Chem-Impex International Inc.

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Wood Dale, IL 60191 USA

SAFETY DATA SHEET

SECTION 1. CHEMICAL IDENTIFICATION

CATALOG #: 00755

NAME: Methyl alcohol

SYNONYMS: Methanol

24 HOUR EMERGENCY

TELEPHONE:

(800) 535-5053(USA)

352-323-3500 (INTERNATIONAL)

TO REQUEST AN MSDS: (800) 869-9290

CUSTOMER SERVICE:

(630) 766-2112

SECTION 2. HAZARDS IDENTIFICATION

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

GHS CLASSIFICATION IN ACCORDANCE WITH 29 CFR 1910 (OSHA HCS)

FLAMMABLE LIQUIDS (CATEGORY 2), H225 ACUTE TOXICITY, ORAL (CATEGORY 3), H301 ACUTE TOXICITY, INHALATION (CATEGORY 3), H331 ACUTE TOXICITY, DERMAL (CATEGORY 3), H311 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (CATEGORY 1), EYES, CENTRAL NERVOUS SYSTEM. H370

FOR THE FULL TEXT OF THE H-STATEMENTS MENTIONED IN THIS SECTION, SEE SECTION 16.

GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

PICTOGRAM



SIGNAL WORD DANGER

HAZARD STATEMENT(S)

H225 HIGHLY FLAMMABLE LIQUID AND VAPOUR.

H301 + H311 + H331 TOXIC IF SWALLOWED, IN CONTACT WITH SKIN OR IF INHALED.

H370 CAUSES DAMAGE TO ORGANS (EYES, CENTRAL NERVOUS

SYSTEM).

PRECAUTIONARY STAT	EMENT(S)
P210	KEEP AWAY FROM HEAT/SPARKS/OPEN FLAMES/HOT SURFACES.
	NO SMOKING.
P233	KEEP CONTAINER TIGHTLY CLOSED.
P240	GROUND/BOND CONTAINER AND RECEIVING EQUIPMENT.
P241	USE EXPLOSION-PROOF ELECTRICAL/ VENTILATING/ LIGHTING/
	EQUIPMENT.
P242	USE ONLY NON-SPARKING TOOLS.
P243	TAKE PRECAUTIONARY MEASURES AGAINST STATIC
	DISCHARGE.
P260	DO NOT BREATHE DUST/ FUME/ GAS/ MIST/ VAPOURS/ SPRAY.
P264	WASH SKIN THOROUGHLY AFTER HANDLING.
P270	DO NOT EAT, DRINK OR SMOKE WHEN USING THIS PRODUCT.
P271	USE ONLY OUTDOORS OR IN A WELL-VENTILATED AREA.

P270 DO NOT EAT, DRINK OR SMOKE WHEN USING THIS PRODUCT.
P271 USE ONLY OUTDOORS OR IN A WELL-VENTILATED AREA.
P280 WEAR PROTECTIVE GLOVES/ PROTECTIVE CLOTHING/ EYE
PROTECTION/ FACE PROTECTION.

P301 + P310 + P330 IF SWALLOWED: IMMEDIATELY CALL A POISON CENTER/

DOCTOR. RINSE MOUTH.

P303 + P361 + P353 IF ON SKIN (OR HAIR): REMOVE/ TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING. RINSE SKIN WITH WATER/ SHOWER.

P304 + P340 + P311 IF INHALED: REMOVE PERSON TO FRESH AIR AND KEEP

COMFORTABLE FOR BREATHING. CALL A POISON CENTER/

DOCTOR.

P307 + P311 IF EXPOSED: CALL A POISON CENTER OR DOCTOR/ PHYSICIAN. P362 TAKE OFF CONTAMINATED CLOTHING AND WASH BEFORE

REUSE.

P370 + P378 IN CASE OF FIRE: USE DRY SAND, DRY CHEMICAL OR ALCOHOL-

RESISTANT FOAM FOR EXTINCTION.

P403 + P233 STORE IN A WELL-VENTILATED PLACE. KEEP CONTAINER

TIGHTLY CLOSED.

P403 + P235 STORE IN A WELL-VENTILATED PLACE. KEEP COOL.

