

ROYAL LUBRICANTS COMPANY INC. -- ROYCO 560 -- 9150-01-439-2070

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

Product ID:ROYCO 560
MSDS Date:10/17/2000
FSC:9150
NIIN:01-439-2070
Status Code:A
MSDS Number: CLGZQ
=== Responsible Party ===
Company Name:ROYAL LUBRICANTS COMPANY INC.
Address:MERRY LN
Box:518
City:EAST HANOVER
State:NJ
ZIP:07936-0518
Country:US
Info Phone Num:973-887-7411/7410
Emergency Phone Num:
973-887-7411
Resp. Party Other MSDS Num.:740,054-3
Preparer's Name:PRODUCT SAFETY
Chemtrec Ind/Phone:(800)424-9300
CAGE:07950

=== Contractor Identification ===
Company Name:ROYAL LUBRICANTS COMPANY INC.
Address:215 MERRY LN
Box:518
City:EAST HANOVER
State:NJ
ZIP:07936
Country:US
Phone:973-887-7411/7410
Contract Num:SP0450-01-C-0635
CAGE:07950

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

Ingred Name:SYNTHETIC ESTER
CAS:67762-53-2
Fraction by Wt: 0% TO >9%

Ingred Name:SY

NTHETIC ESTER

CAS:67762-52-1

Fraction by Wt: 0% TO >90%

Ingred Name:OCTYLATED N-PHENYL-1-NAPHTHYLAMINE

CAS:68259-36-9

< Wt:2.

Ingred Name:P,P-DIOCTYLDIPHENYLAMINE

CAS:68411-46-1

< Wt:2.

Ingred Name:TRICRESYL PHOSPHATE (MIXED ISOMERS)

CAS:1330-78-5

RTECS #:TD0175000

= Wt:1.

Ingred Name:MINOR ADDITIVES (MIXTURE)

< Wt:1.

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

LD50 LC50 Mixture:NOT AVAILABLE FOR PRODUCT.

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:N

O

Health Hazards Acute and Chronic:EYE CONTACT: MILDLY IRRITATING. SKIN CONTACT: MILDLY IRRITATING. PROLONGED/REPEATED CONTACT MAY RESULT IN ABSORPTION OF TRICRESYL PHOSPHATE WHICH COULD LEAD TO DELAYED NEUROTOXICITY. RELEASE DURING HIGH PRESSURE MAY RESULT IN INJECTION OF OIL INTO SKIN CAUSING LOCAL NECROSIS. INHALATION: VAPORS, GENERATED AT HIGH TEMPERATURES ONLY, OR OIL MISTS FROM PRODUCT MAY BE MILDLY IRRITATING TO THE NOSE, THROAT, AND RESPIRATORY TRACT. COULD

LEAD TO DELAYED NEUROTOXICITY. INGESTION: COULD BE TOXIC IF SWALLOWED, RESULTING IN DELAYED NEUROTOXICITY.

Explanation of Carcinogenicity:THIS PRODUCT DOES NOT CONTAIN ANY CARCINOGENS AS IDENTIFIED BY IARC, NTP, OR OSHA.

Effects of Overexposure:IRRITATION AS NOTED IN HEALTH HAZARD. DELAYED NEUROTOXICITY MAY BE EVIDENCED BY NUMBNESS AND TINGLING OF THE HANDS AND FEET, WEAKNESS AND CRAMPS, AND UNSTEADY GAIT. LOCAL NEGROSIS IS EVIDENCED BY DELA YED ONSET OF PAIN AND TISSUE DAM

AGE A

FEW HOURS FOLLOWING INJECTION.

Medical Cond Aggravated by Exposure:PREEXISTING EYE, SKIN, RESPIRATORY AND NERVE DISORDERS MAY BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT.

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

First Aid:EYE CONTACT: FLUSH WITH PLENTY OF WATER FOR 15 MIN. WHILE HOLDING EYELIDS OPEN. GET MEDICAL ATTENTION. SKIN CONTACT: REMOVE CONTAMINATED CLOTHING/SHOES AND WIPE EXCESS FROM SKIN. FLUSH WITH WATER. FOLLOW BY WASHING WITH SO

AP AND WATER. IF IRRITATION

OCCURS, GET MEDICAL ATTENTION. DO NOT REUSE CLOTHING UNTIL CLEANED.

CONTAMINATE LEATHER ARTICLES, INCLUDING SHOES, CANNOT BE

DECONTAMINATED AND SHOULD BE DESTROYED. IF MATERIAL INJECTED UNDER SKIN, SEEK MEDICAL ATTENTION. INHALATION: MOVE TO FRESH AIR.

