MATERIAL SAFETY DATA BULLETIN Gen III - Base Lubricating Oil

[In accordance with the criteria of Regulation No 1907/2006 (REACH) as amended]

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: ReGen Base Oil

Base Lubricating Oil

SUPPLIER:

Gen III Oil Corporation Suite 1750 – 400 Burrard St. Vancouver, B.C V6C 3A6

CAS Number: 74869-22-0 · EC number: 278-012-2 · Index number: 649-484-00-0

24 - Hour Emergency (call collect): 604-806-5275 Product and MSDS Information: 604-806-5275

2. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAMES AND SYNONYMS: PETROLEUM HYDROCARBONS INGREDIENTS CONSIDERED HAZARDOUS TO HEALTH:

This product is not formulated to contain ingredients which have exposure limits established by U.S. agencies. It is not hazardous to health as defined by the European Union Dangerous Substances/Preparations Directives.

Substance meets criteria of note L - it contains less than 3% DMSO extract as measured by IP 346, therefore classification as carcinogenic does not apply.

Substance does not meet criteria for PBT or vPvB in accordance with Annex XIII of REACH Regulation.

See Section 15 for a regulatory analysis of the ingredients.

See Section 15 for European Label Information.

See Section 8 for exposure limits (if applicable).

3. HAZARDS IDENTIFICATION

HUMAN HEALTH HAZARDS: No specific hazards under normal use conditions. Exposure limit for oil mist applies. Prolonged or repeated exposure may give rise to dermatitis.

SAFETY HAZARDS: Not classified as flammable but will burn.

ENVIRONMENTAL HAZARDS: Not readily biodegradable. Expected to have a high potential to bioaccumulate.

OTHER INFORMATION: Not classified as dangerous for supply or conveyance.

4. FIRST AID MEASURES

EYE CONTACT: Flush thoroughly with water. If irritation occurs, call a physician.

SKIN CONTACT: Remove contaminated clothing and wash affected skin with soap and water. If persistent irritation occurs, obtain medical attention. If high pressure injection injuries occur, obtain medical attention immediately.

INHALATION: In the event of dizziness or nausea, remove casualty to fresh air. If symptoms persist, obtain medical

INGESTION: Wash out mouth with water and obtain medical attention. DO NOT INDUCE VOMITING.

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA: Carbon dioxide, foam, dry chemical and water fog.

SPECIAL FIRE FIGHTING PROCEDURES: Water or foam may cause frothing. Use water to keep fire exposed containers cool. Water spray may be used to flush spills away from exposure. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

SPECIAL PROTECTIVE EQUIPMENT: For fires in enclosed areas, fire fighters must use self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None. Flash Point C(F): >193(380) (ASTM D-92). Flammable limits -

LEL: NA, UEL: NA.

NFPA HAZARD ID: Health: 0, Flammability: 1, Reactivity: 0

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Avoid contact with skin and eyes.

PERSONAL PROTECTION: Wear impermeable gloves and boots.

ENVIRONMENTAL PRECAUTIONS: Prevent from spreading or entering into drains, ditches or rivers by using sand, earth, or other appropriate barriers. Inform local authorities if this cannot be prevented.

CLEAN-UP METHODS – SMALL SPILLAGE: Absorb liquid with sand or earth. Sweep up and remove to a suitable, clearly marked container for disposal in accordance with local regulations.

CLEAN-UP METHODS – LARGE SPILLAGE: Prevent from spreading by making a barrier with sand, earth or other containment material. Reclaim liquid directly or in an absorbent. Dispose of as for small spills.

7. HANDLING AND STORAGE

HANDLING: No special precautions are necessary beyond normal good hygiene practices. See Section 8 for additional personal protection advice when handling this product.

STORAGE: Do not store in open or unlabeled containers. Store away from strong oxidizing agents or combustible material.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Legal Basis: Commission Directive 2006/15/EC, 2000/39/EC, 2009/161/EC

There are no occupational exposure limit values at working place for the substances present in the mixture at the Community level. Please check any national occupational exposure limit values in your country.

Engineering control measures: Carry out a health risk assessment to determine safe operating procedures to avoid contact and exposure. Apply engineering controls appropriate to the job.

Occupational exposure standards: Threshold limit values are given below. Lower exposure limits may apply locally:

Component NameLimit TypeValueOil Mist, Mineral8-hour TWA515 - min STEL10

Hygiene measures: Wash hands before eating, drinking, smoking and using the toilet.

Respiratory protection: Carry out a health risk assessment to determine personal protection equipment that is necessary to avoid contact and exposure and that is appropriate to the job.

Hand protection: Wear PVC or nitrile rubber gloves.

Eye protection: Wear safety glasses or full face shield if splashes are likely to occur.

Body protection: Minimize all forms of skin contact. Wear overalls to minimize contamination of personal clothing. Launder overalls and undergarments regularly.

9. PHYSICAL AND CHEMICAL PROPERTIES

Typical physical properties are given below. Consult Product Data Sheet for specific details.

APPEARANCE: Liquid

COLOR: Clear ODOR: None

ODOR THRESHOLD-ppm: NE

pH: NA

BOILING POINT C(F): > 316(600) MELTING POINT C(F): NA

FLASH POINT C(F): > 193(380) (ASTM D-92)

FLAMMABILITY: NE AUTO FLAMMABILITY: NE EXPLOSIVE PROPERTIES: NA OXIDIZING PROPERTIES: NA

VAPOR PRESSURE-mmHg 20 C: < 0.1

VAPOR DENSITY: > 2.0 EVAPORATION RATE: NE RELATIVE DENSITY, 15/4

RELATIVE DENSITY, 15/4 C: 0.86 SOLUBILITY IN WATER: Negligible PARTITION COEFFICIENT: > 3.5 VISCOSITY AT 100 C, cSt: > 5.0 POUR POINT C(F): <-12 (10) FREEZING POINT C(F): NE

VOLATILE ORGANIC COMPOUND: NA

NA=NOT APPLICABLE NE=NOT ESTABLISHED D=DECOMPOSES

FOR FURTHER TECHNICAL INFORMATION, CONTACT YOUR MARKETING REPRESENTATIVE

10. STABILITY AND REACTIVITY

STABILITY (THERMAL, LIGHT, ETC.): Stable.

CONDITIONS TO AVOID: Extreme heat.

INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizers. HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL DATA

INHALATION HAZARD: Unlikely to be harmful. >5mg/L (Mist, estimated)

DERMAL HAZARD: Unlikely to be harmful. >2g/kg (estimated)
ORAL HAZARD: Unlikely to be harmful. >5g/kg (estimated)

ASPIRATION HAZARD: Not expected to be an aspiration hazard.

SKIN CORROSION/IRRITATION: Not expected to be irritating. Repeated exposure may cause skin dryness or cracking.

SERIOUS EYE DAMAGE/IRRITATION: Not expected to be irritating.

SKIN SENSITIZATION: No information available on the mixture, however none of the components have been classified for skin sensitization (or are below the concentration threshold for classification).

SPECIFIC TARTGET ORGAN TOXICITY (SINGLE EXPOSURE): No information available on the mixture, however none of the components have been classified for target organ toxicity (or are below the concentration threshold for classification).

SPECIFIC TARTGET ORGAN TOXICITY (REPEATED EXPOSURE): No information available on the mixture, however none of the components have been classified for target organ toxicity (or are below the concentration threshold for classification).

CARCINOGENICITY: No information available on the mixture, however none of the components have been classified for carcinogenicity (or are below the concentration threshold for classification).

GERM CELL MUTANGENICITY: No information available on the mixture, however none of the components have been classified for germ cell mutagenicity (or are below the concentration threshold for classification).

REPRODUCTIVE TOXICITY: No information available on the mixture, however none of the components have been classified for reproductive toxicity (or are below the concentration threshold for classification).

12. ECOLOGICAL INFORMATION

BASIS FOR ASSESSMENT: Ecotoxicological data have not been determined specifically for this product. Information given is based on a knowledge of the components and the ecotoxicology of similar products.

MOBILITY: Liquid under most environmental conditions. Floats on water. If it enters soil, it will adsorb to soil particles and will not be mobile.

PERSISTENCE / DEGRADABILITY: Not readily biodegradable. Major constituents are expected to be inherently biodegradable, but the product contains components that may persist in the environment.

BIOACCUMULATION: Has the potential to bioaccumulate.

ECOTOXICITY: Poorly soluble mixture. Product is not chronically at 1 mg/L. May cause physical fouling of aquatic organisms. (LC/EC50 expressed as the nominal amount of product required to prepare aqueous test extract)

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Used or waste oil should be recycled or dispose of in accordance with prevailing regulations, preferably to a recognized collector or contractor. The competence of the contractor to deal satisfactorily with used oil should be established beforehand.

PRODUCT DISPOSAL: As for waste disposal.

CONTAINER DISPOSAL: 200 litre drums should be drained and returned to the supplier or sent to a drum reconditioned without removing or defacing markings or labels.

14. TRANSPORT INFORMATION

Not dangerous for conveyance under UN, IMO, ADR/RID and IATA/ICAO codes.

15. REGULATORY INFORMATION

EC Classification: Not classified as Dangerous under EC criteria

EINECS (EC): All components in compliance.

TSCA (USA): All components listed.

METI(JAPAN): All components listed.

In the absence of local approval authorities/standards, follow US NIOSH/MSHA, UK BSI regulations. Respirators must meet either the above or local standard for approved respirators

Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC as amended.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (Text with EEA relevance) as amended.

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives.

European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste

16. OTHER INFORMATION

USE: LUBRICATING OIL

ABBREVIATIONS AND ACRYNOMS:

PBT Persistent, Bioaccumulative and Toxic substance vPvB very Persistent, very Bioaccumulative substance

TRAININGS: Before commencing working with the product, the user should learn the Health & Safety regulations, regarding handling chemicals, and in particular, undergo a proper workplace training.

Key literature references and sources of data

This SDS was prepared on the basis of sheets of the individual components, literature data, online databases (eg. ECHA, TOXNET, COSING) as well as our knowledge and experience, taking into account current legislation.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not be construed as guaranteeing any specific property of the product.