P405 STORE LOCKED UP.

P501 DISPOSE OF CONTENTS/ CONTAINER TO AN APPROVED WASTE

DISPOSAL PLANT.

HAZARDS NOT NONE
OTHERWISE
CLASSIFIED (HNOC)
OR NOT COVERED
BY GHS

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MF: CH₃OH

MW: 32.04

CAS-NO. 67-56-1

PURITY: $\geq 99\%$ (GC)

HAZARDOUS COMPONENTS

COMPONENT	CLASSIFICATION	CONCENTRATION
Methyl alcohol		
	FLAM. LIQ. 2; ACUTE TOX. 3; STOT SE 1; H225, H301, H331, H311, H370	<= 100 %
	CONCENTRATION LIMITS: >= 10 %: STOT SE 1, H370; 3 - < 10 %: STOT SE 2, H371	

FOR THE FULL TEXT OF THE H-STATEMENTS MENTIONED IN THIS SECTION, SEE SECTION 16.

SECTION 4. FIRST-AID MEASURES

DESCRIPTION OF FIRST AID MEASURES

GENERAL ADVICE FIRST AIDER NEEDS TO PROTECT HIMSELF. SHOW THIS

MATERIAL SAFETY DATA SHEET TO THE DOCTOR IN

ATTENDANCE.

IF INHALED AFTER INHALATION: FRESH AIR. IMMEDIATELY CALL IN

PHYSICIAN. IF BREATHING STOPS: IMMEDIATELY APPLY ARTIFICIAL RESPIRATION, IF NECESSARY ALSO OXYGEN.

IN CASE OF SKIN IN CASE OF SKIN CONTACT: TAKE OFF IMMEDIATELY ALL

CONTACT CONTAMINATED CLOTHING. RINSE SKIN WITH WATER/

SHOWER. CALL A PHYSICIAN IMMEDIATELY.

IN CASE OF EYE CONTACT

AFTER EYE CONTACT: RINSE OUT WITH PLENTY OF WATER. CALL IN OPHTHALMOLOGIST. REMOVE CONTACT

LENSES

IF SWALLOWED

AFTER SWALLOWING: FRESH AIR. MAKE VICTIM DRINK

ETHANOL (E.G. 1 DRINKING GLASS OF A 40%

ALCOHOLIC BEVERAGE). CALL A DOCTOR IMMEDIATELY

(MENTION METHANOL INGESTION). ONLY IN

EXCEPTIONAL CASES, IF NO MEDICAL CARE IS AVAILABLE WITHIN ONE HOUR, INDUCE VOMITING (ONLY IN FULLY CONSCIOUS PERSONS) AND MAKE VICTIM DRINK

THE MOST IMPORTANT KNOWN SYMPTOMS AND EFFECTS

ETHANOL AGAIN (APPROX. 0.3 ML OF A 40% ALCOHOLIC

BEVERAGE/KG BODY WEIGHT/HOUR).

MOST IMPORTANT SYMPTOMS AND

EFFECTS, BOTH ACUTE

ARE DESCRIBED IN THE LABELLING (SEE SECTION 2.2) AND/OR IN SECTION 11.

AND DELAYED

INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

NO DATA AVAILABLE

SECTION 5. FIRE AND EXPLOSION DATA

EXTINGUISHING MEDIA

SUITABLE SUITABLE EXTINGUISHING MEDIA

EXTINGUISHING MEDIA WATER FOAM CARBON DIOXIDE (CO2) DRY POWDER

UNSUITABLE EXTINGUISHING MEDIA

FOR THIS SUBSTANCE/MIXTURE NO LIMITATIONS OF

EXTINGUISHING AGENTS ARE GIVEN.

SPECIAL HAZARDS ARISING FROM THE CARBON OXIDES COMBUSTIBLE.

SUBSTANCE OR MIXTURE

PAY ATTENTION TO FLASHBACK.

VAPORS ARE HEAVIER THAN AIR AND MAY SPREAD

ALONG FLOORS.

DEVELOPMENT OF HAZARDOUS COMBUSTION GASES OR

VAPOURS POSSIBLE IN THE EVENT OF FIRE.