(CONTD. SEE " OTHER INFO.").

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

Flash Point Method:COC

Flash Point:~260.C, 500.F

Extinguishing Media:USE WATER FOG, FOAM, DRY CHEMICAL OR CO2, DO NOT

USE A DIRECT STREAM OF WATER. PRODUCT WILL FLOAT AND CAN BE REIGNITED ON SURFACE OF WATER.

Fire Fighting Procedures:MATERIAL WILL NOT BURN UNLESS PREHEATED. DO NOT ENTER CONFINED FIRE SPACE WITHOUT FULL BUNKER GEAR (HELMET WITH FACE SHIELD, BUNKER COATS, GLOVES AND RUBBER BOOTS). INCLUDING A POSITIVE PRESSURE NIOSH APPROVED SELF CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED CONTAINERS WITH WATER.

Unusual Fire/Explosion Hazard:NONE IDENTIFIED.

===

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

Spill Release Procedures:MAY BURN BUT NOT READILY IGNITABLE. WEAR RESPIRATOR AND PROTECTIVE CLOTHING. STOP LEAK IF POSSIBLE. DIKE AND CONTAIN SPILL. REMOVE WITH VACUUM TRUCKS OR PUMP TO STORAGE/SALVAGE VESSELS. SOAK UP RESIDUE WITH AN ABSORBENT (CLAY, SAND OR OTHER SUITABLE MATERIAL). DISPOSE OF PROPERLY. FLUSH AREA WITH WATER TO REMOVE RESIDUE. TAKE UP SMALL SPILLS WITH AN ABSORBENT AND DISPOSE OF PROPERLY

Y.
Neutralizing Agent:NONE PROVIDED BY MFR

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

Handling and Storage Precautions:STORE IN A COOL DRY PLACE WITH ADEQUATE VENTILATION. AVOID SKIN CONTACT. WASH WITH SOAP AND WATER BEFORE EATING, DRINKING, SMOKING, APPLYING COSMETICS, OR USING TOILET FACILITIES. LAUNDRER CONTAMINATED CLOTHING BEFORE REUSE.
Other Precautions:KEEP AWAY FROM OPEN FLAMES AND HIGH TEMPERATURES.

=====
Exposure Controls/Personal Protec
tion
=====

Respiratory Protection:IF EXPOSURE MAY OR DOES EXCEED OCCUPATIONAL EXPOSURE LIMITS USE A NIOSH-APPROVED RESPIRATOR TO PREVENT OVEREXPOSURE. IN ACCORD WITH 29 CFR 1910.134 USE EITHER AN ATMOSPHERE-SUPPLYING RESPIRATOR OR AN AIR-PURIFYING RESPIRATOR FOR ORGANIC VAPORS AND PARTICULATES.

Ventilation:NONE PROVIDED BY MFR

Protective Gloves:AVOID CONTACT WITH SKIN. WEAR CHEMICAL-RESISTANT GLOVES.

Eye Protection:AVOID CONTACT WITH EYES. WEAR SAFETY GLASSES OR GOGGLES AS APPROPRIATE.

Other Protective Equipment:AVOID CONTACT WITH SKIN WEAR CHEMICAL RESISTANT PROTECTIVE CLOTHING.

Work Hygienic Practices:AVOID SKIN CONTACT. WASH WITH SOAP AND WATER BEFORE EATING, DRINKING, SMOKING, APPLYING COSTMETICS, OR USING TOILET FACILITIES. LAUNDRER CONTAMINATED CLOTHING BEFORE REUSE.

Supplemental Safety and Health

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

HCC:V6

Boiling Pt:B.P. Text:NOT AVAILABLE

Melt/Freeze Pt:M.P/F.P Text

:NOT AVAILABLE

Decomp Temp:Decomp Text:NONE PROVIDED BY MFR

Vapor Pres:NOT AVAILABLE

Vapor Density:NOT AVAILA

Spec Gravity:.99 (H2O=1) APPROX.

pH:NONE PROVIDED

Viscosity:28.0 CST @ 100 DEG F

Evaporation Rate & Reference:NOT AVAILABLE

Solubility in Water:NEGLIGIBLE.

Appearance and Odor:CLEAR LIQUID.

Percent Volatiles by Volume:NONE PROVIDE

Corrosion Rate:NONE PROVIDED BY MFR

=====
Stability and Reactivity Data
=====

Stability Indicator/Materials to Avoid:YES
CONTAC

T WITH STRONG OXIDIZING AGENTS.

