07291999

MATERIAL SAFETY DATA SHEET: 00001205

PAGE:1



CANADA COLORS AND CHEMICALS LIMITED 80 SCARSDALE ROAD DON MILLS, ONTARIO M3B 2R7 (416)-449-7750

PRODUCT: TEXANOL CODE: 913850

SECTION 01: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER.....EASTMAN CHEMICAL CANADA INC.

11 ALLSTATE PARKWAY, SUITE 430

MARKHAM, ONTARIO CANADA; L3R 9T8

PREPARED BY......ENVIRONMENTAL & REGULATORY AFFAIRS DEPARTMENT

PREPARATION DATE......FEB 03/1999

PRODUCT NAME......TEXANOL

PRODUCT CODE......913850

MATERIAL USE......SOLVENT

EMERGENCY PHONE NO.....(416)-444-2112

SECTION 02: COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS EXPOSURE LEVELS LD/50, ROUTE, SPECIES LC/50, ROUTE, SPECIES

2,2,4-TRIMETHYL-

1,3-PENTANEDIOL MONO-

ISOBUTYRATE

% :100

CAS #:25265-77-4

SECTION 03: HAZARDS IDENTIFICATION

ROUTE OF ENTRY:

SKIN CONTACT.....LOW HAZARD FOR USUAL INDUSTRIAL HANDLING.

SKIN ABSORPTION......N.AV.

EYE CONTACT.....ESSENTIALLY NONIRRITATING, BUT CONTACT MAY CAUSE SLIGHT

TRANSIENT IRRITATION. MAY CAUSE IRRITATION IF NOT FLUSHED

N.AV.

>3.2 G/KG (ORL-RAT)

WITH WATER IMMEDIATELY.

INHALATION.....LOW HAZARD FOR USUAL INDUSTRIAL HANDLING.

INGESTION.....EXPECTED TO BE A LOW INGESTION HAZARD.

EFFECTS OF ACUTE EXPOSURE.....SEE ABOVE

EFFECTS OF CHRONIC EXPOSURE.....SEE ABOVE

SECTION 04: FIRST AID MEASURES

INSTRUCTIONS:.....IN CASE OF INGESTION, OBTAIN MEDICAL ATTENTION IMMEDIATELY.

DO NOT GIVE ANYTHING BY MOUTH TO A CONVULSING OR UNCONSCIOUS PERSON. EYES: ANY MATERIAL THAT CONTACTS THE

EYE SHOULD BE WASHED OUT IMMEDIATELY. IF EASY TO DO, REMOVE CONTACT LENSES. IF THE SYMPTOMS PERSIST, CONSULT A PHYSICIAN. IN CASE OF SKIN CONTACT:. WASH SKIN WITH LARGE AMOUNTS OF RUNNING WATER, AND SOAP IF AVAILABLE, FOR 15 MINUTES. SEEK MEDICAL ATTENTION IF IRRITATION OCCURS. IN

CASE OF INHALATION, REMOVE TO FRESH AIR. IF THE SYMPTOMS

PERSIST, CONSULT A PHYSICIAN.

SECTION 05: FIRE FIGHTING MEASURES

T.D.G. FLAM. CLASS......NOT REGULATED

FLAMMABILITY.....SEE FLASH POINT

07291999 MATERIAL SAFETY DATA SHEET: 00001205 PAGE:2

PRODUCT: TEXANOL CODE: 913850

SECTION 05: FIRE FIGHTING MEASURES

IF YES, UNDER WHICH

CONDITIONS?

EXTINGUISHING MEDIA......CARBON DIOXIDE, DRY CHEMICAL, FOAM. WATER

SPECIAL PROCEDURES......FIREFIGHTERS SHOULD WEAR THE USUAL PROTECTIVE GEAR;

SELF-CONTAINED BREATHING APPARATUS.

FLASH POINT (C), METHOD......120 C. (C.O.C.)

AUTO IGNITION TEMPERATURE......393 (C)

UPPER FLAMMABLE LIMIT (% BY.....4.24

VOL.)

LOWER FLAMMABLE LIMIT (% BY.....0.62

VOL.)

EXPLOSION DATA

EXPLOSIVE POWER......N.AV.

RATE OF BURNING......N.AV.

SENSITIVITY TO STATIC......N.AV.

DISCHARGE

SENSITIVITY TO IMPACT.....N.AV.

UNUSUAL FIRE AND EXPLOSION.....NONE

HAZARDS

HAZARDOUS COMBUSTION PRODUCTS....CARBON DIOXIDE. CARBON MONOXIDE

SECTION 06: ACCIDENTAL RELEASE MEASURES

LEAK/SPILL........WEAR PROTECTIVE EQUIPMENT. ABSORB WITH INERT MATERIAL.

