SAFETY DATA SHEET

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

PRODUCT

Product Name: **0953 ULTRA-KLEEN PAG ISO 220**
Product Description: Synthetic Polyalkyleneglycol Base Fluids and Additives
Product Code: 0953-220
Intended Use: Gear oil

COMPANY IDENTIFICATION

Manufacturer: **Hydrotex Partners Ltd.**
4912 S. 48th West Avenue
Tulsa, OK 74107 USA

Transportation Emergency Phone	800-424-9300 CHEMTREC
Hydrotex Transportation No.	918-583-6224
SDS Requests	972-389-8500
Product Technical Information	800-527-9439
SDS Internet Address	http://www.hydrotexlube.com

SECTION 2 HAZARDS IDENTIFICATION

GHS Classification:

Skin irritation – Category 2
Eye irritation – Category 2B
Inhalation – Category 4

GHS label elements
Symbol(s)

Signal Word: WARNING

Hazard Statements

H303 May be harmful if swallowed
H316 Causes mild skin irritation
H320 Causes eye irritation
H332 Harmful if inhaled

Precautionary Statements

P261 Avoid breathing mist, spray, or vapors
P271 Use only outdoors or in well-ventilated areas
P309/P311 If exposed or you fell unwell: Call a POISON CENTER or physician
P331 Do NOT induce vomiting
P280 Wear protective gloves/eye protection/face protection

Response

P305/P351/P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P301/P310 IF SWALLOWED: Immediately call a POISON CENTER or physician.
P304/P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P337/P313 If eye irritation persists: Get medical attention
P302/P352 IF ON SKIN: Wash with plenty of soap and water

Disposal

P501 Dispose of contents/container in accordance with local/regional/national/international regulations

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Reportable Hazardous Substance(s) or Complex Substance(s)

Name	CAS#	Concentration*
Alcohol Alkoxylate (Oxirane, Methyl-Polymer with Oxirane, Monobutyl Ether)	9038-95-3	90 - 100%
Alkylated Diphenyl Amines	68411-46-1	1 – 5%

* All concentrations are percent by weight unless material is a gas. Gas concentrations are in percent by volume.

See Section 8 for exposure limits (if applicable).

SECTION 4 FIRST AID MEASURES

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

SKIN CONTACT: Wash contact areas with soap and water.

INHALATION: Immediately remove from further exposure. Get immediate medical assistance. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. Give supplemental oxygen, if available. If breathing has stopped, assist ventilation with a bag-valve-mask device or use mouth-to-mouth resuscitation.

INGESTION: Not expected to be a problem. However, if greater than 1/2 liter (pint) ingested, seek medical attention.

SECTION 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: Fire fighters must use positive pressure breathing apparatus, due to possible release of toxic fumes.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Exposure to fire can generate toxic fumes.

COMBUSTION PRODUCTS: Fumes, smoke, carbon monoxide, sulfur oxides, aldehydes and other decomposition products, in the case of incomplete combustion

FLAMMABILITY PROPERTIES

Flash Point [Method]: >219°C (425°F) [ASTM D-92]
Flammable Limits (Approximate volume % in air): LEL: NA UEL: NA
Autoignition Temperature: N/D

SECTION 6 ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES: In case of accident or road spill notify CHEMTREC (800) 424-9300.

Report spills as required to appropriate authorities. U. S. Coast Guard regulations require immediate reporting of spills that could reach any waterway including intermittent dry creeks. Report spill to Coast Guard toll free number (800) 424-8802.

PROCEDURES IF MATERIAL IS RELEASED OR SPILLED: Adsorb on fire retardant treated sawdust, diatomaceous earth, etc. Shovel up and dispose of at an appropriate waste disposal facility in accordance with current applicable laws and regulations, and product characteristics at time of disposal. For large spills, self-contained breathing apparatus must be worn during cleanup.

ENVIRONMENTAL PRECAUTIONS: Prevent spills from entering storm sewers or drains and contact with soil.

