arc furnace, furnace door roller bearings, roller guide bearings and runout rolls in Steel Plants. Hot electric motor, ID, FD and PA fans and drying section bearings in paper and plastic production equipment.
GREASE DCCS-40	2/1to 1	Synthetic oil	Complex organic base	-40 to + 280	High temperature fully synthetic speciality grease based on organic base complex thickener system and high viscosity synthetic base oil. Fully synthetic grease which will have superior performance in the above mentioned applications at higher temperatures.

SECTION I

SPECIALITY GRADES : GREASES

Product	NLGI Grade	Base Oil	Thickener	Usable Temp. Range °C	Characteristics & Applications
GREASE CRB 32	2/1	Synthetic oil	Non-soap	-40 to + 220	High temperature resistant fully synthetic grease made from a synthetic base fluid and thermally stable non-soap gellant. Provides prolonged bearing life coupled with enhanced anti-wear and high load carrying capacity as well as required corrosion protection. Recommended for moderate to high speed oscillating bearings, guidance instrumentation, freezer plants, mobile military and air frame controls operating over a wide range of temperature from -40 to +220°C. Strongly recommended for cassette roller bearings of continuous casting machine for obtaining higher number of heats.
BALMEROL GREASE SC-HT	2	Low volatile mineral oil	Sulfonate complex	-20 to + 220	Premium quality high performance grease. The superior characteristics of this grease are attributed to its specially formulated over-based calcium sulfonate complex thickener and refined mineral oil. Grease SC-HT exhibits flow property, non-ageing reversibility, thermal and shear stability and water resistance characteristics, that are unmatched by other soap or non-soap based grease. Typical applications include continuous castors, coupling and run out rolls in steel plant, wheel bearing and C.V. Joints in automobile, rock crusher and conveyors in mining and bearings and spindles in pulp and paper mill. Ideal for centralized lubrication system in heavy-duty steel plant, where resistance to high temperature, load, water is critical.

SECTION I

SPECIALITY GRADES : GREASES

Product	NLGI Grade	Base Oil	Thickener	Usable Temp. Range °C	Characteristics & Applications
BALMEROL GREASE SC-HT-1/(M)	1	Low volatile mineral oil	Organic complex	20 to + 220	Recommended for sleeve seal application in sponge iron sector, and application, where exposure to mild acid/or alkali is prevalent.
ALCOM 2	2	Low volatile mineral oil	Aluminium complex	-20 to + 180	Premium grade Aluminium complex grease with specially formulated Aluminium complex thickener system and synergistic blend of high performance additives characterized by vary high dropping point, outstanding oxidation stability, excellent resistance to water washout and spray off and unique reversible viscosity-temperature behaviour. Has excellent flow properties and recommended for centralised lubrication system. It is designed to withstand extreme loads. Specially recommended for all heavy duty steel plant and engineering applications where resistance to high temperature, load and humidity is critical.
CALCOM 2	2	Low volatile mineral oil	Calcium complex	0 to + 180	Calcium complex grease having excellent antiwear, antifretting, extreme pressure and lubricating properties. Complex soap enables the grease to retain same structure at elevated temperature and imparts good shear stability and anti-rust properties.

SECTION I**SPECIALITY GRADES : GREASES**

Product	NLGI Grade	Base Oil	Thickener	Usable Temp. Range °C	Characteristics & Applications
SPRAYLUBE 'O'	0	Low volatile mineral oil	Aluminium complex	-20 to + 180	Sprayable adhesive lubricant with high quality colloidal graphite. Designed for severe lubrication condition encountered in slow speed large open gear drives. Recommended for lubrication of open gear drives of rotary kilns, cement mills, sintering plants, ball mills, etc.
SPRAYLUBE 'O' HMF	0/00	Low volatile mineral oil	Aluminium complex	-20 to + 160	A sprayable grease used through grease dispensing system of open gear lubrication. Anti-wear and extreme pressure additive package ensures extended life of gears under adverse environment conditions. It is recommended for use in all types of open gear system for kilns, mills, mixers, steel wire ropes, in cement plants, sponge iron plants, crushing mills, mines, metallurgical and heavy industries. Passes FZG test (12 th stage).
SPRAYLUBE PM SPRAYLUBE RN	2 0	Mineral oil Mineral oil	Aluminium complex	-20 to + 180	Grease is used as a pre-start assembly lubricant for central lubrication of open gears to prevent the seizure of the exposed metallic surface during start up spraylube R N Grease is formulated for spray lubrication of open gears during running-in and for conditioning of worm gear box. It is generally used for the first 300 hrs. of operation. The above greases find application in rotary drive of cement plant, coal crusher/ball mill and palletising mill dragline etc.

SECTION I

SPECIALITY GRADES : GREASES

Product	NLGI Grade	Base Oil	Thickener	Usable Temp. Range °C	Characteristics & Applications
SPRAYLUBE CTSF	000'	Synthetic	Aluminium complex	-20 to + 180	A fluid grease designed for lubrication of Tyre & Chair plate in rotary kiln operating at high temperature.
CRYOTEC 2/2P/W	0,1,2	Low pour point mineral oil	Lithium	-40 to + 130	Suitable for low temperature application of all types of anti-friction ball and roller bearings and sliding surfaces.
2T/S	0,1,2	Synthetic	Lithium	-55 to + 130	CRYOTEC 2T is approved by Telco for window mechanism. CRYOTEC 2S is additionally fortified with MoS ₂ .
CRYOTEC SG B2	2	Low volatile mineral oil	Lithium	-35 to + 135	Lithium base grease specially formulated for low temperature application, fortified with selective antirust and antioxidant additives. It is a highly shear stable and water resistant grease. It finds application for lubrication of ball and roller bearing of electric motor, saws and spindles operating at high speed.
AM S3 / AM S1	3,1	Low volatile mineral oil	Aluminium stearate	0 to + 60	Highly water resistant greases used in submarine applications to prevent corrosion of submarine parts.
PROTECTIVE PX-6	90-140	Mineral oil	Wax	–	A wax based product and used as soft film corrosion preventive compound. It is applied by brushing or smearing.

SECTION I

SPECIALITY GRADES : GREASES

Product	NLGI Grade	Base Oil	Thickener	Usable Temp. Range °C	Characteristics & Applications
GREASE CIAT IM-201	2/1	Low viscosity Mineral oil	Lithium	-60 to + 90	Grease finds use in lubricating devices and machines working under low shear stress.
XG 340	1	Low volatile mineral oil	Aluminium stearate	0 to + 60	Aluminium stearate based grease containing graphite and used for lubricating small arms and certain other equipment as well as for rust proofing. Meets IS 408 specification.
LICOTEC M 1000	2	Low volatile mineral oil	Lithium	-10 to + 140	Lithium base grease with MoS ₂ , graphite and other EP additives for use in high pressure roller mills, cranes, hoist drums & hoist machines, bucket wheel excavators, support and thrust rollers of rotary kiln & driers, trunion bearings of rotating drums (Grinding mills) bearing in sintering machines and slewing ring bearings.
AUTOGREASE RP 2	2	Low volatile mineral oil	Lithium	30 to + 140	Superior quality lithium base grease specially developed for corrosion protection of equipment and machine parts operating under arduous aquatic conditions. Pipe threading for export quality pipes to protect from rusting. Also suitable for auto spare parts, e.g. torsion ring spring fitted in the cup of wheel.

SECTION I**SPECIALITY GRADES : GREASES**

Product	NLGI Grade	Base Oil	Thickener	Usable Temp. Range °C	Characteristics & Applications
INERTOX 2	2/1	Synthetic oil	PTFE	-40 to + 300	Superior quality fully synthetic grease formulated with fully fluorinated polyether. Stable against concentrated acids, halides, high pressure oxygen and oxides of nitrogen. Can be used in presence of UF6 & SF6. It is recommended for use in liquid oxygen, nitrogen and helium. Formulated to operate in severe applications in Chemical, Electrical, Aluminium, Steel, Nuclear and Liquid Gas industries where chemical inertness is a necessity.
INERTOX EP 2	2/1	Synthetic oil	PTFE	-40 to + 300	Premium grade fully synthetic grease based on perfluoropolyether and fortified with suitable EP agent. It is chemically inert to concentrated acids and alkalis, oxidising agents etc. Used in Aluminium coiler Mandrel lubrication in Aluminium Industry. Suitable for all high temperature and extreme pressure applications in oxidative atmosphere.
PYROLUBE HD 440 / 350	2/1	Mineral oil	Lithium Calcium	-20 to + 140	Premium grade polymer enhanced high performance grease with lithium calcium thickener formulated for high temperature lubrication. Specially recommended for steel mill roll-neck bearing services where heavy loads, medium to high speed and water wash out conditions are prevalent, other industries such as paper mill, industrial construction, cement works, etc.

