

Material Safety Data Sheet

Christenson Oil
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 (503)286-1673

Christenson Oil MSDS #DRPK

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MANUFACTURER: HAJ, Inc.dba Christenson Oil 3747 N. Suttle Rd. PO Box 17339 Portland, Oregon 97217 CONTACT FOR FURTHER INFO: CALL (503)286-1673	TRANSPORTATION EMERGENCIES: CALL CHEMTREC (800)424-9300 CONTINENTAL U.S.												
PRODUCT IDENTIFICATION													
<table> <tr> <td>PRODUCT NAME :</td> <td>DUREX PROKOOL HEAT TRANSFER FLUID</td> </tr> <tr> <td>SYNONYMS :</td> <td>N/A</td> </tr> <tr> <td>GENERIC NAME :</td> <td>PG HEAT TRANSFER FLUID</td> </tr> <tr> <td>CHEMICAL FAMILY:</td> <td>GLYCOLS</td> </tr> <tr> <td>DOT PROPER SHIPPING NAME :</td> <td>N/A</td> </tr> <tr> <td>ID NUMBER :</td> <td>NONE</td> </tr> </table>		PRODUCT NAME :	DUREX PROKOOL HEAT TRANSFER FLUID	SYNONYMS :	N/A	GENERIC NAME :	PG HEAT TRANSFER FLUID	CHEMICAL FAMILY:	GLYCOLS	DOT PROPER SHIPPING NAME :	N/A	ID NUMBER :	NONE
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SECTION I - INGREDIENTS (% w/w, unless otherwise noted)

PROPYLENE GLYCOL	CAS# 000057-55-6 > 95%
DIPOTASSIUM PHOSPHATE	CAS# 007758-11-4 < 5%
DIONIZED WATER	CAS# 007732-18-5 < 5%

THIS DOCUMENT IS PREPARED PURSUANT TO THE OSHA HAZARD COMMUNICATION STANDARD (20 CFR 1910.1200). IN ADDITION, OTHER SUBSTANCES NOT "HAZARDOUS" PER THIS OSHA STANDARD MAY BE LISTED. WHERE PROPRIETARY INGREDIENT SHOWS, THE IDENTITY MAY BE AVAILABLE AS PROVIDED IN THIS STANDARD.

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SECTION II - EMERGENCY AND FIRST AID PROCEDURES**EYE CONTACT:**

IRRIGATE IMMEDIATELY WITH WATER FOR AT LEAST FIVE MINUTES

SKIN CONTACT:

WASH OFF IN FLOWING WATER OR SHOWER

INHALATION (BREATHING):

REMOVE TO FRESH AIR IF EFFECTS OCCUR. CONSULT MEDICAL.

INGESTION (SWALLOWING):

INDUCE VOMITING IF LARGE AMOUNTS ARE INGESTED. CONSULT MEDICAL.

NOTE TO PHYSICIAN:

NO SPECIFIC ANTIDOTE. SUPPORTIVE CARE. TREATMENT BASED ON JUDGMENT OF THE PHYSICIAN IN RESPONSE TO REACTIONS OF THE PATIENT.

SECTION III - POTENTIAL ADVERSE HEALTH EFFECTS**INHALATION (BREATHING):**

A SINGLE PROLONGED (HOURS) INHALATION EXPOSURE IS NOT LIKELY TO CAUSE ADVERSE EFFECTS. MISTS ARE NOT LIKELY TO BE HAZARDOUS.

INGESTION (SWALLOWING):

SINGLE DOSE ORAL TOXICITY IS LOW. THE LD50 FOR FEMALE RATS IS ABOUT 20.3 G/KG.

SYSTEMIC AND OTHER EFFECTS:

REPEATED EXCESSIVE INGESTION MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS. NO CARCINOGENIC EFFECTS HAVE BEEN SEEN IN LONG-TERM ANIMAL STUDIES. BIRTH DEFECTS ARE UNLIKELY. EXPOSURES HAVING NO ADVERSE EFFECTS ON THE MOTHER SHOULD HAVE NO EFFECT ON THE FETUS. IN ANIMAL STUDIES, HAS BEEN SHOWN NOT TO INTERFERE WITH REPRODUCTION. RESULTS OF MUTAGENICITY TESTS IN VITRO (TEST TUBE) AND IN ANIMALS HAVE BEEN NEGATIVE.

SECTION IV - SPECIAL PROTECTION INFORMATION**VENTILATION:**GOOD GENERAL VENTILATION SUFFICIENT
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RESPIRATORY PROTECTION:

NO RESPIRATORY PROTECTION SHOULD BE NEEDED.

SKIN PROTECTION:

NO PRECAUTIONS OTHER THAN CLEAN BODY-COVERING SHOULD BE NEEDED.

EYE PROTECTION:

USE SAFETY GLASSES.