FORMS EXPLOSIVE MIXTURES WITH AIR AT AMBIENT

TEMPERATURES.

ADVICE FOR **FIREFIGHTERS**

STAY IN DANGER AREA ONLY WITH SELF-CONTAINED BREATHING APPARATUS. PREVENT SKIN CONTACT BY KEEPING A SAFE DISTANCE OR BY WEARING SUITABLE

PROTECTIVE CLOTHING.

FURTHER INFORMATION

REMOVE CONTAINER FROM DANGER ZONE AND COOL WITH WATER. PREVENT FIRE EXTINGUISHING WATER FROM CONTAMINATING SURFACE WATER OR THE GROUND WATER SYSTEM.

SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSONAL
PRECAUTIONS,
PROTECTIVE EQUIPMENT
AND EMERGENCY
PROCEDURES

ADVICE FOR NON-EMERGENCY PERSONNEL: DO NOT BREATHE VAPORS, AEROSOLS. AVOID SUBSTANCE CONTACT. ENSURE ADEQUATE VENTILATION. KEEP AWAY FROM HEAT AND SOURCES OF IGNITION. EVACUATE THE DANGER AREA, OBSERVE EMERGENCY PROCEDURES, CONSULT AN EXPERT.

FOR PERSONAL PROTECTION SEE SECTION 8.

ENVIRONMENTAL PRECAUTIONS

DO NOT LET PRODUCT ENTER DRAINS. RISK OF

EXPLOSION.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP COVER DRAINS. COLLECT, BIND, AND PUMP OFF SPILLS. OBSERVE POSSIBLE MATERIAL RESTRICTIONS (SEE SECTIONS 7 AND 10). DISPOSE OF PROPERLY. CLEAN UP

AFFECTED AREA.

REFERENCE TO OTHER SECTIONS

FOR DISPOSAL SEE SECTION 13.

SECTION 7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

WORK UNDER HOOD. DO NOT INHALE

SUBSTANCE/MIXTURE. AVOID GENERATION OF

VAPOURS/AEROSOLS.

KEEP AWAY FROM OPEN FLAMES, HOT SURFACES AND

SOURCES OF IGNITION.TAKE PRECAUTIONARY

MEASURES AGAINST STATIC DISCHARGE.

IMMEDIATELY CHANGE CONTAMINATED CLOTHING. APPLY PREVENTIVE SKIN PROTECTION. WASH HANDS

AND FACE AFTER WORKING WITH SUBSTANCE.

FOR PRECAUTIONS SEE SECTION 2.2.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES KEEP CONTAINER TIGHTLY CLOSED IN A DRY AND WELL-VENTILATED PLACE. KEEP AWAY FROM HEAT AND

SOURCES OF IGNITION. KEEP LOCKED UP OR IN AN AREA ACCESSIBLE ONLY TO QUALIFIED OR AUTHORIZED

PERSONS.

STORAGE CLASS (TRGS 510): 3: FLAMMABLE LIQUIDS

Store at RT

SPECIFIC END USE(S)

APART FROM THE USES MENTIONED IN SECTION 1.2 NO OTHER SPECIFIC USES ARE STIPULATED.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CONTROL PARAMETERS