COLLECT AND CONTAIN IN SUITABLE DISPOSAL CONTAINERS. FLUSH
AREA WITH WATER; PREVENT WASHINGS FROM ENTERING WATERWAYS.

SECTION 07: HANDLING AND STORAGE

HANDLING PROCEDURES AND......KEEP AWAY FROM HEAT, SPARKS, AND OPEN FLAME. KEEP AWAY FROM

EQUIPMENT INCOMPATIBLES. MINIMIZE EXPOSURE TO AIR. IF PEROXIDE

FORMATION IS SUSPECTED, DO NOT OPEN OR MOVE CONTAINER.

MAINTAIN A GOOD PERSONAL HYGIENE.

STORAGE NEEDS......KEEP CONTAINER CLOSED WHEN NOT IN USE. TO MAINTAIN PRODUCT

QUALITY, DO NOT STORE IN HEAT OR DIRECT SUNLIGHT. STORE

AWAY FROM INCOMPATIBLE MATERIALS.

SECTION 08: EXPOSURE CONTROLS/PERSONAL PROTECTION

GLOVES/ TYPE......WEAR IMPERVIOUS GLOVES.

RESPIRATORY/TYPE..... A RESPIRATOR SHOULD BE WORN IF NEEDED AND MUST BE WORN IF

EXPOSURE IS LIKELY TO EXCEED RECOMMENDED EXPOSURE LIMITS

(WHEN AVAILABLE). RESPIRATOR TYPE: MIST, ORGANIC VAPOUR

EYE/TYPE......SAFETY GLASSES WITH SIDE-SHIELDS.

FOOTWEAR/TYPE......NO SPECIAL REQUIREMENTS.

CLOTHING/TYPE.......WEAR ADEQUATE PROTECTIVE CLOTHES.

OTHER/TYPE.....EYE BATH AND SAFETY SHOWER.

ENGINEERING CONTROLS......GOOD GENERAL VENTILATION (TYPICALLY 10 AIR CHANGES PER

HOUR) SHOULD BE SUFFICIENT TO CONTROL AIRBORNE LEVELS.

VENTILATION RATES SHOULD BE MATCHED TO CONDITIONS.

SUPPLEMENTARY LOCAL EXHAUST VENTILATION, CLOSE SYSTEMS, OR RESPIRATORY PROTECTION MAY BE NEEDED IN SPECIAL

CIRCUMSTANCES SUCH AS POORLY VENTILATED SPACES, MECHANICAL

GENERATION OF DUSTS, HEATING, DRYING, ETC..

SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE.....LIQUID

ODOUR.....SLIGHT

07291999

PAGE: 3

PRODUCT: TEXANOL CODE: 913850

SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES

ODOUR THRESHOLD......N.AV.

VAPOUR PRESSURE (MMHG).....0.01. @ 20(C)

VAPOUR DENSITY (AIR=1)...........7.5

EVAPORATION RATE......0.002

BOILING POINT......244 (C)

SPECIFIC GRAVITY (WATER=1).....0.95

SOLUBILITY IN WATER (% W/W).....500 - 860 MG/L @ 20(C)

COEFFICIENT OF WATER/OIL DIST....LOG P=3.47, P = 2951

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY:

YES.....YES

NO, WHICH CONDITIONS?

COMPATABILITY WITH OTHER

SUBSTANCES:

YES

NO, WHICH ONES?.....OXIDIZING AGENTS

REACTIVITY CONDITIONS?.....CONTACT WITH INCOMPATIBLES.

HAZARDOUS PRODUCTS OF.....SEE HAZARDOUS COMBUSTION PRODUCTS

DECOMPOSITION

HAZARDOUS POLYMERIZATION......WILL NOT OCCUR

SECTION 11: TOXICOLOGICAL INFORMATION

EXPOSURE LIMIT OF MATERIAL.....NOT ESTABLISHED

LC 50 OF MATERIAL, SPECIES &.....>3.55 MG/L/6HRS. (RAT)

ROUTE

LD 50 OF MATERIAL, SPECIES &.....6.86 ML/KG. (ORAL-RAT). >20 ML/KG. (DERMAL-GUINEA PIG)

ROUTE

CARCINOGENICITY OF MATERIAL....NONE

REPRODUCTIVE EFFECTS.....NONE KNOWN

MUTAGENICITY......NEGATIVE

SIGNIFICANT LABORATORY DATA.....HYALINE DROPLET FORMATION HAS BEEN OBSERVED IN MALE RATS WITH POSSIBLE RELEVANCE TO EXPOSED TO THIS MATERIAL. SOME HYDROCARBONS CAN INDUCE