PERSONAL PRECAUTIONS: See Section 8

SECTION 7 HANDLING AND STORAGE

HANDLING: Avoid inhalation of vapors or mists.

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

SPECIAL PRECAUTIONS: Prevent small spills and leakages to avoid slip hazard.

EMPTY CONTAINER WARNING: Empty containers retain residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Do not attempt to refill or clean container since residue is difficult to remove. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS: This product does not contain any components which have recognized exposure limits.

VENTILATION: Use in well-ventilated area with local exhaust ventilation.

RESPIRATORY PROTECTION: Approved respiratory protective equipment should be used if ventilation is inadequate and breathing of mists or vapors is likely.

EYE PROTECTION: Normal industrial eye protection practices should be employed.

SKIN PROTECTION: No special equipment required. However, good personal hygiene practices should always be followed.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Typical physical and chemical properties are given below. Consult the Supplier in Section 1 for additional data.

GENERAL INFORMATION

Physical State: Liquid
Color: Amber
Odor: Amine
Odor Threshold: N/D

IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION

Relative Density (at 15 °C): 1.01
Flash Point [Method]: >219°C (425°F) [ASTM D-92]
Flammable Limits (Approximate volume % in air): LEL: NA UEL: NA
Autoignition Temperature: N/D
Boiling Point / Range: > 300°C (572°F)
Vapor Density (Air = 1): NA
Vapor Pressure: < 0.013 kPa (0.1 mm Hg) at 20°C
Evaporation Rate (n-butyl acetate = 1): N/D
pH: N/A
Log Pow (n-Octanol/Water Partition Coefficient): > 3.5
Solubility in Water: Complete
Viscosity: 220 cSt (220 mm²/sec) at 40°C | 41.9 cSt (41.9 mm²/sec) at 100°C
Oxidizing Properties: See Sections 3, 15, 16.

OTHER INFORMATION

Freezing Point: N/D
Melting Point: N/A
Pour Point: -42°C (-43°F)
DMSO Extract (mineral oil only), IP-346: NA

SECTION 10 STABILITY AND REACTIVITY

STABILITY: Material is stable under normal conditions.

CONDITIONS TO AVOID: Excessive heat. High energy sources of ignition.

MATERIALS TO AVOID: Strong oxidizers

HAZARDOUS DECOMPOSITION PRODUCTS: Material does not decompose at ambient temperatures.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

Route of Exposure	Conclusion / Remarks
Inhalation	
Toxicity (Rat): LC50 > 2000 mg/m³	Minimally Toxic. Based on assessment of the components.
Irritation: No end point data.	Negligible hazard at ambient/normal handling temperatures. Based on assessment of the components.

Route of Exposure	Conclusions / Remarks
Ingestion	
Toxicity (Rat): LD50 > 2000 mg/kg	Minimally Toxic. Based on test data for structurally similar materials.
Skin	
Toxicity (Rabbit): LD50 > 2000 mg/kg	Minimally Toxic. Based on test data for structurally similar materials.
Irritation (Rabbit): Data available.	Negligible irritation to skin at ambient temperatures. Based on assessment of the components.
Eye	
Irritation (Rabbit): Data available.	May cause mild, short-lasting discomfort to eyes. Based on assessment of the components. Draize score: greater than 6 but 15 or less.

CHRONIC/OTHER EFFECTS

Acute exposure to aerosols of this PAG generated at room temperature produced delayed lung damage and mortality in laboratory animals.

SECTION 12 ECOLOGICAL INFORMATION

The information given is based on data available for the material, the components of the material, and similar materials.

ECOTOXICITY: Not established.

MOBILITY: Not established.

PERSISTENCE AND DEGRADABILITY: Not established.

BIOACCUMULATIVE POTENTIAL: Not established.

SECTION 13 DISPOSAL CONSIDERATIONS

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

DISPOSAL RECOMMENDATIONS

Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products. Such burning may be limited pursuant to the Resource Conservation and Recovery Act. In addition, the product is suitable for processing by an approved recycling facility or can be disposed of at an appropriate government waste disposal facility. Use of these methods is subject to user compliance with applicable laws and regulations and consideration of product characteristics at time of disposal.

REGULATORY DISPOSAL INFORMATION

RCRA Information: The unused product, in our opinion, is not specifically listed by the EPA as a hazardous waste (40 CFR, Part 261D), nor is it formulated to contain materials which are listed as hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrosiveness or reactivity and is not formulated

with contaminants as determined by the Toxicity Characteristic Leaching Procedure (TCLP). However, used product may be regulated.

Empty Container Warning PRECAUTIONARY LABEL TEXT: Empty containers may retain residue and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Do not attempt to refill or clean container since residue is difficult to remove. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

SECTION 14 TRANSPORT INFORMATION

LAND (DOT): Not Regulated for Land Transport

LAND (TDG): Not Regulated for Land Transport

SEA (IMDG): Not Regulated for Sea Transport according to IMDG-Code

AIR (IATA): Not Regulated for Air Transport

SECTION 15 REGULATORY INFORMATION

US OSHA HAZARD COMMUNICATION STANDARD: Product assessed in accordance with OSHA 29 CFR 1910.1200 and determined to be hazardous.

Governmental Inventory Status: All components comply with TSCA, and EINECS/ELINCS.

U.S. Superfund Amendments and Reauthorization Act (SARA) Title III: This product contains no "EXTREMELY HAZARDOUS SUBSTANCES".

SARA (311/312) REPORTABLE HAZARD CATEGORIES: CHRONIC

This product contains no chemicals subject to the supplier notification requirements of SARA (313) toxic release program.

THIS PRODUCT HAS BEEN AUTHORIZED BY USDA FOR USE UNDER THE FOLLOWING CATEGORY: This product is acceptable as a lubricant where there is no possibility of food contact (complies with earlier USDA guidelines for H-2 lubricant use).

The following product ingredients are cited on the lists below: None

--- REGULATORY LISTS SEARCHED ---

1=ACGIH ALL	6=IARC 1	11=TSCA 4	16=CA P65 CARC	21=LA RTK
2=ACGIH A1	7=IARC 2A	12=TSCA 5a2	17=CA P65 REPRO	22=MI 293
3=ACGIH A2	8=IARC 2B	13=TSCA 5e	18=CA RTK	23=MN RTK
4=NTP CARC	9=OSHA CARC	14=TSCA 6	19=FL RTK	24=NJ RTK
5=NTP SUS	10=OSHA Z	15=TSCA 12b	20=IL RTK	25=PA RTK
				26=RI RTK

Code key: CARC=Carcinogen; SUS=Suspected Carcinogen; REPRO=Reproductive

Cal. Prop. 65

WARNING This product contains the following chemical(s) known to the state of California to cause cancer and/or birth defects based on maximum impurity levels of components: <0.7 ppm Sulfur Dioxide, CAS no. 7446-09-5; <1 ppm Benzene, CAS no. 71-43-2; <1 ppm Toluene CAS no. 108-88-3; <1 ppm Ethyl Acrylate CAS no.140-88-5; <2 ppm Methyl Isobutyl Ketone CAS no. 108-10-1; 2 ppm Ethyl Benzene CAS no. 100-41-4 For more information go to: www.P65Warnings.ca.gov/petroleum.

SECTION 16 OTHER INFORMATION

N/D = Not determined, N/A = Not applicable

USE: LUBRICANT

NFPA Hazard ID:	Health:	2	Flammability:	1	Reactivity:	0
HMIS Hazard ID:	Health:	2	Flammability:	1	Reactivity:	0

Health studies have shown that many hydrocarbons pose potential human health risks which may vary from person to person. Information provided on this MSDS reflects intended use. This product should not be used for other applications. In any case, the following advice should be considered:

Avoid breathing vapors or fumes. Use with adequate ventilation. Keep container closed.

For industrial use only. Not intended or suitable for use in or around a household or dwelling.

THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS: None
Prepared by: Hydrotex Partners Ltd.

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