COMPONENTS WITH WORKPLACE CONTROL PARAMETERS

CAS-NO.	VALUE	CONTROL	BASIS
		PARAMETERS	
67-56-1	TWA	200 PPM	USA. ACGIH THRESHOLD LIMIT
			VALUES (TLV)
REMARKS	DANGER (BSORPTION	
	STEL	250 PPM	USA. ACGIH THRESHOLD LIMIT
			VALUES (TLV)
	DANGER (OF CUTANEOUS A	BSORPTION
	ST	250 PPM	USA. NIOSH RECOMMENDED
		325 MG/M3	EXPOSURE LIMITS
	POTENTIAL FOR DERMAL ABSORPTION		
	TWA	200 PPM	USA. NIOSH RECOMMENDED
		260 MG/M3	EXPOSURE LIMITS
	POTENTIA	BSORPTION	
	TWA	200 PPM	USA. OCCUPATIONAL EXPOSURE
		260 MG/M3	LIMITS (OSHA) - TABLE Z-1 LIMITS
			FOR AIR CONTAMINANTS
	PEL	200 PPM	CALIFORNIA PERMISSIBLE
		260 MG/M3	EXPOSURE LIMITS FOR
			CHEMICAL CONTAMINANTS
	SKIN		
	С	1,000 PPM	CALIFORNIA PERMISSIBLE
			EXPOSURE LIMITS FOR
			CHEMICAL CONTAMINANTS
	SKIN		
	STEL	250 PPM	CALIFORNIA PERMISSIBLE
		325 MG/M3	EXPOSURE LIMITS FOR
			CHEMICAL CONTAMINANTS
	SKIN		
	67-56-1	REMARKS DANGER OF STEL DANGER OF STEL DANGER OF STEL POTENTIAL TWA POTENTIAL TWA PEL SKIN C SKIN STEL	PARAMETERS 67-56-1 TWA 200 PPM REMARKS DANGER OF CUTANEOUS AT STEL 250 PPM DANGER OF CUTANEOUS AT ST 250 PPM 325 MG/M3 POTENTIAL FOR DERMAL AT TWA 200 PPM 260 MG/M3 POTENTIAL FOR DERMAL AT TWA 200 PPM 260 MG/M3 PEL 200 PPM 260 MG/M3 SKIN C 1,000 PPM SKIN STEL 250 PPM 325 MG/M3

BIOLOGICAL OCCUPATIONAL EXPOSURE LIMITS

COMPONENT	CAS-NO.	PARAMETERS	VALUE	BIOLOGICAL	BASIS
				SPECIMEN	
Methyl alcohol	67-56-1	METHANOL	15 MG/L	URINE	ACGIH -
					BIOLOGICAL
					EXPOSURE
					INDICES (BEI)
	REMARKS	END OF SHIFT (A	S SOON AS	S POSSIBLE AFTE	R EXPOSURE
		CEASES)			

DERIVED NO EFFECT LEVEL (DNEL)

DERIVED IN EIT	ect devel (bried)		
APPLICATION	ROUTES OF	HEALTH EFFECT	VALUE
AREA	EXPOSURE		
WORKERS	SKIN CONTACT	LONG-TERM SYSTEMIC EFFECTS	40MG/KG BW/D
CONSUMERS	SKIN CONTACT	LONG-TERM SYSTEMIC EFFECTS	8MG/KG BW/D
CONSUMERS	INGESTION	LONG-TERM SYSTEMIC EFFECTS	8MG/KG BW/D
WORKERS	SKIN CONTACT	ACUTE SYSTEMIC EFFECTS	40MG/KG BW/D
CONSUMERS	SKIN CONTACT	ACUTE SYSTEMIC EFFECTS	8MG/KG BW/D
CONSUMERS	INGESTION	ACUTE SYSTEMIC EFFECTS	8MG/KG BW/D
WORKERS	INHALATION	ACUTE SYSTEMIC EFFECTS	260 MG/M3
WORKERS	INHALATION	ACUTE LOCAL EFFECTS	260 MG/M3
WORKERS	INHALATION	LONG-TERM SYSTEMIC EFFECTS	260 MG/M3
WORKERS	INHALATION	LONG-TERM LOCAL EFFECTS	260 MG/M3
CONSUMERS	INHALATION	ACUTE SYSTEMIC EFFECTS	50 MG/M3
CONSUMERS	INHALATION	ACUTE LOCAL EFFECTS	50 MG/M3
CONSUMERS	INHALATION	LONG-TERM SYSTEMIC EFFECTS	50 MG/M3
CONSUMERS	INHALATION	LONG-TERM LOCAL EFFECTS	50 MG/M3

PREDICTED NO EFFECT CONCENTRATION (PNEC)

COMPARTMENT	VALUE
SOIL	23.5 MG/KG
SEA WATER	15.4 MG/L
FRESH WATER	154 MG/L
FRESH WATER SEDIMENT	570.4 MG/KG
ONSITE SEWAGE TREATMENT PLANT	100 MG/KG

EXPOSURE CONTROLS

APPROPRIATE ENGINEERING CONTROLS

IMMEDIATELY CHANGE CONTAMINATED CLOTHING. APPLY PREVENTIVE SKIN PROTECTION. WASH HANDS AND FACE AFTER WORKING WITH SUBSTANCE.

PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE PROTECTION

USE EQUIPMENT FOR EYE PROTECTION TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR EN 166(EU). SAFETY GLASSES

SKIN PROTECTION HANDLE WITH GLOVES. GLOVES MUST BE INSPECTED

PRIOR TO USE. USE PROPER GLOVE REMOVAL TECHNIQUE (WITHOUT TOUCHING GLOVE"S OUTER SURFACE) TO AVOID

SKIN CONTACT WITH THIS PRODUCT. DISPOSE OF

CONTAMINATED GLOVES AFTER USE IN ACCORDANCE WITH APPLICABLE LAWS AND GOOD LABORATORY PRACTICES.

WASH AND DRY HANDS.

BODY PROTECTION FLAME RETARDANT ANTISTATIC PROTECTIVE CLOTHING.

RESPIRATORY PROTECTION REQUIRED WHEN VAPOURS/AEROSOLS ARE GENERATED.

OUR RECOMMENDATIONS ON FILTERING RESPIRATORY PROTECTION ARE BASED ON THE FOLLOWING STANDARDS:

DIN EN 143, DIN 14387 AND OTHER ACCOMPANYING STANDARDS RELATING TO THE USED RESPIRATORY

PROTECTION SYSTEM.

CONTROL OF DO NOT LET PRODUCT ENTER DRAINS. RISK OF EXPLOSION.

ENVIRONMENTAL EXPOSURE

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE Colorless clear liquid or Clear free liquid

ODOUR CHARACTERISTIC

ODOUR THRESHOLD 10 PPM

PH NO DATA AVAILABLE

MELTING

POINT/FREEZING POINT INITIAL BOILING POINT AND BOILING RANGE

FLASH POINT

EVAPOURATION RATE 6.3 - DIETHYL ETHER 1.9 - N-BUTYL ACETATE

FLAMMABILITY (SOLID, NO DATA AVAILABLE

GAS)

UPPER/LOWER

UPPER EXPLOSION LIMIT: 44 %(V)
FLAMMABILITY OR

LOWER EXPLOSION LIMIT: 5.5 %(V)

EXPLOSIVE LIMITS

VAPOUR PRESSURE 169.27 HPA AT 25 C

VAPOUR DENSITY 1.11 RELATIVE DENSITY 0.79 g/mL

WATER SOLUBILITY 1,000 G/L AT 20 C - COMPLETELY MISCIBLE

PARTITION COEFFICIENT: LOG POW: -0.77 AT 25 C - (HSDB), BIOACCUMULATION IS

N- OCTANOL/WATER NOT EXPECTED.

AUTO-IGNITION 455.0 C AT 1,013 HPA - DIN 51794

TEMPERATURE

DECOMPOSITION DISTILLABLE IN AN UNDECOMPOSED STATE AT NORMAL

TEMPERATURE PRESSURE.

VISCOSITY 0.54 - 0.59 MM2/S AT 20 C

EXPLOSIVE PROPERTIES NO DATA AVAILABLE OXIDIZING PROPERTIES NO DATA AVAILABLE

OTHER SAFETY INFORMATION

MINIMUM IGNITION 0.14 MJ

ENERGY

CONDUCTIVITY < 1 MS/CM

RELATIVE VAPOR 1.11

DENSITY

SECTION 10. STABILITY AND REACTIVITY

REACTIVITY VAPORS MAY FORM EXPLOSIVE MIXTURE WITH AIR.

CHEMICAL STABILITY THE PRODUCT IS CHEMICALLY STABLE UNDER STANDARD

AMBIENT CONDITIONS.