SECTION I

SPECIALITY GRADES : GREASES

Product	NLGI Grade	Base Oil	Thickener	Usable Temp. Range °C	Characteristics & Applications
HC GREASE	1	Low volatile mineral oil	Calcium	-20 to + 65	Superior quality rust preventive grease inhibited with special additives. Forms a soft film over the metal surface when applied by brushing and is recommended for protection against rusting in saline atmosphere. This grease can be used for long term outdoor use.
L C COMPOUND	–	–	–	–	Grease is used as a lubricant in seaming of metal containers/barrels.
NEUTRO SM-60	3	Silicon	Moly Sulfide Paste	upto + 500	These are pastes containing high percentage of solid lubricants, ideal for sliding friction at high temperature. Effective anti-seize compounds for bolts, nuts and other parts exposed to very high temperature.
NEUTRO MG-60	3	Low volatile mineral oil	Moly Sulfide Paste	upto + 350	
MOLY NEUTRO NG-60	3	Low volatile mineral oil	Moly Sulfide with graphite	upto + 350	
NEUTRO MZ 100	–	–	–	upto + 600	100% powdered Molybdenum Disulphide upto 5 micron particle size. Used as a solid lubricant for high temperature applications.
BASECOAT/ SLIPCOAT	–	Low Volatile mineral oil	Wax base	–	Specially formulated for launching of ships/offshore platforms.
	2	Low Volatile mineral oil	Lithium / Calcium		

upto + 350

SECTION I

SPECIALITY GRADES : GREASES

Product	NLGI Grade	Base Oil	Thickener	Usable Temp. Range °C	Characteristics & Applications
WD4 / WD5	–	–	–	–	Extreme pressure oil/grease used for wire drawing of Aluminium.
CHAIN COMPOUND-HT	–	Synthetic	Polymer wax	+120 to + 130	Specially formulated synthetic product for lubrication of automotive as well as heavy duty high speed industrial chains for high temperature applications. Because of its extremely adhesive nature it resists spray off and does not melt away thereby providing excellent long-term protection against corrosion and wear and also the desired tensile strength. It is particularly suitable for motorcycle chains with O-Rings. The product is applied by dipping the chain in the molten compound to ensure proper penetration of the lubricant between narrow clearances of pin bush and bush rollers. Also suitable for application on conveyor chains.
GELSIL-T	–	–	–	-15 to + 60	Gel pen ink sealant cum flow improver formulated with a selective fluid, which are immiscible with hydrophilic gel ink. Maintains adequate pressure to enable the gel ink flow smoothly for smooth writing. Also suitable for hydrophilic ink e.g. glycol based ink.
SYNTHRONIC W	1	Synthetic	Lithium Complex	-40 to + 180	Fully synthetic lithium complex silicone free white coloured buttery grease for use in electronics industry. Recommended in tape-deck mechanisms.

SECTION I**SPECIALITY GRADES : GREASES**

Product	NLGI Grade	Base Oil	Thickener	Usable Temp. Range °C	Characteristics & Applications
SYNTHRONIC Y	1	Synthetic Oil	Lithium Complex	-40 to + 180	Fully synthetic premium grade silicone free lithium complex yellow coloured buttery grease for applications in precision electronic, electrical and mechanical instruments / appliances. Used for lubrication and noise reduction of gears and bearings of precision instruments. Suitable for sliding and revolving parts of micro appliances. It is specifically used in synchronous motors of AC louvers.
SYNTHRONIC P	1	Synthetic Oil	Lithium Complex	-40 to + 180	Lithium complex based silicone free pink coloured synthetic grease with buttery structure suitable for multipurpose applications in precision electronic, electrical and mechanical instruments. Offers excellent noise dampening effect. Compatible with metals and plastics. Specifically used in sliding parts of CD drive assemblies.
VALVELUBE P	Stick	Synthetic Oil	–	0 to + 160	Synthetic plug valve lubricant which provides a seal between plug and valve body to prevent leakage of the fluid and also lubricate the mating surfaces to facilitate the operation of the valve. The lubricant is insoluble in and inert to all petroleum solvents & fuels e.g. HSD, Kerosene, MTO, Hexane, Naphtha, LDO, Motor Spirit / Petrol. Used for lubricating and sealing of taper plug valves fitted in BGOT and BTPN tank wagons of Railways. This grade is approved by Wagons Directorate, RDSO.