EXPOSURE GUIDELINE (S):

10 MG/M3 FOR PROPYLENE GLYCOL MIST. 400 PPM FOR PROPYLENE GLYCOL VAPORS. PROPYLENE GLYCOL: AIHA WEEL IS 50 PPM TOTAL 10 MG/M3 AEROSOL ONLY.

SECTION V - REACTIVITY DATA

STABILITY (CONDITIONS TO AVOID):

STABLE OVER NORMAL OPERATING TEMPERATURE RANGE OF -30F TO 250F.

INCOMPATIBILITY (SPECIFIC MATERIALS TO AVOID):

OXIDIZING MATERIAL

HAZARDOUS DECOMPOSITION PRODUCTS:

NONE

HAZARDOUS POLYMERIZATION:

WILL NOT OCCUR

SECTION VI - SPILL OR LEAK PROCEDURES****HIGHWAY OR RAILWAY SPILLS****

CALL CHEMTREC 800-424-9300 CONT. U.S.

ACTION TO TAKE FOR SPILLS/LEAKS;

COVER WITH ABSORBENT MATERIAL, SOAK UP AND SWEEP INTO BAG.

WASTE DISPOSAL METHOD:

INCINERATE OR BURY AWAY FROM WATER SUPPLIES IN ACCORDANCE WITH LOCAL REGULATIONS.

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SECTION VII - STORAGE AND SPECIAL PRECAUTIONS

SPECIAL PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:
EXERCISE REASONABLE CARE AND CAUTION.

SECTION VIII- FIRE AND EXPLOSION HAZARD DATA

NFPA CLASS	HEALTH HAZARD: FLAMMABILITY:1 REACTIVITY: 0 OTHER: N	HAZARD RANKING		DOT FLAMMABILITY CLASSIFICATION	FLASH POINT
		0 = LEAST	1 = SLIGHT		
		2 = MODERATE	3 = HIGH	N/A	215F, 102C
		4 = EXTREME			PG (TCC)

EXTINGUISHING MEDIA:

WATER FOG, ALCOHOL RESISTANT, DRY CHEMICAL.

FIRE & EXPLOSION HAZARDS:

HEATED VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL TO A SOURCE OF IGNITION.

FIRE FIGHTING:

FOR FIRES INVOLVING LARGE QUANTITIES OF PRODUCT WEAR SELF-CONTAINED BREATHING APPARATUS AND FULL TURN-OUT GEAR.

FLAMMABLE LIMITS;

LFL: 2.65% @ 100C

Propylene Glycol specifications

UFL: 12.5% @ 130C

SECTION IX - PHYSICAL DATA

APPROX BOILING POINT	VAPOR DENSITY	EVAPORATION RATE	% VOLATILE
ND	2.62	<1	NIL
% SOLUBILITY IN WATER	SPECIFIC GRAVITY	APPEARANCE	ODOR
100%	1.05	CLEAR	ODORLESS LIQUID

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SECTION X - REGULATORY INFORMATION (Not meant to be all-inclusive--selected regulations represented.)**NOTICE:**

THE INFORMATION HEREIN IS PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE AS OF THE EFFECTIVE DATE SHOWN ABOVE. HOWEVER, NO WARRANTY, EXPRESS OR IMPLIED, IS GIVEN. REGULATORY REQUIREMENTS ARE SUBJECT TO CHANGE AND MAY DIFFER FROM ONE LOCATION TO ANOTHER; IT IS THE BUYERS RESPONSIBILITY TO ENSURE THAT ITS ACTIVITIES COMPLY WITH FEDERAL, STATE OR PROVINCIAL, AND LOCAL LAWS. THE FOLLOWING SPECIFIC INFORMATION IS MADE FOR THE PURPOSE OF COMPLYING WITH NUMEROUS FEDERAL, STATE OR PROVINCIAL, AND LOCAL LAWS AND REGULATIONS. SEE MSDS SHEET FOR HEALTH AND SAFETY INFORMATION.

U.S. REGULATIONS:

SARA HAZARD CATEGORY: THIS PRODUCT HAS BEEN REVIEWED ACCORDING TO THE EPA "HAZARD CATEGORIES" PROMULGATED UNDER SECTIONS 311 AND 312 OF THE SUPERFUND AMENDMENT AND REAUTHORIZATION ACT OF THE 1986 (SARA TITLE III) AND IS CONSIDERED, UNDER APPLICABLE DEFINITIONS, TO MEET THE FOLLOWING CATEGORIES: A DELAYED HEALTH HAZARD.

SECTION XI - DOCUMENTARY INFORMATION

ISSUE DATE : September 20, 1996 PRODUCT CODE NO. : NONE
MSDS NO. : DRPK PREV. PROD. CODE : NONE
PREV. MSDS NO. : NONE

DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES

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