



Marfak Bio Elitesyn HD

High performance EAL lubricating grease

Formerly known as Clarity Synthetic EA Grease

Product description

Marfak Bio Elitesyn HD are a range of high performance environmentally acceptable lubricating (EAL) greases available in NLGI 0 and NLGI 2 grades. These greases are suitable for lubrication of heavily loaded bearings and in wet and corrosive environments, even at low temperatures.

Marfak Bio Elitesyn HD are anhydrous calcium thickened lubricating greases based on biodegradable synthetic esters, containing antioxidants, corrosion inhibitors and EP/AW additives, formulated to provide robust adhesion and water resistance.

Customer benefits

- Formulated with biodegradable synthetic esters for environmentally acceptable lubrication
- Offers good protection of heavily loaded bearings in wet and corrosive environments
- Promotes good component wear, corrosion and rust protection offering long system performance and service life
- Designed for effective adhesion to critical components to aid long-term protection
- Good pumpability helps ensure protection across a typical temperature ranges

Product highlights

- **Environmentally accepted lubricating (EAL) grease**
- **Biodegradable formulation**
- **Offers good component wear and corrosion prevention**
- **Provides effective adhesion for good component protection**
- **Advanced performance even in wet and corrosive environments**

Selected specification standards include:

DIN	ISO
2013 VGP Compliance	Swedish Standard
Eco-label ready	

Applications

Marfak Bio Elitesyn HD 0 and HD 2 are modern high performance EAL greases for diversified use. The product is suitable for marine on-deck applications, slides, hinges, sub-merged pumps, propeller caps, in all marine applications requiring an EAL grease. And serve as a universal grease for forestry, agricultural and construction vehicles. The greases are easily pumpable in most modern centralized lubrication systems.

Marfak Bio Elitesyn HD can be recommended for the lubrication of:

All highly loaded plain and rolling bearings and slide ways and other elements of construction and farm machinery.

- Machine tools
- Used for wheel flange lubrication.
- Threaded spindles
- Gear drives
- Deck Equipment

All applications where a biodegradable grease NLGI 0 or NLGI 2 is required.

The product is especially suited for applications where risks of contamination of the soil, waters or channels can occur.

Approvals, performance and suitable for use

Approvals

- 2013 VGP Compliance
- RISE listing SS155470

Performance

	DIN 51 502	ISO 6743-09	Operating temperature
Marfak Bio Elitesyn HD 0	KPE0G-40	ISO-L-XD(F)BIB0	-40°C up to 100°C (max 110°C)
Marfak Bio Elitesyn HD 2	KPE2K-40	ISO-L-XD(F)CIB2	-10°C up to 120°C (max 130°C)

- Lubricating grease SS 155470: Environmentally acceptable Class B
- Eco-label ready

Product maintenance and handling

Maintaining a clean work environment is critical when equipment greasing is performed. Grease fittings should be wiped clean prior to grease injection to prevent contaminants from entering the equipment. Bearing housings should be maintained one-third to one-half full of grease. Over-greasing should be avoided as excessive heat build-up can result. Periodic relubrication via grease gun or centralized system should be supplemented by complete cleaning and packing with fresh grease on an appropriate schedule. Always follow the recommendations of the OEM.

Avoid any spillage of used and unused product to the environment.

Product residue and package/container should be disposed of in dedicated collection points.

Typical test data			
Test	Test Methods	Results	
NLGI grade	ASTM D217	0	2
Shelf Life: 36 months from date of filling indicated on the product label.			
Appearance	Visual	Yellow	
Texture	—	Smooth	
Thickener type	—	Anhydrous Calcium	
Penetration worked, 60 strokes mm/10	ISO 2137	355-385 (363)	265-295
Base oil Type	—	Synthetic ester	
Base Oil viscosity at 40°C, mm ² /s	ASTM D7152	460	560
Base Oil viscosity at 100°C, mm ² /s	ASTM D7152	50	58
Density at 15°C, kg/l	IP 530	0.930	0.950
Dropping Point, °C	IP 396	150	150
Four ball Weld Load, N	DIN 51 350/4	3600	3200
Four ball Weld Load, kgf	ASTM D2596	315	320
Copper corrosion	ASTMD 4048	1A	1A
Water resistance static, 90°C	DIN 51807/1	0	0
Water washout dynamic at 38°C, %	ISO 11009	1	1
Water wash out at 79°C,%	ISO 11009		≤5
Water spray off, %	ASTM D4049		20
Emcor corrosion test distilled water	ISO 11007	0-0	0-0
Emcor corrosion test salt water	ISO 11007	≤2-2	≤2-2
Readily biodegradable content,%	EEL calculation	82	>60
Renewable carbon content	EEL calculation	86	86
Seal Packing compatibility ; AMS 3217/2C NBR-L Type 70 hours @ 150°C	ASTM D4289		
Seal Swell,%		13.98	
Hardness Durameter A		-2	

The typical test data set out above does not constitute a specification. It is indicative only and can be affected by allowable production tolerances. Chevron may modify this test data. Modified data will supersede all previous data, so please ensure you refer to the latest version of this Product Data Sheet (PDS).

Disclaimer: Data provided in this Product Data Sheet (PDS) is based on standard tests under laboratory conditions and is indicative only. This product should not be used for any purpose other than those expressly set out in this PDS. The user has sole responsibility for verifying that this product is suitable for the user's intended application. Neither Chevron nor its subsidiaries (i) make any warranty or representation as to the accuracy or completeness of this PDS; and/or (ii) accept liability for any loss or damage suffered as a result of the use of this product other than in accordance with the terms of this PDS.

When disposing of used product, take care to protect the environment and follow local legislation.

Safety Data Sheets (SDS's) are available for all Chevron products. If you require a SDS or any further information regarding a Chevron product, please contact your local sales office or see www.texacolubricants.com.

Always confirm that the product selected is consistent with the original equipment manufacturer's recommendation for the equipment operating conditions and customer's maintenance practices.

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