SECTION I**SPECIALITY GRADES : GREASES**

Product	NLGI Grade	Base Oil	Thickener	Usable Temp. Range °C	Characteristics & Applications
THERMOPASTE HT	2/3	Synthetic Oil	Inorganic	-20 to + 600	Synthetic paste impregnated with dry lubricants and having high load carrying capacity. Suitable for sliding friction applications at high temperatures upto 600°C. Rail shoe of preheating furnace for sliding of slabs on the shoe in Aluminium industry.
TM SYNTHLUBE FLEX 2	2	Synthetic hydrocarbon	Lithium	-50 to + 150	Lithium base grease based on synthetic hydrocarbon oil of excellent thermal or oxidation stability fortified with synergistic combination of additives. Suitable for application in roller bearings over a wide temperature range. Recommended for traction motor bearings of new generation locomotives (WAP 5 class).
ROPE LUBE 1000	00	Mineral oil	Calcium	-20 to 170	Semi-fluid calcium grease in NLGI '00' consistency with AW/RI additives and solid lubricant used for increasing the life of wire rope used in ATD of OHEs used by Indian Railways. Can be recommended for wear and corrosion protection of wire ropes used in industrial applications.
SYNTAC 1002 / GREASE CG 1	2/1	High viscosity mineral oil	Lithium Complex	0 to + 140	High temperature coupling greases and oil designed for high centrifugal force applications. The greases are based on Lithium / Lithium complex soap formulated with very high viscosity oils and suitable EP / anti-wear / anti-corrosion additives. They are designed to resist oil separation under high centrifugal forces. Coupling applications – both gear and grid type where high centrifugal forces exclude the use of conventional greases. Syntac 1002 is designed for centrifugal force > 800 G and Grease CG1 for > 20,000 G.

SECTION I

SPECIALITY GRADES : GREASES

Product	NLGI Grade	Base Oil	Thickener	Usable Temp. Range °C	Characteristics & Applications
DRI-LUB "0"/0 (M)	0	Mineral oil	Lithium Complex	-0 to + 180	Highly adhesive semi-fluid lubricant based on lithium complex grease fortified with superior EP/AW adhesive package. Medium to small open gears on kilns, mills, mixers working under moderately heavy loads in dip lubrication conditions.
PYROMACH SUPER	2	Mineral oil	Lithium Calcium	0 to + 140	Premium quality adherent grease specially formulated for high performance lubrication of different applications in iron & steel industries, industrial constructions and mining operations. Recommended for rollneck bearing services, feeder rolls, heavy earth moving machinery and marine application.
PYROMACH SUPER HR-S	2/1	Mineral oil	Lithium Calcium	0 to + 140	Specially recommended for hot roll mill bearing in structural rolling, wire rod mills, antifriction Bearing and feeder rolls.
ROLLMACH EP SPL	2/1	Mineral oil	Lithium Calcium	-10 to + 140	Highly water resistant grease with high load bearing capacity formulated specially for roll neck bearing of cold rolling mills in Steel Plants. Recommended for cold rolling mills in primary and secondary steel sector.
DRAGLUBE SF	1/0	Low volatile mineral oil	Lithium Complex	0 to + 180	Specially formulated for effective lubrication of large open gears in heavy duty earth moving equipment used in mining application. Incorporation of high performance EP, antiwear additives, selective tackifier and solid lubricant reduce gear surface pitting and eliminate stick slip condition. Recommended for open gears of shovels, stackers, dragliners, bucket wheel reclaimers operating under extreme critical condition.