POSSIBILITY OF

RISK OF EXPLOSION WITH:

HAZARDOUS REACTIONS OXIDIZING AGENTS

PERCHLORIC ACID

PERCHLORATES

SALTS OF OXYHALOGENIC ACIDS

CHROMIUM(VI) OXIDE HALOGEN OXIDES NITROGEN OXIDES NONMETALLIC OXIDES CHROMOSULFURIC ACID

CHLORATES HYDRIDES ZINC DIETHYL **HALOGENS**

POWDERED MAGNESIUM HYDROGEN PEROXIDE

NITRIC ACID SULFURIC ACID PERMANGANIC ACID SODIUM HYPOCHLORITE EXOTHERMIC REACTION WITH:

ACID HALIDES **ACID ANHYDRIDES** REDUCING AGENTS

ACIDS BROMINE **CHLORINE CHLOROFORM** MAGNESIUM

TETRACHLOROMETHANE

RISK OF IGNITION OR FORMATION OF INFLAMMABLE

GASES OR VAPOURS WITH:

FLUORINE

OXIDES OF PHOSPHORUS

RANEY-NICKEL

GENERATES DANGEROUS GASES OR FUMES IN CONTACT

WITH:

ALKALINE EARTH METALS

ALKALI METALS

CONDITIONS TO AVOID WARMING.

INCOMPATIBLE **MATERIALS**

NO DATA AVAILABLE

HAZARDOUS DECOMPOSITION

PRODUCTS

IN THE EVENT OF FIRE: SEE SECTION 5

SECTION 11. TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS

ACUTE TOXICITY ACUTE TOXICITY ESTIMATE ORAL - 100.1 MG/KG

(EXPERT JUDGMENT)

REMARKS: CLASSIFIED ACCORDING TO REGULATION (EU)

1272/2008, ANNEX VI (TABLE 3.1/3.2) SYMPTOMS: NAUSEA, VOMITING

ACUTE TOXICITY ESTIMATE INHALATION - 4 H - 3.1 MG/L -

VAPOR

(EXPERT JUDGMENT)

REMARKS: CLASSIFIED ACCORDING TO REGULATION (EU)

1272/2008, ANNEX VI (TABLE 3.1/3.2)

SYMPTOMS: IRRITATION SYMPTOMS IN THE

RESPIRATORY TRACT.

ACUTE TOXICITY ESTIMATE DERMAL - 300.1 MG/KG

(EXPERT JUDGMENT)

REMARKS: CLASSIFIED ACCORDING TO REGULATION (EU)

1272/2008, ANNEX VI (TABLE 3.1/3.2)

NO DATA AVAILABLE

SKIN - RABBIT

CORROSION/IRRITATION RESULT: NO SKIN IRRITATION

REMARKS: (ECHA)

REMARKS: DRYING-OUT EFFECT RESULTING IN ROUGH

AND CHAPPED SKIN.

SERIOUS EYE EYES - RABBIT

DAMAGE/EYE IRRITATION RESULT: NO EYE IRRITATION

REMARKS: (ECHA)

RESPIRATORY OR SKIN

SENSITISATION

SENSITISATION TEST: - GUINEA PIG

RESULT: NEGATIVE

(OECD TEST GUIDELINE 406)

GERM CELL MUTAGENICITY BASED ON AVAILABLE DATA THE CLASSIFICATION

CRITERIA ARE NOT MET. TEST TYPE: AMES TEST

TEST SYSTEM: SALMONELLA TYPHIMURIUM METABOLIC ACTIVATION: WITH AND WITHOUT

METABOLIC ACTIVATION

METHOD: OECD TEST GUIDELINE 471

RESULT: NEGATIVE

TEST TYPE: IN VITRO MAMMALIAN CELL GENE

MUTATION TEST

TEST SYSTEM: CHINESE HAMSTER LUNG CELLS METABOLIC ACTIVATION: WITH AND WITHOUT

METABOLIC ACTIVATION

METHOD: OECD TEST GUIDELINE 476

RESULT: NEGATIVE

TEST TYPE: MICRONUCLEUS TEST

SPECIES: MOUSE

CELL TYPE: BONE MARROW

APPLICATION ROUTE: INTRAPERITONEAL INJECTION

METHOD: OECD TEST GUIDELINE 474

RESULT: NEGATIVE

CARCINOGENICITY

DID NOT SHOW CARCINOGENIC EFFECTS IN ANIMAL EXPERIMENTS.

IARC: NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS

GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS

PROBABLE, POSSIBLE OR CONFIRMED HUMAN

CARCINOGEN BY IARC.

