

MONSANTO CO -- COOLANOL 25R DIELECTRIC HEAT TRANSFER FLUID -- 9160-01-244-6808

===== Product Identification =====

Product ID:COOLANOL 25R DIELECTRIC HEAT TRANSFER FLUID

MSDS Date:05/01/1986

FSC:9160

NIIN:01-244-6808

MSDS Number: BGRGJ

=== Responsible Party ===

Company Name:MONSANTO CO

Address:800 N. LINDBERGH BLVD

City:ST. LOUIS

State:MO

ZIP:63167

Info Phone Num:314-694-1000

Emergency Phone Num:314-694-1000

CAGE:76541

=== Contractor Identification ===

Company

Name:MONSANTO COMPANY

Address:800 N LINDBERGH BLVD

Box:City:SAINT LOUIS

State:MO

ZIP:63167

Country:US

Phone:314-694-6661 OR 800-332-3111

CAGE:76541

===== Composition/Information on Ingredients =====

Ingred Name:ORGANO-SILICATE ESTER

Ingred Name:ANTIOXIDANT ADDITIVE (PROPRIETARY)

Ingred Name:2,6-DI-TERT-BUTYL-P-CRESOL

CAS:128-37-0

RTECS #:GO7875000

OSHA PEL:10 MG/M3

ACGIH TLV:10 MG/M3; 9192

Ingred Name:BERYLLIUM SILICATE (AS BERYLLIUM)

CAS:15191-85-2

RTECS #:VV8925000

Other

REC Limits:OSHA CEILING 0.005
OSHA PEL:0.002 MG/M3; C,0.005
ACGIH TLV:0.002 MG/M3; A2;8990

Ingred Name:HYDROGEN CHLORIDE (HYDROCHLORIC ACID) (SARA III)
CAS:7647-01-0
RTECS #:MW4025000
Fraction by Wt: TRACE
OSHA PEL:C 5 PPM
ACGIH TLV:C 5 PPM; 9192
EPA Rpt Qty:5000 LBS
DOT Rpt Qty:5000 LBS

===== Hazards Identification =====

LD50 LC50 Mixture:ORAL RAT LD50 > 15800 MG/KG
Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO
Reports of Carcinogenicity:NTP:YES
IARC:YES OSHA:YES
Health Hazards Acute and Chronic:COOLANOL 25R IS NOT EXPECTED TO
PRODUCE ADVERSE HUMAN HEALTH EFFECTS WHEN RECOMMENDED SAFETY
PRECAUTIONS. PRODUCT IS A MILD IRRITANT.
Explanation of Carcinogenicity:HMTc LETTER OF 5DEC84 LISTED INGRED. 04
AS "ORTHO SILICATE". CAS NO. IS FOR BERYLLIUM SILICATE,A LISTED
CARCINOGEN.
Effects of Overexposure:EYE/SKIN:MILD IRRITATION. INHALED:RESPIRATORY
IRRITATION.
Medical Cond Aggravated by Exposure:NONE REPORTED.

===== First Aid Measures =====

First Aid:EYE:FLUSH WITH WATER. SKIN:REMOVE CONTAMINATED CLOTHING,WASH
WITH SOAP & WATER. INHALED:REMOVE TO FRESH AIR. INGESTED:GIVE LARGE
AMOUNT OF MILK OR WATER. GET MEDICAL ATTENTION.

===== Fire Fighting Measures =====

Flash Point Method:COC
Flash Point:325F/163C
Autoignition Temp:Autoignition Temp Text:480F
Extinguishing Media:WATER SPRAY,FOAM,DRY CHEMICAL,CARBON DIOXIDE OR
OTHER AGE

NT FOR CLASS B FIRE.

Fire Fighting Procedures:WEAR FULL PROTECTIVE CLOTHING AND SELF
CONTAINED BREATHING APPARATUS. DECONTAMINATE EQUIPMENT AFTER USE.
Unusual Fire/Explosion Hazard:SEE HAZARDOUS DECOMPOSITION PRODUCTS.

===== Accidental Release Measures =====

Spill Release Procedures:ABSORB ON INERT MATERIAL.
Neutralizing Agent:NONE

===== Handling and Storage =====

Handling and Storage Precautions:STORE TIGHTLY CLOSED IN A COO
L DRY
AREA.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:NONE NORMALLY NEEDED. USE NIOSH ORGANIC VAPOR
RESPIRATOR OR SUPPLIED AIR RESPIRATOR IF PRODUCT IS USED AT
ELEVATED TEMPERATURES OR IS MISTED.
Ventilation:GENERAL VENTILATION NORMALLY SUFFICIENT. USE LOCAL EXHAUST
FOR HIGH EXPOSURE OPERATIONS.
Protective Gloves:WEAR PROTECTIVE (RUBBER) GLOVES.
Eye Protection:MFR:NONE HMIS:SAFETY GLASSES.
Work Hygienic Practices:USE NORMAL,GOOD
INDUSTRIAL HYGIENE PRACTICE,
AVOIDING UNNECESSARY CONTACT AND REMOVING MTL FROM
SKIN,EYES,CLOTHING.
Supplemental Safety and Health
INGREDIENTS FROM LETTER TO HMTC 05DEC84.MFR DOES NOT CONFIRM OR DENY
USE OF BERYLLIUM SILICATE(1988). SEE DGSC-SLM CASE HISTORY 85089H
FOR DETAILS.

===== Physical/Chemical Properties =====

HCC:N1
Vapor Pres: