

2. OILS AND GREASES

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>>> Oils

At www.rodavigo.net Family: Oils and greases
Product: Shell oils and greases



Our oils are geared towards meeting the needs of a wide range of industrial activities and machine types, including hydraulic systems, gears, machine tools, compressors and turbines.

With the use of these oils, it will be possible to improve performance, increase efficiency, decrease operation and maintenance costs, improve systems reliability etc.

Hydraulic system oils

Product	Grade Iso	Description
Tellus	22/32/46/68/100	High performance oil type HM / HLP for hydraulic systems in general
Hydrau HM	46/38	Good quality hydraulic oil type HM / HLP
Tellus DO	32/46	High performance HM / HLP type oil for hydraulic systems that require detergent oils
Tellus S	32/46/68	High performance ashless oil type HM / HLP for hydraulic systems with silver alloys
Tellus T	15/32/46/68/100	High viscosity index oil type HV / HVLP for systems operating at variable temperatures
Tellus TD	46	High viscosity index oil type HV / HVLP for systems requiring detergent oils
Tellus Arctic	32	High performance ashless oil for systems that work at very low temperatures
Naturelle HF-E	32/46	Biodegradable synthetic hydraulic oil
Cassida HF	15/32/46/68/100	Synthetic hydraulic oil for food industry equipment, NSF H1 certified
Irus Fluid C		Water / Glycol Type Fire Retardant Hydraulic Fluid (HCF)
Irus Fluid DU	46	Hydraulic Flame Retardant Ester Type Oil (HFDU)

High performance hydraulic oil. Tellus Oils.

Tellus oils are hydraulic fluids based on very high quality, high viscosity index mineral oils. They have been formulated to work under the most severe operating conditions, facilitating the proper functioning of the most modern hydraulic systems.

PROPERTIES:

- Thermal stability
- Resistance against oxidation.
- Chemical stability
- Outstanding anti-wear performance.
- Superior filterability.
- Low friction.
- Excellent antifoaming properties.
- Easy separation of water.



Average technical characteristics for Tellus Oils

Code	Type	Grade Iso	Container LT
1485022220	TELLUS OIL	22	20
14850222209	TELLUS OIL	22	209
148502221000	TELLUS OIL	22	1000
1485023220	TELLUS OIL	32	20
14850232209	TELLUS OIL	32	209
148502321000	TELLUS OIL	32	1000
1485024620	TELLUS OIL	46	20
14850246209	TELLUS OIL	46	209
1485024621000	TELLUS OIL	46	1000
1485026820	TELLUS OIL	68	20
14850268209	TELLUS OIL	68	209
148502681000	TELLUS OIL	68	1000
14850210020	TELLUS OIL	100	20
148502100209	TELLUS OIL	100	209
1485021001000	TELLUS OIL	100	1000

Characteristic	Method	Typical values				
		22	32	46	68	100
ISO 6743/4		HM	HM	HM	HM	HM
Kinematic viscosity, cSt	IP 71					
* at 0°C		180	338	580	1040	1790
* at 40°C		22	32	46	68	100
* at 100°C		4,3	5,4	6,7	8,6	11,1
Viscosity index	IP 226	100	99	98	97	96
Density at 15°C, Kg./m3	IP 365	866	875	879	886	891
Flashpoint	IP 34	204	209	218	223	234
Freezing point	IP 15	-30	-30	-30	-24	-24



Product	Grade Iso	Description
Omala	68/100/150/220/320/460/680/800	High quality mineral oils of extreme pressure (EP) for reducers.
Morlina	5/10/32/68/100/150/220/320	Mineral oils for circulation systems and machine tool spindles
Vitrea M	220/680	Oils without additives for bearings and circulation systems.
Delima S	220	Oil for circulation systems in the paper industry.
Omala F	220/320	Special extreme pressure (EP) oils with high resistance to micropitting of gears.
Omala RL	220	Synthetic PAO (polyalphaolefin) and long life oils without EP additives
Omala HD	68/150/220/320/460	High-performance, long-life PAO type synthetic extreme pressure (EP) oils.
Alvania GL	NLGI 00	Mineral based semi-fluid lithium grease for reducers.
Tivela S	150/220/320/460/680	Special PAG (polyalkylene glycol) type synthetic oils for worm gear reducers.
Tivela GL	NLGI 00	PAG type synthetic semi-fluid grease for worm gear reducers.
Cassida GL	150/220/320/460/680	Synthetic oils for reducers and gear systems in the food industry (NSF H1)
Cassida Gle	220	Synthetic oil for food industry fillers (NSF H1)
Cassida RC	220	Synthetic oil for rotary kilns and autoclaves in the food industry (NSF H1)

Omala Industrial Gear Oil

These oils have been formulated for those applications where a product with Extreme Pressure (EP) characteristics is required, such as: Steel gear systems subjected to high loads.

