

SHELL OIL COMPANY -- FILMCOL SPECIAL INDUSTRIAL SOLVENT A-2 -- 6810-00-205-6790

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

Product ID:FILMCOL SPECIAL INDUSTRIAL SOLVENT A-2

MSDS Date:09/15/1986

FSC:6810

NIIN:00-205-6790

MSDS Number: BJPCN

=== Responsible Party ===

Company Name:SHELL OIL COMPANY

Address:HEALTH, SAFETY AND ENVIRONMENT

Box:4320

City:HOUSTON

State:TX

ZIP:77210

Country:US

Info Phone Num:713-2

41-4819

Emergency Phone Num:713-473-9461

Preparer's Name:JOHN P.SEPESI

CAGE:54527

=== Contractor Identification ===

Company Name:SHELL OIL COMPANY

Box:2463

City:HOUSTON

State:TX

ZIP:77210

Country:US

Phone:800-231-6950

CAGE:54527

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

Ingred Name:ETHYL ALCOHOL (ETHANOL)

CAS:64-17-5

RTECS #:KQ6300000

Fraction by Wt: 85.8%

Other REC Limits:NONE SPECIFIED

OSHA PEL:1000 PPM

ACGIH TLV:1000 PPM; 9192

Ingred Name:METHYL ALCOHOL (METHANOL)

) (SARA III)
CAS:67-56-1
RTECS #:PC1400000
Fraction by Wt: 4.3%
Other REC Limits:NONE SPECIFIED
OSHA PEL:S,200PPM/250STEL
ACGIH TLV:S,200PPM/250STEL; 93
EPA Rpt Qty:5000 LBS
DOT Rpt Qty:5000 LBS

Ingred Name:METHYL ISOBUTYL KETONE (SARA III)
CAS:108-10-1
RTECS #:SA9275000
Fraction by Wt: 0.9%
Other REC Limits:NONE SPECIFIED
OSHA PEL:100 PPM/75 STEL
ACGIH TLV:50 PPM/75 STEL; 9293
EPA Rpt Qty:5000 LBS
DOT Rpt Qty:5000 LBS

Ingred Name:ISOPROPYL ALCOHOL (SARA III)
CAS:67-63-0
RTECS #:NT8050000
F
raction by Wt: 9.0%
Other REC Limits:NONE SPECIFIED
OSHA PEL:400 PPM/500 STEL
ACGIH TLV:400 PPM/500STEL;9192

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

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:ACUTE: INHALATION:MAY CAUSE HEADACHE,
DROWINESS & LASSITUDE, LOSS OF APPETITE & INABILITY TO CONCENTRATE.
IRRITATION OF THE THROAT. INGESTION:CAN CAUSE DEPRESSION OF CNS

,
NAUSEA, VOMITING & DIARRHEA. EYE:LIQUID OR VAPOR MAY CAUSE
IRRITATION.LIVER AND KIDNEY DAMAGE POSSIBLE.

Effects of Overexposure:MAY CAUSE EYE, SKIN & RESPIRATORY TRACT
IRRITATION. INDIVIDUAL RESPONSES TO METHYL ALCOHOL VARY. INGESTION
OF LESS THAN 30 ML HAS BEEN FATAL TO HUMANS. IN GENERAL, A FEW
OUNCES MAY CAUSE BLINDNESS AND DEATH; AS LITTLE AS 4 ML MAY BE
TOXIC IF INGESTED. MAY CAUSE HEADACHE, DROWINESS, CNS DEPRESSION,
NAUSEA, & DIARRHEA.

Medical Cond Aggravat

ed by Exposure: PERSONS WITH A HISTORY OF AILMENTS
OR WITH A PRE-EXISTING DISEASE INVOLVING THE SKIN, EYE, RESPIRATORY
TRACT, LIVER OR KIDNEY MAY BE AT INCREASED RISK FROM EXPOSURE.

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

First Aid: INHALATION: REMOVE TO FRESH AIR. RESUSCITATE IF NOT BREATHING.
GET MEDICAL ATTENTION. EYES: IMMEDIATELY FLUSH WITH PLENTY OF WATER
FOR 15 MINUTES. GET MEDICAL ATTENTION. SKIN: REMOVE CONTAMINATED
CLOTHING. FLUSH WITH WATER.
IF IRRITATION PERSISTS, GET MEDICAL
ADVICE. INGESTION: DO NOT INDUCE VOMITING UNLESS INSTRUCTED TO DO
SO. GIVE NOTHING BY MOUTH IF UNCONSCIOUS. GET IMMEDIATE MEDICAL
ATTENTION.

