

DATE: 08/14/93

ACCT: 888235-01

INDEX: N/A

CAT NO: C602100

PO NBR: N/A

CELLO-SEAL (TM)/CELLO-GREASE (TM)
 CELLO-SEAL (TM)/CELLO-GREASE (TM)
 CELLO-SEAL (TM)/CELLO-GREASE (TM)

MATERIAL SAFETY DATA SHEET

FISHER SCIENTIFIC
 CHEMICAL DIVISION
 1 REAGENT LANE
 FAIR LAWN NJ 07410
 (201) 796-7100

EMERGENCY NUMBER: (201) 796-7100
 CHEMTREC ASSISTANCE: (800) 424-9300

THIS INFORMATION IS BELIEVED TO BE ACCURATE AND REPRESENTS THE BEST INFORMATION CURRENTLY AVAILABLE TO US. HOWEVER, WE MAKE NO WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, WITH RESPECT TO SUCH INFORMATION, AND WE ASSUME NO LIABILITY RESULTING FROM ITS USE. USERS SHOULD MAKE THEIR OWN INVESTIGATIONS TO DETERMINE THE SUITABILITY OF THE INFORMATION FOR THEIR PARTICULAR PURPOSES.

SUBSTANCE IDENTIFICATION

SUBSTANCE: **CELLO-SEAL (TM)/CELLO-GREASE (TM)**

TRADE NAMES/SYNONYMS:

CELLO-SEAL(R); CELLO-GREASE(R); C602; C601; ACC04367

CHEMICAL FAMILY:

FATTY ACID

MOLECULAR FORMULA: C57-H110-O9

MOLECULAR WEIGHT: 938

CERCLA RATINGS (SCALE 0-3): HEALTH=0 FIRE=1 REACTIVITY=0 PERSISTENCE=0
 NFPA RATINGS (SCALE 0-4): HEALTH=0 FIRE=1 REACTIVITY=0

COMPONENTS AND CONTAMINANTS

COMPONENT: CASTOR OIL PERCENT: 70-95
 CAS# 8001-79-4

COMPONENT: CELLULOSE ACETATE BUTYRATE PERCENT: 5-30
 CAS# 9004-36-8

OTHER CONTAMINANTS: NONE

EXPOSURE LIMITS:

NO OCCUPATIONAL EXPOSURE LIMITS ESTABLISHED BY OSHA, ACGIH, OR NIOSH.

PHYSICAL DATA

DESCRIPTION: PALE YELLOW OR DARK AMBER TRANSPARENT GREASE.

BOILING POINT: 482 F (250 C) (DECOMPOSES)

MELTING POINT: 194-266 F (90-130 C) SPECIFIC GRAVITY: 0.9

SOLUBILITY IN WATER: INSOLUBLE

SOLVENT SOLUBILITY: CHLOROFORM, ACETONE

FIRE AND EXPLOSION DATA

FIRE AND EXPLOSION HAZARD:
 SLIGHT FIRE HAZARD WHEN EXPOSED TO HEAT OR FLAME.

FLASH POINT: 572 F (300 C) (CC) FLAMMABILITY CLASS(OSHA): IIIB

FIREFIGHTING MEDIA:

DRY CHEMICAL OR CARBON DIOXIDE
 (1990 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.5).

FOR LARGER FIRES, USE WATER SPRAY, FOG OR REGULAR FOAM
 (1990 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.5).

FIREFIGHTING:

MOVE CONTAINER FROM FIRE AREA IF YOU CAN DO IT WITHOUT RISK. DO NOT SCATTER SPILLED MATERIAL WITH HIGH-PRESSURE WATER STREAMS. DIKE FIRE-CONTROL WATER FOR LATER DISPOSAL (1990 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.5, GUIDE PAGE 31).

USE AGENTS SUITABLE FOR TYPE OF SURROUNDING FIRE. AVOID BREATHING HAZARDOUS VAPORS, KEEP UPWIND.

WATER OR FOAM MAY CAUSE FROTHING (NFPA 325M, FIRE HAZARD PROPERTIES OF FLAMMABLE LIQUIDS, GASES, AND VOLATILE SOLIDS, 1991)

DATE: 08/14/93

ACCT: 888235-01

INDEX: N/A

CAT NO: C602100

PO NBR: N/A

TOXICITY

CARCINOGEN STATUS: NONE.

THE TOXICITY OF HYDROGENATED CASTOR OILS HAS NOT BEEN QUANTIFIED. MAY BE A SKIN IRRITANT. MAY PRODUCE EFFECTS SIMILAR TO ORDINARY CASTOR OIL, WHICH IS OF LOW TOXICITY.

