

MATERIAL SAFETY DATA SHEET

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Springside Sci LLC
4122 Bennett Memorial Road 201B
Durham, NC 27705

SUBSTANCE:

SYNTHETIC ULTRA-LOW-TEMPERATURE

LUBRICATING OIL

TRADE NAMES/SYNONYMS: HYALINE

NSF REGISTRATION NUMBER: 138421

PRODUCT USE: Synthetic lubricating oil

CREATION DATE: 05/15/2007

REVISION DATE: 03/03/2015

SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT: Polyalphaolefin

CAS NUMBER: 68037-01-4

EC NUMBER (EINECS): 500-183-1

PERCENTAGE: 95-100

COMPONENT: Benzenepropanoic acid

CAS NUMBER: 41484-35-9

EC NUMBER (EINECS): 255-392-8

PERCENTAGE: 0-1

COMPONENT: Alkylated diphenylamine

CAS NUMBER: 68411-46-1

EC NUMBER (EINECS): 270-128-1

PERCENTAGE: 0-1

COMPONENT: Amines

CAS NUMBER: 80939-62-4

EC NUMBER (EINECS): 279-632-6

PERCENTAGE: 0-1

COMPONENT: Propyl paraben

CAS NUMBER: 94-13-3

EC NUMBER (EINECS): 202-307-7

PERCENTAGE: 0-1

COMPONENT: Dimethylpolysiloxane
CAS NUMBER: 63149-62-9
EC NUMBER (EINECS): not assigned
PERCENTAGE: 0-1

NOTE: The IP 346 value of the mineral oil is less than 3%

SECTION 3 HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS:

INHALATION:

SHORT TERM EXPOSURE: Irritation

LONG TERM EXPOSURE: Lung damage

SKIN CONTACT:

SHORT TERM EXPOSURE: Irritation

LONG TERM EXPOSURE: Irritation, skin disorders

EYE CONTACT:

SHORT TERM EXPOSURE: Irritation

LONG TERM EXPOSURE: No information available

INGESTION:

SHORT TERM EXPOSURE: Diarrhea, difficulty breathing

LONG TERM EXPOSURE: no information on significant adverse effects

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM (HMIS):

Health – 1

Flammability – 1

Reactivity – 0

Not a Controlled Product under (WHMIS) – Canada

Special Protection: See Section 8

SECTION 4 FIRST AID MEASURES

INHALATION: Vapor pressure is very low and inhalation at room temperature is not a problem. If overcome by vapor from hot product, immediately remove from exposure and call a physician.

SKIN CONTACT: Remove any contaminated clothing and wash with soap and warm water. If injected by high pressure under skin, regardless of the appearance or its size, contact a physician IMMEDIATELY. Delay may cause loss of affected part of body.

EYE CONTACT: Flush eyes with clear water for 15 minutes or until irritation subsides. If irritation persists, consult a physician.

INGESTION: If ingested, call a physician immediately. Do not induce vomiting.

SECTION 5 FIRE FIGHTING MEASURES

FIRE AND EXPLOSION HAZARDS: Slight fire hazard

EXTINGUISHING MEDIA: Foam, dry chemical, carbon dioxide or water spray (fog)

FIRE FIGHTING: Cool exposed containers with water. Use air-supplied breathing equipment for enclosed or confined spaces.

HAZARDOUS COMBUSTION PRODUCTS:

Thermal decomposition products or combustion: oxides of carbon, oxides of sulphur

SECTION 6 ACCIDENTAL RELEASE MEASURES

OCCUPATIONAL RELEASE: Recover liquid, wash remainder with suitable petroleum solvent or add absorbent. Keep petroleum products out of sewers and watercourses. Advise authorities if product has entered or may enter sewers and watercourses.

SECTION 7 HANDLING AND STORAGE

STORAGE: Store and handle in accordance with all current regulations and standards. Keep container tightly closed. Keep away from heat, sparks, and flame. See original container for storage recommendations. Keep separated from incompatible substances.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS:

White mineral oil:

MINERAL OIL MIST:

5 mg/m³ UK OES TWA

10mg/m³ UK OES STEL

VENTILATION: Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits.

EYE PROTECTION: Wear splash resistant safety goggles. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

CLOTHING: Wear appropriate chemical resistant clothing.

GLOVES: Wear appropriate chemical resistant (nitrile) gloves.

RESPIRATOR: Consider the need for appropriate protective equipment, such as self-contained breathing apparatus, adequate masks and filters.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: liquid

APPEARANCE: clear

COLOUR: water-white

PHYSICAL FORM: oil

ODOR: odorless

BOILING POINT: >288 C

FREEZING POINT: Not available

FLASH POINT: 207 C (COC)
LOWER FLAMMABLE LIMIT: 0.9% by volume
UPPER FLAMMABLE LIMIT: 7.0% by volume
AUTO IGNITION: 221 C (COC)
VAPOUR PRESSURE: <0.01 mm Hg
VAPOR DENSITY (air=1): >5
SPECIFIC GRAVITY (water=1): 0.82
DENSITY: not available
WATER SOLUBILITY: negligible
pH: not available
VOLATILITY: not available
ODOR THRESHOLD: not available
EVAPORATION RATE: <0.01 (Butyl acetate=1)
VISCOSITY: 4.4 mm²/s @ 100 C
COEFFICIENT OF WATER/OIL DISTRIBUTION: not available

SECTION 10 STABILITY AND REACTIVITY

REACTIVITY: Stable at normal temperatures and pressures

CONDITIONS TO AVOID: Avoid heat, flames, sparks and other sources of ignition. Avoid contact with strong oxidants like liquid chlorine, concentrated oxygen.

INCOMPATIBLES: Oxidising materials, chlorine

HAZARDOUS DECOMPOSITION:

Thermal decomposition products or combustion: oxides of carbon, oxides of sulphur

POLYMERISATION: Will not polymerise.

SECTION 11 TOXICOLOGICAL INFORMATION

Polyalphaolefin:

TOXICITY DATA:

Greater than 2,000 mg/kg LD50 oral-rat

Benzenepropanoic acid:

TOXICITY DATA:

Greater than 5,000 mg/kg LD50 oral-rat

Alkylated diphenylamine:

TOXICITY DATA:

Greater than 5,000 mg/kg LD50 oral-rat

Amines:

TOXICITY DATA:

Greater than 5,000 mg/kg LD50 oral-rat

Propyl paraben:

TOXICITY DATA:

Greater than 8,000 mg/kg LD50 oral-rat

Dimethylpolysiloxane:

TOXICITY DATA:

Greater than 34,600 mg/kg LD50 oral-rat

SECTION 12 ECOLOGICAL INFORMATION

Not available

SECTION 13 DISPOSAL CONSIDERATIONS

Dispose in accordance with all applicable regulations

SECTION 14 TRANSPORT INFORMATION

LAND TRANSPORT ADR: No classification assigned.

LAND TRANSPORT RID: No classification assigned.

AIR TRANSPORT IATA: No classification assigned.

AIR TRANSPORT ICAO: No classification assigned.

MARITIME TRANSPORT IMDG: No classification assigned.

SECTION 15 REGULATORY INFORMATION

EUROPEAN REGULATIONS:

EC CLASSIFICATION (CALCULATED): Not classified as dangerous.

SECTION 16 OTHER INFORMATION

The above information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of SPRINGSIDE SCI LLC. The data on these sheets relates only to the specific material designated herein. SPRINGSIDE SCI LLC assumes no legal responsibility for use or reliance upon this data.