

PHOENIX INDUSTRIES INC -- SPECIALLY DENATURED ALCOHOL 3A -- 6810-00-577-4889

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

Product ID:SPECIALLY DENATURED ALCOHOL 3A

MSDS Date:12/01/2000

FSC:6810

NIIN:00-577-4889

Status Code:A

MSDS Number: CLHNW

=== Responsible Party ===

Company Name:PHOENIX INDUSTRIES INC

Address:1519 CHAMBERLAYNE PARKWAY

City:RICHMOND

State:VA

ZIP:23222

Country:US

Info Phone Num:804-264-5183/FAX: 264-5535

Emergency Phone Num:804-264-5183

Chemtrec Ind/Ph

one:(800)424-9300

CAGE:0YED2

=== Contractor Identification ===

Company Name:PHOENIX INDUSTRIES INC

Address:1519 CHAMBERLAYNE PARKWAY

Box:City:RICHMOND

State:VA

ZIP:23222

Country:US

Phone:804-264-5183/FAX: 264-5535

Contract Num:SP0450-01-M-ZB07

CAGE:0YED2

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

Ingred Name:ETHYL ALCOHOL

CAS:64-17-5

RTECS #:KQ6300000

Minumum % Wt:90.

Maxumum % Wt:95.

OSHA PEL:1900 MG/M3;1000 PPM

ACGIH TLV:1880 MG/M3;1000 PPM

Ingred Name:METHYL ALCOH

OL
CAS:67-56-1
RTECS #:PC1400000
Minumum % Wt:1.
Maxumum % Wt:5.
OSHA PEL:100 PPM
ACGIH TLV:262 MG/M3;200 PPM
ACGIH STEL:328 MG/M3;250 PPM S
EPA Rpt Qty:5000 LBS
DOT Rpt Qty:5000 LBS

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

LD50 LC50 Mixture:ORAL, RAT, LD50:7,060 MG/KG (ETHANOL)
Health Hazards Acute and Chronic:INHALATION: CAUSES IRRITATION TO
MUCOUS MEMBRANES OF UPPER RESPIRATORY TRACT. PROLONGED EXPOSURES TO
HIGH CONCENTRATIONS MAY CAUSE DROWSINESS, LOSS O
F APPETITE,
INABILITY TO CONCENTRATE. INGESTION: CA USES HEADACHES, GASTRITIS,
INTOXICATION, BLINDNESS AND IN ACUTE CASES, DEATH. SKIN CONTACT:
CAUSES IRRITATION, CRACKING, FLAKING DUE TO DEFATting. EYE
CONTACT:CAUSES IRRITATION. SPLASHES CAUSE TEMPOR ARY PAIN, BLURRED
VISION. CHRONIC EXPOSURE: PROLONGED CONTACT CAUSES DRYING, CRACKING
OF SKIN. MAY AFFECT NERVOUS SYSTEM, LIVER, BLOOD, REPRODUCTIVE
SYSTEM. CONTINUED INGESTION OF SMALL AMOUNTS COULD CAUSE
BLINDNESS

Effects of Overexposure:INHALATION: IRRITATION OF MUCOUS MEMBRANES OF
UPPER RESPIRATORY TRACT, DROWSINESS, LOSS OF APPETITE, INABILITY TO
CONCENTRATE. INGESTION: HEADACHES, GASTRITIS, INTOXICATION,
BLINDNESS , DEATH. SKIN CO N TACT: IRRITATION, CRACKING, FLAKING,
DEFATting. EYE CONTACT: IRRITATION, TEMPORARY PAIN, BLURRED VISION.
CHRONIC: DRYING, CRACKING OF SKIN, NERVOUS SYSTEM EFFECTS, LIVER,
BLOOD, REPRODUCTIVE SYSTEM E FFECTS, BLINDNESS.

Medical Cond Aggravated by Ex
posure:PERSONS WITH PRE-EXISTING SKIN
DISORDERS OR EYE PROBLEMS OR IMPAIRED LIVER OR KIDNEY FUNCTION MAY
BE MORE SUSCEPTIBLE TO THE EFFECTS OF THE SUBSTANCE.

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

First Aid:INHALATION: MOVE TO FRESH AIR. IF NOT BREATHING, GIVE
ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.
CALL A PHYSICIAN. INGESTION: INDUCE VOMITING IMMEDIATELY AS
DIRECTED BY MEDICAL PE RSONNEL. NEVER GIVE ANYTHING BY MOUTH TO

AN
UNCONSCIOUS PERSON. SKIN CONTACT: REMOVE CONTAMINATED CLOTHING. WASH SKIN WITH SOAP OR MILD DETERGENT AND WATER FOR 15 MINUTES. GET MEDICAL ATTENTION IF IRRITATION DEVELOPS OR PERSISTS. EYE CONTACT: FLUSH WITH WATER FOR 15 MINUTES, LIFTING LOWER AND UPPER EYELIDS OCCASIONALLY. GET MEDICAL ATTENTION.