SECTION II A/B/C

INDUSTRIAL GRADES : LUBRICATING OILS

Product	Viscosity @ 4.0 °C cSt	Flash pt. °C min COC	VI min	Characteristics / Applications
SPECIALITY GEAR OILS				
SYNTEC EP-C	900-1100	220		High performance semi-synthetic oil with outstanding adherence to metal surface. It has in-built extreme pressure capabilities to withstand high loads in heavy duty applications. When applied to metal surfaces, it forms an extremely tenacious film with good adherence and lubricity at moderate to high speeds. It does not splash or 'throw off' during usage. Recommended for all open or semi closed gear applications where adhesive properties and leakage resistance of the lubricant are critical. In view of its outstanding tacky nature and good EP properties, it is specially, recommended for heavily loaded gears of textile machinery and looms.
GEARFLUX BM SERIES				
ISO VG 46	43-48	190	100	Suitable for all types of gears working under severe mechanical conditions which are likely to lead to pitting, abrasive wear or scaling. Helps to accelerate 'running in' under extreme loads, also suitable for chain variators with positive drive, power transmission and material handling chains. It comes under the category of energy efficient gear oil.
'68	64-74	200	95	
100	90-105	200	95	
150	135-160	200	90	
220	200-230	230	90	
257*	250-280	230	90	
320	288-350	230	90	
460	420-500	240	90	
680	615-700	240	85	

BALMEROL®*The Best in the Long Run***SECTION II A/B/C****INDUSTRIAL GRADES : LUBRICATING OILS**

Product	Viscosity @ 4.0 °C cSt	Flash pt. °C min COC	VI min	Characteristics / Applications
SYNTHGEAR RP 1000 GB 220 GEAR SYNTH M 100 M 220 M 320 M 460	900-1100 198-242 90-110 198-242 288-352 430-460	250 225 270 270 270 280	280 210 130 140 140	Fully synthetic gear oil based on polyalkylene glycol/polyalphaolefins of proven versatility in extremes of operating temperatures. Suitably additivated with EP/anti-wear/anti-oxidant rust and corrosion inhibitors. It is suitable for industrial gears where operating environment and bulk oil temperatures are such that conventional lubricants do not give satisfactory performance. Specially suitable for moderate speed gears operating at high temperatures and loads.
COUPLING OILS COUPLOL 30	3000-3500	280	120	COUPLOL 30 is very high viscosity semi-synthetic coupling oil used for lubrication of gear coupling. It is extremely useful for lubrication of coupling of centrifugal force not more than 2000 G.
SPECIALITY CHAIN OILS ULTRA OIL HT 220	198-242	220	90	ULTRA OIL HT220 is fully synthetic oil capable of withstanding high temperature and load. It has high flash point and low volatility. It is recommended for lubrication of all types of chains and conveyors used in textile, food and paint industries.

SECTION II A/B/C

INDUSTRIAL GRADES : LUBRICATING OILS

Product	Viscosity @ 4.0 °C cSt	Flash pt. °C min COC	VI min	Characteristics / Applications
ULTRA OIL HT 220 SPL	200-240	270	90	ULTRA OIL HT 220 SPL is recommended for oil lubricated antifriction bearing running at high temperature. It is particularly suitable for textile stentor frame ovens, heavily loaded conveyor chains operating at high temperature.
AGRICULTURAL OILS BALSPRAY	15-16	—	—	BALSPRAY is orchard spray oil blended from highly refined base stock, diligent fungicide and appropriate emulsifiers specifically designed for maximum protection of apple trees. Normally sprayed as an 1 to 2% oil-in-water emulsion on apple orchards in hilly regions encountering low ambient temperatures. Also used for protection of trees like cinchona, eucalyptus, agricultural crops, fruits etc. It is ecofriendly and highly effective against European redmite. It is made from narrow range of light base oil paraffinic type. The product is certified by Regional Horticultural Research Station, Mashobra, Simla.

SECTION II A/B/C

INDUSTRIAL GRADES : LUBRICATING OILS

Product	Viscosity @ 4.0 °C cSt	Flash pt. °C min COC	VI min	Characteristics / Applications
STEEL ROLLING OILS AQUAROLL SERIES Tailor Made	–	–	–	AQUAROLL SERIES oils are high performance meta-stable emulsifiable type rolling (tailor made) oils specially developed for cold rolling of steel in single & multistand mills. Also recommended as a rust preventive in post pickling operation. Formulated from synergistic blend of tailor made fats, synthetic esters and special additives. These oils form meta-stable emulsion in water with optimum lubricity, excellent plate-out characteristics and very good film strength to enable high reduction at optimum load and tension. Specific grades are available for 4 stand & 5 stand tandem mills, 4-High mills, 6 high mills, 20-High mills and Z-High mills and also for rolling of special steels such as silicon steel.
COPPER ROLLING OILS CUPROL SERIES TAILOR MADE	–	–	–	A fully synthetic micro emulsion forming lubricants for hot rolling of copper.
AL-ROLLING OILS / INK OILS ALROL SERIES TAILOR MADE	–	–	–	Narrowly distilled mineral oil having low viscosity and very low aromatic content. They contain chemical additives to facilitate rolling of aluminium sheet and foil guages leaving no stain on the surface.