Endless screw gear systems

Lubrication of bearings, guides, where an EP lubricant is required.

PROPERTIES:

- Completely lead free.
- Great anti-wear and extreme pressure capacity.
- Excellent demulsibility.
- Very good thermal stability.
- High stability to oxidation and aging.
- Rust and corrosion protection.



Average technical characteristics for Omala Oils

Characteristic	Method	Grade Iso			
		68	100	150	220
Density at 15°C, (g / ml)	ASTM D-1298	0,883	0,889	0,890	0,898
Kinematic viscosity, cSt	ASTM D-445				
* at 40°C		67	100	151	223
* at 100°C		8,8	11,4	15	19,5
Viscosity index	ASTM D-2270	103	102	97	99
Flashpoint	ASTM D-93	188	188	190	192
Freezing point	ASTM D-97	-27	-27	-21	-18
		320	460	680	800
Characteristic	Method	Grade Iso			
Density at 15°C, (g / ml)	ASTM D-1298	0,902	0,906	0,921	0,828
Kinematic viscosity, cSt	ASTM D-445				
* at 40°C		321	456	690	847
* at 100°C		24,4	30,8	37,8	41,4
Viscosity index	ASTM D-2270	97	96	90	86
Flashpoint	ASTM D-93	196	198	192	198
Freezing point	ASTM D-97	-15	-9	-9	-9

Code	Type	Grade Iso	Container LT
1485036820	OMALA OIL	68	20
14850368209	OMALA OIL	68	209
14850310020	OMALA OIL	100	20
148503100209	OMALA OIL	100	209
14850315020	OMALA OIL	150	20
148503150209	OMALA OIL	150	209
1485031501000	OMALA OIL	150	1000
14850322020	OMALA OIL	220	20
148503220209	OMALA OIL	220	209
1485032201000	OMALA OIL	220	1000
14850332020	OMALA OIL	320	20
148503320209	OMALA OIL	320	209
14850346020	OMALA OIL	460	20
148503460209	OMALA OIL	460	209

Compressor and pneumatic tool oils

Product	Grade Iso	Description
Corena D	46/150	High quality mineral oil for rotary air compressors (screw or vane)
Corena AS	46/68	High performance synthetic oil for rotary air compressors (screw or vane)
Corena P	68/100/150	High quality mineral oil for reciprocating (piston) air compressors
Corena AP	68/100	Synthetic oil for reciprocating (piston) air compressors
Cassida CR	46	Synthetic oil for rotary compressors in the food industry (NSF H1)
Corena V	100	Specific mineral oil for vacuum pumps.
Cassida VP	100	Synthetic oil for vacuum pumps in the food industry (NSF H1)



>>> Oils



Compressor and pneumatic tool oils

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Corena D lubricant oil for rotary compressors

Corena D oil has been developed for the lubrication of rotary air compressors, in injection systems or oil bath

PROPERTIES:

- Anti-wear ability.
- Quick separation of water.
- Low foam formation.
- Thermal and oxidation stability.
- Anti-rust and anticorrosive.
- Keeps the internal surfaces of the compressors clean.
- Long oil change intervals.
- Stable viscosity for long periods of time.



Characteristic	Method	Typical values		
		46	68	150
Grade iso VG		46	68	150
Kinematic viscosity, cSt	ASTM D-445			
* at 40°C		46	68	150
* at 100°C		6,9	8,9	14,5
Density at 15°C, (Kg./l)	ASTM D-1258	0,875	0,880	0,890
Flashpoint	ASTM D-93	230	240	240
Freezing point	ASTM D-97	-33	-30	-24

Code	Type	Grade Iso	Container LT
148507D4620	CORENA D	46	20
148507D46209	CORENA D	46	209
148507D461000	CORENA D	46	1000
148507D6820	CORENA D	68	20
148507D68209	CORENA D	68	209
148507D681000	CORENA D	68	1000

Code	Type	Grade Iso	Container LT
148507D15020	CORENA D	150	20
148507D150209	CORENA D	150	209
148507D1501000	CORENA D	150	1000

Refrigerator compressor oils

Product	Grade Iso	Description
Clavus G	32/46/68	Naphthenic oil for refrigerator compressors that work with R12 or R22 type refrigerants
Clavus AB	32/46/68/100	Synthetic oil (alkylbenzene) for ammonia, R12 or R22 systems at very low temperatures
Clavus R	32	Synthetic polyol ester type oil for systems that work with ammonia as a refrigerant (R134a and its combinations)
Clavus SP	68	PAO (polyalphaolefin) synthetic oil for ammonia, CFC and HCFC systems
Clavus SG	68	Synthetic polyglycol type oil for systems that work with ammonia as a coolant
Clavus SD 22-12		Semi-synthetic oil for systems that work with R12 or R22 and their combinations
Clavus 0624		Special naphthenic oil for hermetic systems that work with hydrocarbons (R600a, R290)
Clavus	32/46/68	Naphthenic oil for refrigerator compressors that work with ammonia as a refrigerant
Cassida RF	32/46/68/100	Synthetic oil for refrigeration compressors in the food industry (NSF H1)