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

Flash Point Method:CC
Flash Point:=12.8C, 55.F
Autoignition Temp:=422.C, 791.6F
Lower Limits:3.3
Upper
Limits:19
Extinguishing Media:WATER SPRAY, DRY CHEMICAL, ALCOHOL FOAM, OR CARBON DIOXIDE. WATER MAY BE INEFFECTIVE.
Fire Fighting Procedures:WEAR FULL PROTECTIVE CLOTHING AND NIOSH-APPROVED SCBA WITH FULL FACEPIECE OPERATED IN THE PRESSURE DEMAND OR OTHER POSITIVE PRESSURE MODE. WATER SPRAY CAN BE USED TO EXTINGUISH FIRES AND COOL FIRE-EXPOSED CONTAINERS. WATER MAY BE USED TO FLUSH SPILLS AWAY FROM EXPOSURES AND TO DILUTE SPILLS TO NON-FLAMMABLE MIXTURES.
Unusual Fire/Explosion Hazard:FLAMMABLE LIQUID AND VAPOR! DANGEROUS FIRE HAZARD WHEN EXPOSED TO HEAT OR FLAME. ABOVE FLASH POINT, VAPOR-AIR MIXTURES ARE EXPLOSIVE WITHIN FLAMMABLE LIMITS NOTED ABOVE. VAPORS CAN FLOW ALONG SURFACES TO DISTANT IGNITION SOURCES AND FLASH BACK. SEALED CONTAINERS MAY RUPTURE WHEN HEATED. SENSITIVE TO STATIC DISCHARGE.

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

Spill Release Procedures:VENTILATE AREA. REMOVE SOURCES OF IGNITION. WEAR PERSONAL PROTECTIVE EQUIPMENT. ISOLATE HAZARD AREA. CONTAIN AND RECOVER LIQUID WHEN POSSIBLE. USE NON-SPARKING TOOLS AND EQUIPMENT. COLLECT LIQUID IN AN APPROPRIATE CONTAINER OR ABSORB WITH AN INERT MATERIAL (E.G. VERMICULITE, DRY SAND, EARTH) AND PLACE IN A WASTE CONTAINER. DO NOT FLUSH TO SEWER! U.S. REGULATIONS (CERCLA) (CONTD. SEE "FEDERAL REG")

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

Handling and Storage Precautions:PROTECT AGAINST PHYSIC

AL DAMAGE. STORE

IN A COOL, DRY, WELL-VENTILATED LOCATION, AWAY FROM AREAS WHERE FIRE HAZARD MAY BE ACUTE. OUTSIDE OR DETACHED STORAGE IS PREFERRED. SEPARATE FROM INCOMPATIBLES. CONTAINERS SHOULD BE BONDED AND GROUNDED FOR TRANSFERS TO AVOID STATIC SPARKS.

Other Precautions:STORAGE AND USE AREAS SHOULD BE NO SMOKING AREA. USE NON-SPARKING TYPE TOOLS AND EQUIPMENT, INCLUDING EXPLOSION PROOF VENTILATION. CONTAINERS OF THIS MATERIAL MAY BE HAZARDOUS WHEN EMPTY SINCE TH

EY RE TAIN PRODUCT RESIDUES (VAPORS, LIQUID); OBSERVE ALL WARNINGS AND PRECAUTIONS LISTED FOR THE PRODUCT.

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

Respiratory Protection:(NIOSH APPROVED): IF THE EXPOSURE LIMIT IS EXCEEDED, WEAR A SUPPLIED AIR, FULL-FACEPIECE RESPIRATOR, AIRLINED HOOD, OR FULL-FACEPIECE SELF-CONTAINED BREATHING APPARATUS.

Ventilation:A SYSTEM OF LOCAL AND/OR GENERAL EXHAUST IS RECOMMENDED TO KEEP EMPLOYEE EXPOSURES BELOW THE AIRBORNE EXPOSURE LIMITS.

Protective Gloves:WEAR IMPERVIOUS GLOVES.

Eye Protection:USE CHEMICAL SAFETY GOGGLES AND/OR FULL FACE SHIELD WHERE SPLASHING IS POSSIBLE

Other Protective Equipment:MAINTAIN EYE WASH FOUNTAIN AND QUICK-DRENCH FACILITY IN WORK AREA. WEAR IMPERVIOUS PROTECTIVE CLOTHING, INCLUDING BOOTS, LAB COAT, APRON OR COVERALLS, AS APPROPRIATE TO PREVENT SKIN CONTACT.