NTP: NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS

GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS A

KNOWN OR ANTICIPATED CARCINOGEN BY NTP.

OSHA: NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS

GREATER THAN OR EQUAL TO 0.1% IS ON OSHA S LIST OF

REGULATED CARCINOGENS.

REPRODUCTIVE TOXICITY BASED ON AVAILABLE DATA THE CLASSIFICATION

CRITERIA ARE NOT MET.

SPECIFIC TARGET ORGAN

TOXICITY - SINGLE

CAUSES DAMAGE TO ORGANS. - EYES, CENTRAL

NERVOUS SYSTEM

EXPOSURE REMARKS: CLASSIFIED ACCORDING TO REGULATION (EU)

1272/2008, ANNEX VI (TABLE 3.1/3.2)

SPECIFIC TARGET ORGAN

TOXICITY - REPEATED

EXPOSURE

NO DATA AVAILABLE

ASPIRATION HAZARD NO DATA AVAILABLE

ADDITIONAL INFORMATION

RTECS: PC1400000

ACUTE EFFECTS: HEADACHE, DIZZINESS, DROWSINESS, NARCOSIS, BLINDNESS, IMPAIRMENT OF VISION, IRRITANT EFFECTS, NAUSEA, VOMITING, AGITATION, SPASMS, INEBRIATION, COMA

DRYING-OUT EFFECT RESULTING IN ROUGH AND

CHAPPED SKIN.

TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

SYSTEMIC EFFECTS:

ACIDOSIS

DROP IN BLOOD PRESSURE

AGITATION, SPASMS

INEBRIATION

DIZZINESS

DROWSINESS

HEADACHE

IMPAIRMENT OF VISION

BLINDNESS NARCOSIS COMA

SYMPTOMS MAY BE DELAYED.

DAMAGE TO:

LIVER

KIDNEY

CARDIAC

IRREVERSIBLE DAMAGE OF THE OPTICAL NERVE.

OTHER DANGEROUS PROPERTIES CAN NOT BE EXCLUDED.

THIS SUBSTANCE SHOULD BE HANDLED WITH PARTICULAR CARE.

STOMACH - IRREGULARITIES - BASED ON HUMAN EVIDENCE

SECTION 12. ECOLOGICAL INFORMATION

TOXICITY TO FISH FLOW-THROUGH TEST LC50 - LEPOMIS MACROCHIRUS

(BLUEGILL) - 15,400.0 MG/L - 96 H

(US-EPA)

TOXICITY TO DAPHNIA AND SEMI-STATIC TEST EC50 - DAPHNIA MAGNA (WATER

OTHER AQUATIC FLEA) - 18,260 MG/L - 96 H INVERTEBRATES (OECD TEST GUIDELINE 202)

TOXICITY TO ALGAE STATIC TEST ERC50 - PSEUDOKIRCHNERIELLA

SUBCAPITATA (GREEN ALGAE) - CA. 22,000.0 MG/L - 96 H

(OECD TEST GUIDELINE 201)

TOXICITY TO BACTERIA STATIC TEST IC50 - ACTIVATED SLUDGE - > 1,000 MG/L - 3

Н

(OECD TEST GUIDELINE 209)

TOXICITY TO FISH (CHRONIC NOEC - ORYZIAS LATIPES (ORANGE-RED KILLIFISH) -

TOXICITY) 7,900 MG/L - 200 H

REMARKS: (EXTERNAL MSDS)

PERSISTENCE AND DEGRADABILITY

BIODEGRADABILITY RESULT: 99 % - READILY BIODEGRADABLE.

(OECD TEST GUIDELINE 301D)

BIOCHEMICAL OXYGEN

DEMAND (BOD)

600 - 1,120 MG/G

REMARKS: (IUCLID)

CHEMICAL OXYGEN 1,420 MG/G

DEMAND (COD)

REMARKS: (IUCLID)

THEORETICAL OXYGEN 1,500 MG/G

DEMAND

REMARKS: (LIT.)