Clavus G lubricating oil for refrigeration compressors

They are high quality hydrotreated naphenic oils, without additives, especially suitable for the efficient lubrication of refrigeration compressors that use hydrocarbons. These can be used in both domestic and industrial refrigeration applications. Clavus G oils should not be used in refrigeration systems that fuel ammonia if it cannot be guaranteed that they are perfectly sealed.

PROPERTIES:

- Very high quality oils without additives.
- Excellent stability.
- Very good properties at low temperatures.

Average technical characteristics of Clavus G Oils

Characteristic	Method	Typical values		
		32	46	68
ISO viscosity grade	ISO 3448	32	46	68
Kinematic viscosity, cSt	ASTM D-445			
* at 40°C		32	46	68
* at 100°C		4,6	5,6	6,9
Density at 15°C, (Kg./l)	ASTM D-1298	0,896	0,902	0,906
Flash point, V.A, °C	ISO 2592	195	210	220
Freezing point, °C	ISO 3016	-48	-42	-39
Flocculation point with R12, °C	DIN 51351	< -50	< -50	< -50
Fluidity in U-tube, °C	DIN 51568	-35	-29	-25

Code	Type	Grade Iso	Container LT
148504G3220	CLAVUS OIL G	32	20
148504G32209	CLAVUS OIL G	32	209
148504G4620	CLAVUS OIL G	46	20
148504G46209	CLAVUS OIL G	46	209
148504G6820	CLAVUS OIL G	68	20
148504G68209	CLAVUS OIL G	68	209



>>> Oils

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Guide and machine tool oils

Product	Grade Iso	Description
Tonna T	68/220	Oil for machine tool guides, as well as hydraulic systems and small reducers
Tonna S	32/68/220	Oil for machine tool guides, as well as hydraulic systems and small reducers
Chaine 3000		Special oil for chains subjected to high temperatures (up to 300°C)
Cassida Chain	150/1000	Synthetic oil for food industry chains (NSF H1)
Cassida Chain HT		Synthetic oil for oven chains in the food industry (NSF H1)
Cassida Chain LT	68	Synthetic oil for freezing tunnel chains in the food industry (NSF H1)
Betula Bio		Biodegradable chainsaw oil
S-5585		Very fluid oil for machine tool spindles



Tonna T lubricating oils for guides

Tonna T oils are adapted for use in the lubrication of machine tool guides.

Both Tonna T 32 and Tonna T 68 can be used as hydraulic oils in the control circuits of machine tools.

PROPERTIES:

- Resist applied loads.
- Ensures the regularity of directional movements.
- Prevents shaking at low speeds.
- Avoid jumps on fast glides.
- Allows for easy starting after long stops.
- Allows precise positioning.

Average technical characteristics Tonna T Oils.

Characteristic	Method			
		32	68	220
ISO degrees		32	68	220
Density at 15°C (g / ml)	ASTM D-4052	0,872	0,882	0,898
Kinematic viscosity, cSt	ASTM D-445			
* at 40°C		32	70	218
* at 100°C		5,7	9,2	19,4
Viscosity index	ASTM D-2270	113	106	101
Flash point, °C	ASTM D-93	214	216	236
Freezing point, °C	ASTM D-97	-30	-27	-9

Code	Typo	Grade Iso	Container LT
148502T3220	TONNA OIL T	32	20
148502T32209	TONNA OIL T	32	209
148502T6820	TONNA OIL T	68	20
148502T68209	TONNA OIL T	68	209
148502T22020	TONNA OIL T	220	20
148502T220209	TONNA OIL T	220	209



>>> Greases

Industrial greases

Our greases help you protect machinery and reduce maintenance costs. All have been designed to safely lubricate your equipment with the least possible cost. A good lubrication system helps to: reduce maintenance costs, increase factory productivity, protect and improve equipment and machines, and improve the reliability of working parts.