HEALTH EFFECTS AND FIRST AID

INHALATION:

HYDROGENATED CASTOR OIL (LIGHT GREASE):

ACUTE EXPOSURE- MAY CAUSE COUGHING, IRRITATION OF THE RESPIRATORY TRACT AND MUCOUS MEMBRANES.

CHRONIC EXPOSURE- NONE REPORTED IN HUMANS.

FIRST AID- REMOVE FROM EXPOSURE AREA TO FRESH AIR IMMEDIATELY. IF BREATHING HAS STOPPED, PERFORM ARTIFICIAL RESPIRATION. KEEP PERSON WARM AND AT REST. TREAT SYMPTOMATICALLY AND SUPPORTIVELY. GET MEDICAL ATTENTION IMMEDIATELY.

SKIN CONTACT:

HYDROGENATED CASTOR OIL (LIGHT GREASE):

SENSITIZER.

ACUTE EXPOSURE- DIRECT CONTACT MAY CAUSE IRRITATION AND SENSITIZATION

DERMATITIS IN PERSON PREVIOUSLY EXPOSED

CHRONIC EXPOSURE- REPEATED OR PROLONGED EXPOSURE MAY CAUSE SENSITIZATION

DERMATITIS.

FIRST AID- REMOVE CONTAMINATED CLOTHING AND SHOES IMMEDIATELY. WASH AFFECTED AREA WITH SOAP OR MILD DETERGENT AND LARGE AMOUNTS OF WATER UNTIL NO EVIDENCE OF CHEMICAL REMAINS (APPROXIMATELY 15-20 MINUTES). GET MEDICAL ATTENTION IMMEDIATELY.

EYE CONTACT:

HYDROGENATED CASTOR OIL (LIGHT GREASE):

ACUTE EXPOSURE- CONTACT MAY CAUSE IRRITATION AND REDNESS.

CHRONIC EXPOSURE- REPEATED OR PROLONGED CONTACT MAY CAUSE CONJUNCTIVITIS.

FIRST AID- WASH EYES IMMEDIATELY WITH LARGE AMOUNTS OF WATER OR NORMAL SALINE, OCCASIONALLY LIFTING UPPER AND LOWER LIDS, UNTIL NO EVIDENCE OF CHEMICAL REMAINS (APPROXIMATELY 15-20 MINUTES). GET MEDICAL ATTENTION IMMEDIATELY.

INGESTION:

HYDROGENATED CASTOR OIL (LIGHT GREASE):

ACUTE EXPOSURE- MAY CAUSE IRRITATION OF THE GASTROINTESTINAL TRACT,

VOMITING, DIARRHEA AND COLLAPSE.

CHRONIC EXPOSURE- NO EFFECTS REPORTED.

FIRST AID- TREAT SYMPTOMATICALLY AND SUPPORTIVELY. GET MEDICAL ATTENTION IMMEDIATELY. IF VOMITING OCCURS, KEEP HEAD LOWER THAN HIPS TO PREVENT ASPIRATION.

ANTIDOTE:

NO SPECIFIC ANTIDOTE. TREAT SYMPTOMATICALLY AND SUPPORTIVELY.

REACTIVITY

REACTIVITY:

STABLE UNDER NORMAL TEMPERATURES AND PRESSURES.

INCOMPATIBILITIES:

TEMPERATURES OF 250 C OR HIGHER: DECOMPOSES.

LEAD, ZINC, OR CADMIUM: HOT GREASE DECOMPOSES IN CONTACT WITH THESE.

DECOMPOSES SLOWLY IN CONTACT WITH IRON, TIN, BRASS, AND BRONZE.

MAY DECOMPOSE SOMEWHAT IN CONTACT WITH STAINLESS STEEL, ALUMINUM, AND MONEL.

MAY REACT VIGOROUSLY WITH STRONG OXIDIZERS.

DECOMPOSITION:

DECOMPOSES AT TEMPERATURES OF 250 C OR HIGHER RELEASING TOXIC OXIDES OF CARBON.

POLYMERIZATION:

HAZARDOUS POLYMERIZATION HAS NOT BEEN REPORTED TO OCCUR UNDER NORMAL TEMPERATURES AND PRESSURES.

CONDITIONS TO AVOID

AVOID CONTACT WITH HEAT, SPARKS, FLAMES, OR OTHER SOURCES OF IGNITION. VAPORS MAY BE EXPLOSIVE. AVOID OVERHEATING OF CONTAINERS; CONTAINERS MAY VIOLENTLY RUPTURE IN HEAT OF FIRE. AVOID CONTAMINATION OF WATER SOURCES.