RATIO BOD/THBOD 76 %

REMARKS: CLOSED BOTTLE TEST(IUCLID)

BIOACCUMULATIVE POTENTIAL

BIOACCUMULATION CYPRINUS CARPIO (CARP) - 72 D

AT 20 C - 5 MG/L(METHANOL)

BIOCONCENTRATION FACTOR (BCF): 1.0

MOBILITY IN SOIL WILL NOT ADSORB ON SOIL.

RESULTS OF PBT AND VPVB PBT/VPVB ASSESSMENT NOT AVAILABLE AS CHEMICAL

ASSESSMENT NOT REQUIRED/NOT CONDUCTED.

OTHER ADVERSE EFFECTS

ADDITIONAL ECOLOGICAL AVOID RELEASE TO THE ENVIRONMENT.

INFORMATION

STABILITY IN WATER AT 19 C83 - 91 % - 72 H

REMARKS: HYDROLYZES ON CONTACT WITH

WATER.HYDROLYZES READILY. - 2.2 YR

REMARKS: REACTION WITH HYDROXYL

RADICALS(IUCLID)

SECTION 13. DISPOSAL CONSIDERATIONS

WASTE TREATMENT METHODS

PRODUCT WASTE MATERIAL MUST BE DISPOSED OF IN

ACCORDANCE WITH THE NATIONAL AND LOCAL

REGULATIONS.

LEAVE CHEMICALS IN ORIGINAL CONTAINERS. NO

MIXING WITH OTHER WASTE.

CONTAMINATED PACKAGING

DISPOSE OF AS UNUSED PRODUCT.

SECTION 14. TRANSPORT INFORMATION

DOT (US)

PROPER SHIPPING NAME: METHANOL

UN NUMBER: 1230 CLASS: 3 PACKING GROUP: II

REPORTABLE QUANTITY 5000 LBS

(RQ):

POISON INHALATION NO

HAZARD:

IMDG

PROPER SHIPPING NAME: METHANOL

UN NUMBER: 1230 CLASS: 3 (6.1) PACKING GROUP: II EMS-NO: F-E, S-D

IATA

PROPER SHIPPING NAME: METHANOL

UN NUMBER: 1230 CLASS: 3 (6.1) PACKING GROUP: II

SECTION 15. REGULATORY INFORMATION

SARA 302 COMPONENTS THIS MATERIAL DOES NOT CONTAIN ANY COMPONENTS

WITH A SECTION 302 EHS TPQ.

SARA 313 COMPONENTS

THE FOLLOWING COMPONENTS ARE SUBJECT TO REPORTING LEVELS ESTABLISHED

BY SARA TITLE III, SECTION 313:

CAS-NO. REVISION DATE

Methyl alcohol 67-56-1 07-01-2007

MASSACHUSETTS RIGHT TO KNOW COMPONENTS

CAS-NO. REVISION DATE

Methyl alcohol 67-56-1 07-01-2007

PENNSYLVANIA RIGHT TO KNOW COMPONENTS

CAS-NO. REVISION DATE

Methyl alcohol 67-56-1 07-01-2007

CALIFORNIA PROP. 65 COMPONENTS

WHICH IS/ARE KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR

OTHER REPRODUCTIVE HARM.

CAS-NO. REVISION DATE

Methyl alcohol 67-56-1 03-16-2012

SECTION 16. OTHER INFORMATION

FULL TEXT OF H-STATEMENTS REFERRED TO UNDER SECTIONS 2 AND 3.

H225 HIGHLY FLAMMABLE LIQUID AND VAPOUR.

H301 + H311 + H331 TOXIC IF SWALLOWED, IN CONTACT WITH SKIN OR IF INHALED.

H370 CAUSES DAMAGE TO ORGANS (EYES, CENTRAL NERVOUS

SYSTEM).

MSDS LEGEND

MW: MOLECULAR WEIGHT MF: MOLECULAR FORMULA

VOC: VOLATILE ORGANIC COMPOUNDS

ACGIH: AMERICAN CONFERENCE OF GOVERNMENENTAL INDUSTRIAL

HYGINISTS

CAS: CHEMICAL ABSTRACTS SERIVE REGISTRY NUMBER
OSHA: OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

PEL: PERMISSIBLE EXPOSURE LIMIT (OSHA)
TLV: THRESHOLD LIMIT VALUE (ACGIH)

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