

“More than oil, peace of mind”



Original HIBON Positive Displacement & Centrifugal Blowers Synthetic Oil



The choice of Lubricant is key to ensuring positive displacement and centrifugal blowers operating efficiency...

High performance Lubricants warrant an extended bearings life span ...

A lubricant that meets your equipment specifications can also prevent premature failure ..

Hibon has therefore selected a high performance synthetic oil to offer the highest protection under extreme operating conditions.

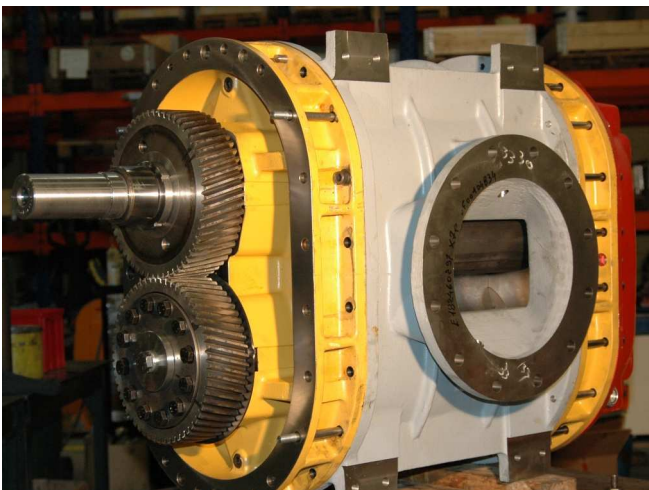


ADVANTAGES—BENEFITS

- Very high viscosity index.
- Low pour point.
- Excellent anti-wear and extreme pressure properties.
- Very good resistance to oxidation
- High resistance to hydrolysis
- Good anti-rust properties.
- Perfect compatibility with seals.
- Miscible with mineral-based gear oils

Extended Warranty

In addition to the excellent cooling performance, thermal stability and remarkable flow behavior in low ambient temperatures, using HIBON LUBE also extends the positive displacement blowers warranty to 24 months.



Highlights

- Fully synthetic, high performance lubricant
- Excellent thermal stability
- High corrosion protection
- Remarkable flow behaviour at low temperatures
- Very good viscosity index
- Friction & wear reduction
- All season lubricant
- Low volatility
- Incomparable cleanliness
- Very unsusceptible to aging

Physical and Chemical properties

Density	0.89
Pour Point ; °C	-45
Flash point, °C	248
Viscosity for 40°C, cSt	221.8
Viscosity for 100°C, cST	24.5
Viscosity Index	138

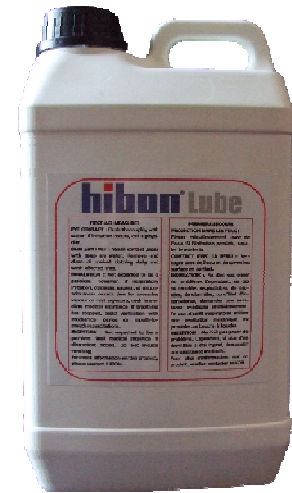
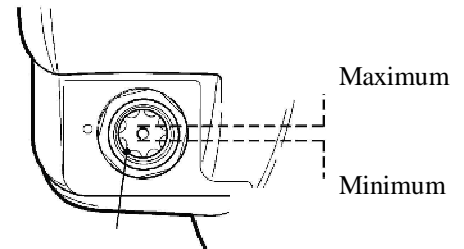
Hazards identification

The product is not classified as dangerous according to directive 1999/45/EC and its amendments.

Oil capacity for Hibon blowers

SN Series	801 802	803 804	806 809 811 815	817 820 822	825 842	855 870 890 8110
Drive end oil capacity (l)	0.125	0.9	1.35	2.6	4	7
Non drive end oil capacity (l)	0.375	0.65	1.2	2.1	3	6
Global SNH	0.50	1.55	2.55	4.7	7	13
Drive end oil capacity (l)	0.101	0.7	1.25	1.2	2	3.3
Non drive end oil capacity (l)	0.311	0.3	1.02 5	0.9	1.7	2.9
Global SNV	0.412	1	1.27 5	2.1	3.7	6.2

Oil level sight glass



S2H Series		S2H22 S2H23	S2H31 S2H32 S2H33	S2H41 S2H42 S2H43	S2H51 S2H52 S2H53
Horizontal	Drive end grease capacity (g)	3.3	3.9	5.3	7.5
	Non drive end oil capacity (l)	0.3	0.6	0.9	1.5
Vertical	Drive end grease capacity (g)	3.3	3.9	5.3	7.5
	Non drive end oil capacity (l)	0.16	0.32	0.48	0.8

SIAV/TB Series		810 820	840	8702 8902
Horizontal	Drive end oil capacity (l)	1.1	4	3,3
	Non drive end oil capacity (l)	1.1	3	2,9
Vertical	Drive end oil capacity (l)	0.58	2	3
	Non drive end oil capacity (l)	0.58	1.7	3

TS 07 or TS 10 vertical position, inlet flow horizontal: 0.8 l / oil casing

TS 07 or TS 10 horizontal position, inlet flow vertical: 1.2 l / oil casing



Ingersoll Rand Industrial Technologies provides products, services and solutions that enhance our customers' energy efficiency, productivity and operations. Our diverse and innovative products range from complete compressed air systems, tools and pumps to material and fluid handling systems and environmentally friendly micro turbines. We also enhance productivity through solutions created by Club-Car® the global leader in golf and utility vehicles for businesses and individuals.