SPILL AND LEAK PROCEDURES

OCCUPATIONAL SPILL:

SHUT OFF IGNITION SOURCES. STOP LEAK IF YOU CAN DO IT WITHOUT RISK. USE WATER

DATE: 08/14/93

ACCT: 888235-01

PAGE: 3

INDEX: N/A

CAT NO: C602100

PO NBR: N/A

SPRAY TO REDUCE VAPORS. FOR SMALL SPILLS, TAKE UP WITH SAND OR OTHER ABSORBENT MATERIAL AND PLACE INTO CONTAINERS FOR LATER DISPOSAL. FOR LARGER SPILLS, DIKE FAR AHEAD OF SPILL FOR LATER DISPOSAL. NO SMOKING, FLAMES OR FLARES IN HAZARD AREA. KEEP UNNECESSARY PEOPLE AWAY. ISOLATE HAZARD AREA AND RESTRICT ENTRY.

PROTECTIVE EQUIPMENT

VENTILATION:
PROVIDE GENERAL DILUTION VENTILATION.

RESPIRATOR:
THE FOLLOWING RESPIRATORS ARE RECOMMENDED BASED ON INFORMATION FOUND IN THE PHYSICAL DATA, TOXICITY AND HEALTH EFFECTS SECTIONS. THEY ARE RANKED IN ORDER FROM MINIMUM TO MAXIMUM RESPIRATORY PROTECTION.
THE SPECIFIC RESPIRATOR SELECTED MUST BE BASED ON CONTAMINATION LEVELS FOUND IN THE WORK PLACE, MUST BE BASED ON THE SPECIFIC OPERATION, MUST NOT EXCEED THE WORKING LIMITS OF THE RESPIRATOR AND MUST BE JOINTLY APPROVED BY THE NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH AND THE MINE SAFETY AND HEALTH ADMINISTRATION (NIOSH-MSHA).

ANY CHEMICAL CARTRIDGE RESPIRATOR WITH AN ORGANIC VAPOR CARTRIDGE(S)

ANY GAS MASK WITH ORGANIC VAPOR CANISTER (CHIN-STYLE OR FRONT- OR BACK-MOUNTED CANISTER).

ANY TYPE 'C' SUPPLIED-AIR RESPIRATOR OPERATED IN THE PRESSURE-DEMAND OR OTHER POSITIVE PRESSURE OR CONTINUOUS-FLOW MODE.

ANY SELF-CONTAINED BREATHING APPARATUS.

FOR FIREFIGHTING AND OTHER IMMEDIATELY DANGEROUS TO LIFE OR HEALTH CONDITIONS:

ANY SELF-CONTAINED BREATHING APPARATUS THAT HAS A FULL FACEPIECE AND IS OPERATED IN A PRESSURE-DEMAND OR OTHER POSITIVE-PRESSURE MODE.

ANY SUPPLIED-AIR RESPIRATOR THAT HAS A FULL FACEPIECE AND IS OPERATED IN A PRESSURE-DEMAND OR OTHER POSITIVE-PRESSURE MODE IN COMBINATION WITH AN AUXILIARY SELF-CONTAINED BREATHING APPARATUS OPERATED IN PRESSURE-DEMAND OR OTHER POSITIVE-PRESSURE MODE.

CLOTHING:
PROTECTIVE CLOTHING NOT REQUIRED. AVOID REPEATED OR PROLONGED CONTACT WITH THIS SUBSTANCE.

GLOVES:
PROTECTIVE GLOVES ARE NOT REQUIRED BUT RECOMMENDED.

EYE PROTECTION:
EYE PROTECTION NOT REQUIRED, BUT ADVISABLE.

AUTHORIZED - FISHER SCIENTIFIC, INC.
CREATION DATE: 05/20/85 REVISION DATE: 12/30/92

-ADDITIONAL INFORMATION-
THIS INFORMATION IS BELIEVED TO BE ACCURATE AND REPRESENTS THE BEST INFORMATION CURRENTLY AVAILABLE TO US. HOWEVER, WE MAKE NO WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, WITH RESPECT TO SUCH INFORMATION, AND WE ASSUME NO LIABILITY RESULTING FROM ITS USE. USERS SHOULD MAKE THEIR OWN INVESTIGATIONS TO DETERMINE THE SUITABILITY OF THE INFORMATION FOR THEIR PARTICULAR PURPOSES.