Product	Grade NLGI	Description
Multiservice EP	NLGI 2	Multipurpose grease with EP additives (extreme pressure)
Alvania RL	NLGI 2 and 3	High quality lithium grease without EP additives
Alvania RLQ	NLGI 2	High quality lithium grease without EP additives, for bearings where low noise is required
Alvania EP (LF)	NLGI 0, 1 and 2	High quality lithic grease with EP additives
Alvania EPB	NLGI 2	Extreme pressure biodegradable grease
Alvania WR	NLGI 2	Lithic-calcium grease with extreme pressure, with high resistance to humidity
Albida RL	NLGI 2	Lithium complex grease without EP additives for high temperature applications
Albida EP	NLGI 2	Lithium complex grease with EP additives for high temperature applications
Albida PP	NLGI 2	Lithium complex grease, especially for the paper industry
Albida PPS	NLGI 2	Lithium complex synthetic grease, especially for the paper industry
Albida EMS	NLGI 2	Lithium complex grease for electric motors
Albida SDM	NLGI 1	Lithium complex grease with solid additives (graphite and molybdenum disulfide) for open gears
Cassida RLS	NLGI 00,1 and 2	Synthetic grease without EP additives for the food industry (NSF H1)
Cassida EPS	NLGI 1 and 2	Synthetic grease with EP additives for food industry (NSF H1)
Cassida HDS	NLGI 2	Synthetic grease for extreme loads in the food industry (NSF H1)
Cassida LTS	NLGI 1	Synthetic grease for very low temperatures in the food industry (NSF H1)
Cassida HTS	NLGI 2	Synthetic grease for very high temperatures in the food industry (NSF H1)
Darina R	NLGI 2	Grease with clay thickener for applications at very high temperatures (up to 200°C)
Stamina EP	NLGI 2	Polyurea grease with long-lasting EP additives
Stamina HDS	NLGI 2	Synthetic polyurea grease with EP additives for extreme loads
Rhodina EP (LF)	NLGI 2	Calcium grease with very high water resistance EP additives
Ossagol V	NLGI 00/000	Very fluid calcium grease for lightly loaded reducers in very humid environments
Malleus GL	NLGI 95 and 205	Fluid and highly adherent calcium grease for lubrication and protection of cables and open gears
Malleus ET	NLGI 2	Anti-seize compound for high temperature applications
Alvania GL 00	-	Fundamental application: closed gearboxes or centralized systems. Exs.: gearmotor sets, forklifts, plastic injectors, lifting systems.



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Alvania EP (LF). Multifunctional Extreme Pressure Grease.

Alvania EP grease is a multifunctional grease based on the dispersion of a lithium thickener in a mining oil, containing additives anti-wear, anti-corrosive and extreme pressure.

APPLICATIONS: It has a large number of industrial applications (bearings, rollers...) where use of grease lubricants with Extreme Pressure properties is advised.

PROPERTIES:

- Greater mechanical stability and resistance to vibrations.
- High oxidation stability.
- Anti-rust and anti-corrosion protection.
- Great anti-waste ability.
- High resistance to water washing.



Characteristic	Method	0	1	2
		Typical values		
		0	1	2
		Li	Li	Li
	ASTM D 217	370	320	267
	ASTM D 566	170	175	180
	ASTM D 445			
- 40 °C, cSt (mm /s)		190	190	190
- 100 °C, cSt (mm /s)		15	15	15
	ASTM D 130	1a	1a	1a
		excellent	very good	good
		"-30 to 120"	"-30 to 120"	"-25 to 130"
		KP0K-30	KP1K-30	KP2K-25

Code	Type	Grade NLGI	Container Kg.
148501EP020	ALVANIA EP	0	20
148501EP050	ALVANIA EP	0	50
148501EP0180	ALVANIA EP	0	180
148501EP120	ALVANIA EP	1	20
148501EP150	ALVANIA EP	1	50
148501EP1180	ALVANIA EP	1	180
148501EP220	ALVANIA EP	2	20
148501EP250	ALVANIA EP	2	50
148501EP2180	ALVANIA EP	2	180

Alvania GL 00. High performance grease for industrial reducers.

Alvania GL 00 grease is specially designed for the lubrication of industrial gear units that work with high and medium loads.

APPLICATIONS: Specific for gear lubrication, as an example:

- Reducers in mixing equipment.
- Reducers that work intermittently.
- Etc.

PROPERTIES:

- Reduction of grease consumption compared to other lytic greases.
- High resistance to the corrosion.
- Contains extreme pressure additives that reduce gear wear.

Characteristic	Method	00
		Typical values
NLGI grade		0 0
Thickener type		Li
Penetration not worked at 25°C; 0.1 mm	ASTM D 217	410
Drop point, °C	ASTM D 566	170
Kinematic viscosity of the base oil of:	ASTM D 445	
- 40 °C, cSt		190
- 100 °C, cSt		15,5
Pumpability		excellent
Work temperature; °C		-30 to 110

Code	Type	Grade NLGI	Container Kg.
148500GL0020	ALVANIA GL-00	00	20