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II

SAFETY DATA SHEET

1. Identification of the substance/preparation and company/ undertaking

Identification of the substance or preparation

Product name : HIBON LUBE
2 litres : CPN 46421343
5 litres : CPN 46421350
20 litres : CPN 46421368

Trade name: HIBON LUBE

Use of the substance/preparation: Bearing Lubricant

Supplied : Ingersoll Rand Air Solutions HIBON

Emergency telephone number (with hours of operation)

CHEMTREC International: +1 (703) 527-3887— 24 hours

2. Hazards identification

The product is not classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : Not classified.

See section 11 for more detailed information on health effects and symptoms.

3. Composition/information on ingredients

Substance/preparation: Preparation—No hazardous ingredient

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

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4. First-aid measures

First-aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention if irritation occurs.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- Inhalation** : Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention if symptoms occur.
- Ingestion** : Wash out mouth with water. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.
- Notes to physician** : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

See section 11 for more detailed information on health effects and symptoms.

5. Fire-fighting measures

Extinguishing media

- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
- Not suitable** : None known.
- Hazardous thermal decomposition products** : The final products of biodegradation are carbon oxides and water. Nitrogen and sulfur oxides and metal salts may also be produced in some cases.
- Hazardous combustion products** : No specific data.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment (see section 8).
- Environmental precautions** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- Methods for cleaning up** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.

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6. Accidental release measures

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment (see section 8).
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- Methods for cleaning up** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.

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7. Handling and storage

- Handling** : Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking.
- Storage** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.
- Packaging materials**
- Recommended** : Use original container.

8. Exposure controls/personal protection

Exposure limit values

Ingredient name	Occupational exposure limits
Europe	
☑ No exposure limit value known.	
France	
No exposure limit value known.	
Netherlands	
No exposure limit value known.	
Germany	
No exposure limit value known.	
Finland	
No exposure limit value known.	
United Kingdom (UK)	
No exposure limit value known.	
Spain	
No exposure limit value known.	

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

Exposure controls

- Occupational exposure controls** : No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling compounds and before eating, smoking and using the lavatory and at the end of the day. Follow good industrial hygiene practice.
- Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

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- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Eye protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.
- Skin protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.



- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. Physical and chemical properties

General information

Appearance

- Physical state** : Liquid. [Clear.]
- Odour** : Mild.

Important health, safety and environmental information

- Flash point** : Open cup: >260°C (500°F) (Cleveland.).
- Relative density** : 0.9 to 0.91
- Density** : Not available.

10. Stability and reactivity

- Stability** : The product is stable.
- Conditions to avoid** : No specific data.
- Materials to avoid** : Reactive or incompatible with the following materials: oxidizing materials.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

Potential acute health effects

- Inhalation** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Eye contact** : No known significant effects or critical hazards.

Acute toxicity

Potential chronic health effects

- Chronic effects** : No known significant effects or critical hazards.
- Carcinogenicity** : Not classified or listed by IARC, NTP, OSHA, EU and ACGIH.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Inhalation** : No specific data.
- Ingestion** : No specific data.

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Skin	: No specific data.
Eyes	: No specific data.
Target organs	: Contains material which may cause damage to the following organs: lungs.

12. Ecological information

Ecotoxicity	: No known significant effects or critical hazards.
<u>Aquatic ecotoxicity</u>	
Conclusion/Summary	: Not available.
<u>Other ecological information</u>	
<u>Persistence/degradability</u>	
Conclusion/Summary	: Not available.
Other adverse effects	: No known significant effects or critical hazards.
AOX	: Not available.
PBT	: Not applicable.
vPvB	: Not applicable.

13. Disposal considerations

Methods of disposal	: The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spill material and runoff and contact with soil, waterways, drains and sewers.
Hazardous waste	: Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 91/689/EEC.

14. Transport information

International transport regulations	
UN/ IMDG/ IATA / ^{ADN/ADNR/}ADR	: Not regulated by any transport mode.

15. Regulatory information

EU regulations	
Classification and labeling have been determined according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and take into account the intended product use.	
Risk phrases	: This product is not classified according to EU legislation.
Product use	: Industrial applications.
Europe inventory	: At least one component is not listed.
Black List Chemicals	: Not listed
Priority List Chemicals	: Not listed
Integrated pollution prevention and control list (IPPC) - Air	: Not listed
Integrated pollution prevention and control list (IPPC) - Water	: Not listed
The Restriction of Hazardous Substances in Electrical and Electronic Equipment (ROHS) Directive (2002/95/EC)	: In compliance.