

HonuBio Gear S

(Biodegradable Synthetic Gear Oil)



Next Generation Sustainable Lubrication Technologies

PRODUCT NAME

HonuBio Gear S
(Biodegradable Synthetic Gear Oil)

MANUFACTURER

Honu Eco Sustainable Solutions, Inc.
200 Mayfly Way
Simpsonville, South Carolina 29680

DESCRIPTION

HonuBio Gear S is a biodegradable, industrial, extreme pressure gear oil formulated from synthetic ester base stocks. The combination of these high-quality base oils and a robust additive package allows for maximum equipment protection for extended drain intervals, while simultaneously providing protection for the environment. The additional lubricity of the fluid allows for efficient operation in demanding conditions. Available in ISO grades 150, 220, 320 and 460.

FEATURES AND BENEFITS

- Provides superior performance and protection in wide temperature ranges and extended drain intervals
- Excellent reduction of friction (lubricity) for efficiency in demanding conditions
- USDA BioPreferred Program – Meets the biobased content standards for use in federal projects
- Meets AGMA 9005-E02 Industrial Gear Specification

SUITABLE USES

To be used in industrial gear applications across a wide range of industries especially where a full synthetic product is recommended, equipment runs in a wide operating temperature range or there is a desire to extend drain intervals. Use in equipment where a release into the environment is possible, where the authorities have mandated the usage of an EAL, or where a leak or spill could reach a waste stream.

PACKAGING

- 5 Gallon Pails
- 55 Gallon Drums
- 275 Gallon Totes

APPLICATION

- Follow recommendations provided in your equipment's owner's manual
- Follow your organization's manuals and/or best practices for preparation, cleaning, conversion, application and ongoing maintenance practices
- If you have further questions, please contact Honu Eco Tech Services by filling out the contact us form on honueco.com

APPROVALS / CERTIFICATIONS

- Classified as Environmentally Acceptable Lubricants (EAL's) as per the EPA's guidance document that defines standards for Environmentally Acceptable Lubricants (EPA 800-R-11-002) and as required by EPA's 2013 U.S. Vessel General Permit (VGP)
- USDA BioPreferred Program – 81% Biobased content

STORAGE AND SHELF LIFE

Storage – Keep in a cool, dry and well-ventilated place. Store in a properly labelled, original container. Containers which are opened must be carefully resealed and kept upright to prevent leakage. To help maintain product quality, do not store in heat or direct sunlight. **Shelf Life** - Product shelf life is 24 months from date of packaging. In some cases product can last longer, please contact your Honu Eco representative

CAUTIONS

Ensure adequate ventilation. Do not breathe vapor/dust. Use personal protective equipment and avoid contact with skin, eyes, and clothing. Wash thoroughly after handling. See the Safety Data Sheet (SDS) for emergency, proper handling and disposal information. Intentional misuse by concentrating and inhaling the product can be harmful or fatal.

AVAILABILITY

- Worldwide

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Typical Properties

Properties	ASTM Test Method	S 150	S 220	S 320	S 460
Product Code		HBGS-150	HBGS-220	HBGS-320	HBGS-460
ISO Grade		150	220	320	460
Specific Gravity	D1298	0.87	0.87	0.87	0.87
Viscosity D445 @40°C, cSt	D445	150	220	320	460
Viscosity D445 @100°C, cSt	D445	19	27	36	46
Viscosity Index	D2270		>160	>160	>160
Flash Point °C	D92		260	268	275
Pour Point °C	D97		-40	-40	-40
Gear Lubrication, FZG Load Stage	DIN 51354		13+	13+	13+
Water Separation, min	D1401		25	25	25
Copper Corrosion	D4048		1A	1A	1A
Rust Test, A & B	D665		Pass	Pass	Pass
Readily Biodegradability % (meaning>60%)			Pass	Pass	Pass
Biodegradability %	OECD 301B		>60	>60	>60
Minimally Toxic			Pass	Pass	Pass
Algae (EC 50), 72 hr, mg/L	OECD 201		>18,000	>18,000	>18,000
Daphnia (EC 50), 48 hr, mg/L	OECD 202		>11,000	>11,000	>11,000
Fish (LC 50), 96 hr, mg/L	OECD 203		>23,000	>23,000	>23,000
Not Bioaccumulative (Calculated value as per EPA standard)			Pass	Pass	Pass
Bio-based Content, %	D6866		>78	>78	>78

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