SECTION II A/B/C**INDUSTRIAL GRADES : LUBRICATING OILS**

Product	Viscosity @ 4.0 °C cSt	Flash pt. °C min COC	Characteristics / Applications
INK OIL SERIES TAILOR MADE	–	–	Narrowly distilled mineral oil having low viscosity. Used in ink formulation.
SPECIALITY - OILS			
MIST OIL 30	36-38	200	Fully synthetic oil having in built EP, anti-staining and anti-corrosion properties. It is recommended to be used as mist lubricant during edge trimming operation of 'Aluminium strip'.
BILCUT 40	36-40	190	Fully synthetic neat oil for light metal billet cutting. It has inbuilt anti-staining, anti-oxidant and EP properties to ensure optimum lubricity and finish of billet edge.
TRIMOL 35	35-39	170	A fully synthetic neat oil for light metal edge trimming. It has inherent anti-rusting, anti-staining, anti-oxidant and EP properties to ensure optimum lubricity and finish of the strip edge.
OIL OX-52	40-50	140	Suitable for use as a lubricant preservative-cum-cleaning agent for small arms and machine guns at medium and high temperatures. This oil is not to be left in prolonged contact with brass.
PROTOSPARK 300	2.8-3.0	80	Formulated with highly refined thin paraffinic oils. It is used as a di-electric fluid in-spark erosion machinery.

SECTION II A/B/C**INDUSTRIAL GRADES : LUBRICATING OILS**

Product	Viscosity @ 40 °C cSt	Flash pt. °C min COC	Characteristics / Applications
PICKLING OILS AQUAROLL PL 10 PL 40 PL 100 SMP		Tailor made	Act as temporary rust preventives during post pickling of steel. They are compatible with Aquaroll Series of cold rolling oils for steel.
TUBE DRAWING OILS EXPANDOL EP 600	450-510	180	A fully synthetic oil for expanders. It has very high load bearing, anti corrosive, water was hability characteristics. It provides optimum lubrication due to its highly viscous ature.

SECTION II A/B/C

INDUSTRIAL GRADES : LUBRICATING OILS

Product	Viscosity @ 40 °C cSt	Flash pt. °C min COC	Sap Value ngKON/g	Characteristics / Applications
DRAW LUBE 300	300-400	180		Fully synthetic high performance tube drawing oil,. It has very good load carrying, antirust and adhesive properties to withstand high pressure during pipe drawing.
BALMEROL AQUAFORM 20 50	35-45 35-45	– –	10-20 35-50	High performance semi-synthetic translucent emulsion forming oil for tube forming operation. It has good antirust, acid resistant and biostable properties.

SECTION III**INDUSTRIAL GRADES : LUBRICATING OILS**

Product	Viscosity @ 40 °C cSt	Flash pt. °C min COC	Sap Value ngKON/g	Characteristics / Applications	
THREAD COMPOUNDS					
TC API MOD	1	Low volatile mineral oil	Lithium complex metal powders	-20 to + 160	Recommended for casing, tubing and line pipe joints used in drilling rigs at various units of ONGC / OIL etc.
TC API MOD MF	1	Low volatile mineral oil	Al. Complex eco-friendly solid lubricants	-20 to + 180	Environment friendly metal free high pressure thread sealant containing graphite and specially engineered microspheres and additives in an aluminium complex base grease. Equivalent to Jet Lube Run N Seal thread sealant. Recommended for use in oil field tubular goods on made up, in service and on storage. Also recommended for use in flow lines, subsurface production tools and tanks battery installation.
TC Z 50	2/1 to 1	Low volatile mineral oil	Lithium complex zinc powder	20 to + 160	Recommended for tool joints, drill bits, drill collars and rotary shouldered connections.