Stability Condition to Avoid:AVOID HEAT, FLAME.

Hazardous Decomposition Products:THERMAL DECOMPOSITION PRODUCTS
DEPENDENT ON CONDITIONS. MIXTURE OF AIRBORNE SOLID, LIQUID,
PARTICULATES, GASES EVOLVE DURING PYROLYSIS OR COMBUSTION. CARBON
MONOXIDE AND OTHER ORGANIC COMPOUNDS FORMED

Conditions to Avoid Polymerization:WILL NOT OCCUR.

===== Toxicological Information =====

Toxicological Information:TRICRESYL PHOSPHATE (MIXED
ISOMERS) HAS BEEN

REPORTED TO PRODUCE DELAYED NEUROTOXICITY IN EXPERIMENTAL ANIMALS.
THE ORTHO ISOMER IN THEIS ADDITIVE IS KEPT BELOW A MINIMUM PURSUANT
TO MILITARY SPECIFIC ATIONS (TYPICALLY 0.03%). MOBIL HAS RECENTLY
REPORTED A STUDY TO THE EPA PURSUANT TO SECTION 8(E) OF TOSCA IN
WHICH THEY DEMONSTRATE THAT TRICRESYL PHOSPHATE (MIXED ISOMERS) AT
3% IN A LUBRICANT BASE OIL PRODUCED SIGNIFICANT SERUM AND
ERYTHROCYTE CHOLINESTERASE INHIBITION AS WELL AS NEUROPATHY TA
RGET

ESTERASE (NEUROTOXIC ESTERASE) INHIBITORS. OTHER STUDIES WITH TCP
IN RATS AND MICE INVOLVING ORAL (CONTD. SEE "ECOLOGICAL")

===== Ecological Information =====

Ecological:UNDER EPA-CWA, THIS PRODUCT IS CONSIDERED AN OIL UNDER
SECTION 311; SPILLS INTO OR LEADING TO SURFACE WATERS THAT CAUSE A
SHEEN MUST BE REPORTED TO THE NATIONAL RESPONSE CENTER,
800-424-8802. (CONTD. FROM "TOXICOLOGICAL") ADMINISTRATION
PRODUCED A DECREASE IN SP
ERM CONCENTRATION AND SPERM MOTILITY WITH
RESULTING DECREASED LITTER SIZE AND PUP VIABILITY IN FEMALES.

===== Disposal Considerations =====

Waste Disposal Methods:PLACE IN AN APPROPRIATE DISPOSAL FACILITY IN
COMPLIANCE WITH LOCAL REGULATIONS. UNDER EPA-CWA, THIS PRODUCT IS
CONSIDERED AN OIL UNDER SECTION 311. SPILLS INTO OR LEADING TO
SURFACE WATERS THAT CAUSE A SHEEN MUST BE REPORTED TO THE NATIONAL
RESPONSE CENTER, 800-424-8802.

=====

=====
MSDS Transport Information
=====

Transport Information:NOT HAZARDOUS BY DOT REGULATIONS.

=====
Regulatory Information
=====

SARA Title III Information:THIS PRODUCT IS CLASSIFIED AS A CHRONIC
(DELAYED) HEALTH HAZARD UNDER SECTION 311/312 OF SARA TITLE III.

Federal Regulatory Information:THE COMPONENTS OF THIS PRODUCT ARE
LISTED ON THE EPA/TSCA INVENTORY OF CHEMICAL SUBSTANCES.

State Regulatory Information:(CONTD. FROM "OTHE
R INFO") THAN 1 GLASS OF

WATER AND 15 CC(1 TABLESPOON) OF SYRUP OF IPECAC. IF SYMPTOMS SUCH
AS LOSS OF GAG REFLEX, CONVULSIONS OR UNCONSCIOUSNESS OCCUR BEFORE
EMESIS, GASTRIC LAVAGE SHOULD BE CONSIDERED FOLLOWING INTUBATION
WITH A CUFFED ENDOTRACHEAL TUBE.

=====
Other Information
=====

Disclaimer (provided with this information by the compiling agencies):

This information is formulated for use by elements of the Department
of Defense.

The United States of America in no manner whatsoever,
expressly or implied, warrants this information to be accurate and
disclaims all liability for its use. Any person utilizing this
document should seek competent professional advice to verify and
assume responsibility for the suitability of this information to their
particular situation.