

Material Safety Data Sheet (MSDS)

BlueEnergy 3000

SCREW COMPRESSOR OIL

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

Product Name	: Sakoon BlueEnergy 3000 – Screw Air Compressor Oil 46, 68, 100, 150
Product Code	: 02/2023 as per German standard DIN 51506
Date of Issue	: January 25 2023 Version: 01
Product Use	: Oil lubricated screw air compressor
Supplier	: Sakoon Pneumatic (Pvt.) Ltd. Darul Uloom, Plot # 9, Shahrah e Darul Uloom, Sector 28, Korangi, Karachi- 75180
Phone	: +92 21 35123114-7

PRODUCT DESCRIPTION (ISO VG-32, 46, 68,100,150,220)

Sakoon Blue Energy Compressor Oils are formulated with good quality mineral oils incorporated with advance high performance additive specifically designed for the lubrication of rotary, screw and vane air compressors. Sakoon Blue Energy oil is a high performance Group II based, rust and oxidation inhibited, petroleum based compressor oil for the lubrication of screw and rotary compressor, contains a special ash less antioxidant, corrosion and foam inhibitors.

These lubricants contain carefully selected oxidation inhibitors to ensure good stability against oxidation, and does not exhibit formation of lacquer or varnish at normal operating temperatures, and are compatible with all types of seals normally used in compressors. Sakoon Blue Energy Compressor Oils are recommended for moderate conditions. Recommended for those compressors operating under severe conditions where lubrication requirements are special. Available in different viscosity grades for convenient selection by users as per their specific requirements.

Application

Rotary, Screw and Vane Air / Gas Compressors.

CUSTOMER BENEFITS

- Saves on maintenance and down time, excellent oxidation stability and low carbon forming tendency of the highly refined base oil and special inhibitor system reduces the build-up of harmful deposits on critical areas, maintaining compressor performance under severest operating conditions. Provides excellent lubrication.
- Protects sensitive compressor parts against wear and tear
- Extends the operating life of equipment. Protects against carbon buildup
- Providing good oxidation resistance through use of advance additives.
- Good antifoaming properties
- Allows good Oil/air separation without excessive foaming to give trouble free operation. Gives maximum protection against rust and corrosion
- Reducing maintenance costs and downtime.
- Increases overall compressor efficiency for both (Screw and Vane) type of compressors. Increases oil drain intervals up to 3000 hours in normal operations.
- High oxidation stability also resist oil breakdown at high discharge temperatures in compressor rank case applications, permitting long oil drain interval.

2. Composition/information on ingredients

- Highly refined mineral oil (IP 346 DMSO extract < 3%) Proprietary performance additives.
- This product does not contain any hazardous ingredients at or above regulated thresholds

3. Hazards identification

This material is not considered to be hazardous, but should be handled in accordance with good industrial hygiene and safety practices.

4. First-aid measures

- a. Eyes
 - I. Wash eye thoroughly with copious quantities of water, ensuring eyelids are held open. Obtain medical advice if any pain or redness develops or persists.
- b. Skin
 - I. Wash skin thoroughly with soap and water as soon as reasonably practicable. Remove heavily contaminated clothing and wash underlying skin.
- c. Ingestion
 - I. If contamination of the mouth occurs, wash out thoroughly with water. Except as a deliberate act, the ingestion of large amounts of product is unlikely. If it should occur, do not induce vomiting; obtain medical advice
- d. Inhalation
 - I. If inhalation of mists, fumes or vapor causes irritation to the nose or throat, or coughing, remove to fresh air. If symptoms persist obtain medical advice.
- e. Medical Advice
 - I. Treatment should in general be symptomatic and directed to relieving any effects.

5. Fire-fighting measures

Use foam, dry powder or water fog. DO NOT USE water jets. Fires in confined spaces should be dealt with by trained personnel wearing approved breathing apparatus. Water may be used to cool nearby heat exposed areas/objects/packages. Avoid spraying directly into storage containers because of the danger of boil-over.

Combustion Products : Toxic fumes may be evolved on burning or exposure to heat.

6. Accidental release measures

- Contain and recover spilled material using sand or other suitable inert absorbent material.
- It is advised that stocks of suitable absorbent material should be held in quantities sufficient to deal with any spillage, which may be reasonably anticipated.
- Spilled material may make surfaces slippery.
- Protect drains from potential spills to minimize contamination. Do not wash product into drainage system.
- In the case of large spills contact the appropriate authorities.
- In the case of spillage on water, prevent the spread of product by the use of suitable barrier equipment. Recover product from the surface. Protect environmentally sensitive areas and water supplies.

7. Handling and storage

Handling Precautions

- Avoid contact with eyes. If splashing is likely to occur wear a full face visor or chemical goggles as appropriate.
- Avoid frequent or prolonged skin contact with fresh or used product. Good working practices, high standards of personal hygiene and plant cleanliness must be maintained at all times.
- Wash hands thoroughly after contact.
- Use disposable cloths and discard when soiled. Do not put soiled cloths into pockets.

Fire Prevention

- Product contaminated rags; paper or material used to absorb spillages, represent a fire hazard, and should not be allowed to accumulate. Dispose of safely immediately after use.

Storage Conditions

- Store under cover away from heat and sources of ignition.

8. Exposure controls/personal protection

Exposure Limits

- There is no appropriate occupational exposure limit for this material.
- Ensure good ventilation.
- Avoid, as far as reasonably practicable, inhalation of vapor, mists or fumes generated during use.
- If vapor, mists or fumes are generated, their concentration in the workplace air should be controlled to the lowest reasonably practicable level.

Protective Clothing

- Wear face visor or goggles in circumstances where eye contact can accidentally occur.
- If skin contact is likely, wear impervious protective clothing and/or gloves.
- Protective clothing should be regularly dry cleaned. Change heavily contaminated clothing as soon as reasonably practicable; dry clean, launder and preferably starch before re-use. Wash any contaminated underlying skin with soap and water.

Respiratory Protection

- Respiratory protection is unnecessary, provided the concentration of vapor, mists or fumes is adequately controlled.
- The use of respiratory equipment must be strictly in accordance with the manufacturers' instructions and any statutory requirements governing its selection and use.

9. Physical and chemical properties

Typical Viscosity Grades: (ISO VG Grade)	32	46	68	100	150	220
Test Method, Physical State	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid
Acid No D974,mg KOH/g	0.10	0.10	0.10	0.10	0.10	0.17
Color	Blue	Blue	Blue	Blue	Blue	Blue
Odor	Oily	Oily	Oily	Oily	Oily	Oily
Kinematic Viscosity @40°C ASTM D445 mm ² /s	32	46	68	100	150	220
mm ² /s@100°C	5.3	6.7	8.5	10.8	14.1	18.3
Carbon residue after ageing	0.7	0.1	1.1	1.3	1.8	2.7
Viscosity Index	104	103	97	96	96	96
Flash Point (COC) ASTM D 92 °C	214	21	226	246	246	288
Pour Point ASTM D 97 °C	-13	-13	-12	-12	-12	-12

10. STABILITY AND REACTIVITY

- Products of this type are stable and unlikely to react in a hazardous manner under normal conditions of use.
- Hazardous polymerization reactions will not occur.
- This material is combustible. Materials to Avoid
- Avoid contact with strong oxidizing agents. Hazardous Decomposition Products
- Thermal decomposition products will vary with conditions.
- Incomplete combustion will generate smoke, carbon dioxide and hazardous gases, including carbon monoxide.

11. TOXICOLOGICAL INFORMATION

Eyes

- Unlikely to cause more than transient stinging or redness if accidental eye contact occurs.
- Skin
- Unlikely to cause harm to the skin on brief or occasional contact but prolonged or repeated exposure may lead to dermatitis.

Ingestion

- Unlikely to cause harm if accidentally swallowed in small doses, though larger quantities may cause nausea and diarrhea.

Inhalation

- At normal ambient temperatures this product will be unlikely to present an inhalation hazard because of its low volatility.
- May cause irritation to eyes, nose and throat due to exposure to vapor, mists or fumes.
- May be harmful by inhalation if exposure to vapor, mists or fumes resulting from thermal decomposition products occurs

12. ECOLOGICAL INFORMATION

Mobility

- Spillages may penetrate the soil causing ground water contamination.

Persistence and degradability

- This product is inherently biodegradable.

Bio-accumulative potential

- There is no evidence to suggest bioaccumulation will occur.

Aquatic toxicity

- Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.

13. DISPOSAL CONSIDERATIONS

- Where possible, arrange for product to be recycled.
- Dispose of via an authorized person/ licensed waste disposal contractor in accordance with local regulations.
- Incineration may be carried out under controlled conditions provided that local regulations for emissions are met.

14. TRANSPORT INFORMATION

Not classified as hazardous for transport (ADR, RID, UN, IMO, and IATA/ICAO).

15. REGULATORY INFORMATION

Not classified as hazardous for supply.

16. OTHER INFORMATION

This data sheet and the health, safety and environmental information it contains are considered to be accurate as of the date specified below. We have reviewed any information contained herein, which we received from sources outside the Sakoon. However, no warranty or representation, express or implied is made as to the accuracy or completeness of the data and information contained in this data sheet.

Health and safety precautions and environmental advice noted in this data sheet may not be accurate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. No statement made in this data sheet shall be construed as a permission, recommendation or authorization given or implied to practice any patented invention without a valid license. Sakoon shall not be responsible for any damage or injury resulting from abnormal use of the material, from any failure to adhere to recommendations, or from any hazards.