HUMAN HEALTH HAZARD EVALUTION KIDNEY NECROSIS IN MALE RATS DUE TO THE ACCUMULATION OF A CHEMICAL-PROTEIN COMPLEX (HYALINE DROPLET FORMATION). THE NECROSIS AND CONSEQUENT CELL REGENERATION ARE BELIEVED TO RESULT IN KIDNEY TUMORIGENSIS. SINCE THE PROTEIN INVOLVED IS FOUND PREDOMINANTLY IN MALE RATS (AND NOT IN HUMANS),

NECROSIS BY THIS MECHANISM IS NOT PREDICTIVE OF HUMAN RISK. IRRITANCY OF MATERIAL......SLIGHT -. (EYES, SKIN - RABBIT)

SENSITIZING CAPABILITY OF.....NONE

MATERIAL

SYNERGISTIC MATERIALS......N.AV.

SECTION 12: ECOLOGICAL CONSIDERATIONS

ENVIRONMENTAL TOXICITY......INTRODUCTION: THIS ENVIRONMENTAL EFFECTS SUMMARY IS WRITTEN INFORMATION TO ASSIST IN ADDRESSING EMERGENCIES CREATED BY AN

ACCIDENTAL SPILL WHICH MIGHT OCCUR DURING THE SHIPMENT OF THIS MATERIAL, AND, IN GENERAL, IT IS NOT MEANT TO ADDRESS DISCHARGES TO SANITARY SEWERS OR PUBLICALLY OWNED TREATMENT WORKS. DATA FOR THIS MATERIAL HAVE BEEN USED TO ESTIMATE ITS ENVIRONMENTAL IMPACT. IT HAS THE FOLLOWING PROPERTIES:. A MODERATE POTENTIAL TO AFFECT SOME AQUATIC ORGANISMS. A MODERATE POTENTIAL TO AFFECT ALGAL GROWTH. A LOW POTENTIAL TO AFFECT SECONDARY WASTE TREATMENT MICROBIAL RESPIRATION.

THE SUBJECT PRODUCT IS EXPECTED TO BIODEGRADE AND IS NOT

07291999

MATERIAL SAFETY DATA SHEET: 00001205

PAGE: 4

PRODUCT: TEXANOL CODE: 913850

SECTION 12: ECOLOGICAL CONSIDERATIONS

ENVIRONMENTAL TOXICITY........EXPECTED TO PERSIST FOR LONG PERIODS IN A AQUATIC INFORMATION ENVIRONMENT. 5-HOUR IC50:. >215 MG/L. A LOW POTENT

ENVIRONMENT. 5-HOUR IC50:. >215 MG/L. A LOW POTENTIAL TO AFFECT THE GERMINATION AND/OR EARLY GROWTH OF SOME PLANTS. THE SUBJECT PRODUCT IS EXPECTED TO BIODEGRADE AND IS NOT EXPECTED TO PERSIST FOR LONG PERIODS IN AN AQUATIC ENVIRONMENT. WHEN DILUTED WITH A LARGE AMOUNT OF WATER, THIS MATERIAL RELEASED DIRECTLY OR INDIRECTLY INTO THE ENVIRONMENT IS NOT EXPECTED TO HAVE A SIGNIFICANT IMPACT. OXYGEN DEMAND DATA:. COD (G OXYGEN/G):. 2.1. THOD (G OXYGEN/G):. 2.4. ACUTE AQUATIC EFFECTS DATA:. 96-HR. LC50 FATHEAD MINNOW MG/L:. 32 uL/L. 48-HR EC-50 WATER FLEA (DAPHNIA) MG/L:. >100 MICROLITRE/L. 96-H LC50 (PILL BUG):. 96-H LC50 (SIDESWIMMER):. 96-H LC50 (RAMSHORN SNAIL):. >100 MICROLITRE/L. 96-H LC50 (AQUATIC EARTHWORM):. 32 uL/L. ACUTE ALGAL EFFECTS:. 72-H EC50 (SELENASTRUM CAPRICORNUTUM):. 18 MG/L,

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL......IN ACCORDANCE WITH MUNICIPAL, PROVINCIAL AND FEDERAL REGULATIONS.

SECTION 14: TRANSPORT INFORMATION

UN NUMBER......N.AP.

T.D.G. CLASSIFICATION.....NOT REGULATED

SPECIAL SHIPPING INSTRUCTIONS....N.AP.

SECTION 15: REGULATORY INFORMATION

WHMIS CLASSIFICATION......THIS IS NOT A CONTROLLED PRODUCT

CPR COMPLIANCE......THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE

HAZARD CRITERIA OF THE CPR AND THE MSDS CONTAINS ALL THE

INFORMATION REQUIRED BY THE CPR.

SECTION 16: OTHER INFORMATION

N.AV.=NOT AVAILABLE N.AP.=NOT APPLICABLE