SECTION III**SPECIALITY GRADES : THREAD DOPE COMPOUNDS**

Product	NLGI Grade	Base Oil	Thickener	Usable Temp Range °C	Characteristics & Applications
TC CR 60	2/1 to 1	Low volatile mineral oil	Lithium complex + lead powder	-20 to + 160	Recommended for drill collars and line pipe joints.
TC CUPRA 401	1	Mineral oil	Lithium complex	-20 to + 160	Lithium complex based anti-seize lubricating compound containing copper, lead and other solids. It is further fortified with oxide and corrosion inhibitor to combat environmental severities. It finds applications in thread connections, nuts & bolts of steam/chemical pipeline, assembly compound for cylinder heads, press for slipper pads, propeller shafts and oil rig machineries.
CUPRAKOTE TC 40	1	Low volatile mineral oil	Aluminium complex	-20 to + 180	Lead and zinc free thread compound containing copper, graphite and eco friendly additives in an aluminium complex grease. Designed for maximum protection of drill collars and tool joints in oil field applications. Suitable for Rack and Pinion of the Jacking system of drilling jack up rigs.

SECTION III

SPECIALITY GRADES : THREAD DOPE COMPOUNDS

Product	NLGI Grade	Base Oil	Thickener	Usable Temp Range °C	Characteristics & Applications
CUPRAKOTE AS-10	1	Mineral oil	Lithium	-20 to 160 0 C	Lithium base antiseize grease containing metallic copper & other additives. Recommended for applications in tool-joint, threads & bolts, pipes & tubes, oven wide variety of condition.
ALCOAT	–	Poly-isobutylene	Inorganic		Non-flowing amorphous type flooding compound for coaxial drop and trunk cables. Meets NEC article 830 V butylene rating. It has excellent corrosion protection and water resistance properties. Possesses suitable dielectric properties so as not to affect the electrical performance. Applied on aluminium, copper or steel wire before PVC sheathing. The cable is filled with the compound in the free space to prevent water ingress from faulty portion of jacket of closure.

SECTION IV

SPECIALITY GRADES : GEAR COMPOUNDS

Product	Viscosity in cSt @ 100 ° C	Characteristics & Applications
GEAR COMPOUNDS		
BLUCOAT 0	86.4-103.6	BLUCOAT grades are bituminous compounds blended to give desired lubrication under extreme pressure conditions. Due to the presence of bitumen, their adhesion to metals is excellent. They are available in 5 grades with varying viscosities. These compounds would pass a Timken value of 20 kgs, min. They are non- corrosive and also have excellent water repellent properties. They are used widely for lubrication of wire ropes (outer dressing), open gears and traction motor gears for electric locomotives.
BLUCOAT 1	200-250	
BLUCOAT 2	400-550	
BLUCOAT 3	750-800	
BLUCOAT 5	950-1200	
SUGAR MILL COMPOUNDS		
BLUCOAT SM 85	38-45	These compounds are made from heavy bodied lubricating base stock with EP additives. Recommended for heavily loaded roller bearings in sugar mills.
BLUCOAT SM 175	78-88	
BLUCOAT SM 260	120-130	
BLUTAK 40	1200-1600 at 40 ° C	Bitumen based open gear compound containing non-inflammable diluent which evaporates after application leaving a uniform film which does not get squeezed out during usage or does not get hardened under low temperature conditions.

SECTION IV

SPECIALITY GRADES : GEAR COMPOUNDS

Product	Viscosity in cSt @ 100 °C	Characteristics & Applications
BLUTAK 30	550-650 at 50 °C	Bituminous based open gear compound. It contains non-inflammable diluent and fortified with EP additives. Recommended for girth gears, open gears, cable and mine ropes in mining equipments.
PROTOTRAC LUBE	–	Traction motor gear lubricant formulated with optimum percentage of lithium soap, mexphalt and high viscosity base oil and additives. Meets GM EMD specifications, also GE specification for such type of lubricant. Formulated specially for Railways as a futuristic product to replace Blucoat 3 as a traction motor gear lubricant specially in certain locomotives where hardening of lubricant is a problem.
BALMEROL RG COMPOUND	300-400	Non bituminous compound containing lithium soap thickeners, high VI base oil, MoS ₂ , polymer and EPadditives. Recommended for application in hydro gas suspensions. Approved by CVRDE, R&D, Heavy Vehicles Factory, Avadi.