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

Flash Point Method: TCC
Flash Point: =15.C, 59.F
Lower Limits: 3.3
Upper Limits: 19.0
Extinguishing Media: USE WATER FOG, CARBON DIOXIDE, FOAM, OR DRY
CHEMICAL.
Fire Fighting Procedures: FIRE FIGHTERS SHOULD USE NIOSH APPROVED SCBA &
FULL PROTECTIVE EQUIPMENT WHEN FIGHTING CHEMICAL FIRE. USE WATER
SPRAY TO COOL NEARBY CONTAINERS EXPOSED TO FIRE.
Unusual Fire/Explosion Hazard: CONTAINER MAY BURST DUE TO EXTREME HEAT.
FIRE OR EXCESSIVE HEAT MAY CAUSE PRODUCTION OF HAZARDOUS
DECOMPOSITION PRODUCTS.

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

Spill Release Procedures: WEAR APPROPRIATE RESPIRATORY PROTECTION AND
PROTECTIVE CLOTHING. CONTAIN SPILLED MATERIAL. TRANSFER TO SECURE
CONTAINER
S. WHERE NECESSARY, COLLECT USING ABSORBENT MEDIA.
ELIMINATE ANY SOURCE OF IGNITION. VENTILATE AREA. WASH RESIDUE
WITH WATER.
Neutralizing Agent: NOT APPLICABLE.

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

Handling and Storage Precautions: STORE IN A FLAMMABLE LIQUID STORAGE
ROOM OR CABINET. KEEP CONTAINERS TIGHTLY CLOSED WHEN NOT IN USE.
PROTECT CONTAINERS FROM PHYSICAL DAMAGE.
Other Precautions: MAKE FREQUENT CAREFUL LEAKAGE INSPECTIONS. ISOLATE
FROM

OXIDIZERS, CHEMICALS CAPABLE OF SPONTANEOUS HEATING, MATERIALS REACTING WITH AIR OR MOISTURE TO LIBERATE HEAT, IGNITION SOURCES AND EXPLOSIVES. KEEP OUT OF DIRECT SUN & AWAY FROM HEAT.

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

Respiratory Protection: IF VENTILATION DOES NOT MAINTAIN INHALATION EXPOSURES BELOW PEL(TLV), USE NIOSH/MSHA APPROVED RESPIRATORS. RESPIRATORS SHOULD BE SELECTED BASED ON THE FORM AND CONCENTRATION OF CONTAMINANT IN AIR & IN ACCORDANCE WITH OSHA (29 CFR 1910.134).

Ventilation: MECHANICAL (GENERAL) ROOM VENTILATION IS NORMALLY ADEQUATE. LOCAL EXHAUST MAY BE REQUIRED IF WORK AREA NOT VENTED.

Protective Gloves: NEOPRENE, NITRILE, VPC OR NATURAL RUBBER

Eye Protection: SAFETY GOGGLES WITH OPTIONAL FACE SHIELD

Other Protective Equipment: EYE WASH STATION AND SAFETY SHOWER. INDUSTRIAL-TYPE WORK CLOTHING AND APRON AS REQUIRED.

Work Hygienic Practices: OBSERVE GOOD PERSONAL HYGIENE PRACTICES AND RECOMMENDED PROCEDURE

S. DO NOT WEAR CONTAMINATED CLOTHING OR FOOTWEAR.

Supplemental Safety and Health

AVOID PROLONGED OR REPEATED EXPOSURE. DO NOT GET ON SKIN OR IN EYES. DO NOT BREATHE VAPORS OR MISTS. CAUTION: FOR MANUFACTURING, PROCESSING, REPACKING OR INDUSTRIAL USE. NOT FOR HOUSEHOLD USE. CONTAINER HAZARDOUS WHEN EMPTY. EMPTIED CONTAINERS RETAIN RESIDUAL LIQUID AND VAPOR. FOLLOW PRECAUTIONS ON LABEL AND IN MSDS.

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

HCC:F5

NR

C/State Lic Num: NOT RELEVANT

Boiling Pt: =76.1C, 169.F

Vapor Pres: 44

Vapor Density: 1.5

Spec Gravity: 0.7941-0.8125

Evaporation Rate & Reference: 1.4(N-BUTYL ACETATE=1)

Solubility in Water: COMPLETE

Appearance and Odor: COLORLESS, CLEAR LIQUID, ALCOHOL ODOR

Corrosion Rate: N/KNOWN

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

Stability Indicator/Materials to Avoid: YES

STRONG OXIDIZING AGENTS

Stability Condition to Avoid: HIGH TEMPERATURES, SPARKS, AND OPEN FLAMES

Hazardous Deco

Composition Products: CARBON MONOXIDE CAN FORM ON INCOMPLETE COMBUSTION OR UNIDENTIFIED ORGANIC COMPOUNDS.

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

Waste Disposal Methods: ALL RECOVERED MATERIAL SHOULD BE PACKAGED, LABELED, TRANSPORTED, AND DISPOSED OR RECLAIMED IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS AND IN CONFORMANCE WITH GOOD ENGINEERING PRACTICES.

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