Supplemental Safety and Health

LOCAL EXHAUST VENTILATION IS GENERALLY PREFERRED BECAUSE IT CAN CONTROL THE

EMISSIONS OF THE CONTAMINANT AT ITS SOURCE, PREVENTING DISPERSION OF IT INTO THE GENERAL WORK AREA. PLEASE REFER TO THE ACGI H DOCUMENT, "INDUSTRIAL VENTILATION, A MANUAL OF RECOMMENDED PRACTICES", MOST RECENT EDITION, FOR DETAILS.

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

HCC:F2

Boiling Pt:=78.C, 172.4F

B.P. Text:(ETHANOL)

Melt/Freeze Pt:=-114.C, -173.2F

M.P/F.P Text:(ETHANOL)

Vapor Pres:40 MM HG @ (66F)(ETHANOL)

Spec Gravity:0.79 @ 20C/4C

pH:NO INFORMAT

TION

Solubility in Water:MISCIBLE IN WATER.

Appearance and Odor:CLEAR, COLORLESS LIQUID; MILD PLEASANT WHISKEY-LIKE ODOR.

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

Stability Indicator/Materials to Avoid:YES

STRONG OXIDANTS, SILVER SALTS, ACID CHLORIDES, ALKALI METALS, METAL HYDRIDES, HYDRAZINE, AND MANY OTHER SUBSTANCES.

Stability Condition to Avoid:STABLE UNDER ORDINARY CONDITIONS OF USE AND STORAGE. HEAT, FLAMES, IGNITION SOURCES AND INCOMPATIBLES.

Hazar

dous Decomposition Products:CARBON DIOXIDE AND CARBON MONOXIDE MAY FORM WHEN HEATED TO DECOMPOSITION.

Conditions to Avoid Polymerization:WILL NOT OCCUR.

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

Toxicological Information:ETHYL ALCOHOL: ORAL, RAT, LD50: 7,060 MG/KG; INHALATION, RAT, LC50: 20,000 PPM/ 10 H; IRRITATION DATA, EYE, RABBIT: 500 MG/24H SEVERE; INVESTIGATED AS A TUMORIGEN, MUTAGEN, REPRODUCTIVE EFFECTOR. METH YL ALCOHOL: ORAL, RAT, LD50:5,628

MG/KG; INHALATION, RAT, LC50: 64,000 PPM/4H; SKIN, RABBIT, LD50: 15,800 MG/KG; IRRITATION DATA, SKIN, RABBIT: 20 MG/24H, MODERATE; INVESTIGATED AS A TUMORIGEN, MUTAGE N, REPRODUCTIVE EFFECTOR. REPRODUCTIVE TOXICITY: ETHANOL HAS BEEN LINKED TO BIRTH DEFECTS IN HUMANS. CARCINOGENICITY: ETHANOL HAS BEEN LINKED TO CANCER IN HUMANS. CHRONIC ETHANOL INGESTION IS ASSOCIAT ED WITH .(CONTD. SEE "SARA I I I")

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

Ecological:ENVIRONMENTAL FATE: ETHANOL: WHEN RELEASED IN SOIL, MATERIAL EXPECTED TO READILY BIODEGRADE; EXPECTED TO LEACH INTO GROUNDWATER; EXPECTED TO QUICKLY EVAPORATE. WHEN RELEASED IN WATER, THIS MATERIAL MA Y EVAPORATE TO A MODERATE EXTENT; NOT EXPECTED TO SIGNIFICANTLY BIOACCUMULATE. WHEN RELEASED IN AIR: THIS MATERIAL IS EXPECTED TO BE READILY DEGRADED BY REACTION WITH PHOTOCHEMICALLY PRODUCED HYDROXYL RADICALS.; EXPECTED TO BE READILY REMOVED FROM THE ATMOSP

HERE BY DRY AND WET DEPOSITION; EXPECTED TO HAVE A
HALF-LIFE OF 1 TO 10 DAYS. PRODUCT IS NOT EXPECTED TO BE TOXIC TO
AQUATIC LIFE. LC50/96-HOUR VALUES FOR FISH ARE OVER 100 MG/L.

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

Waste Disposal Methods: SPILLS NOT RECOVERED SHOULD BE SENT AS WASTE TO
RCRA APPROVED INCINERATOR OR WASTE FACILITY. PROCESSING, USE,
CONTAMINATION OF PRODUCT MAY CHANGE WASTE MANAGEMENT OPTION. STATE
AND LOCAL DISPOSAL REGULATIONS
MAY DIFFER FROM FEDERAL
REGULATIONS. DISPOSE OF CONTAINER AND UNUSED CONTENTS IN ACCORDANCE
WITH FEDERAL, STATE, AND LOCAL REQUIREMENTS.

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

Transport Information: DOMESTIC (LAND, D.O.T.): PROPER SHIPPING NAME:
ETHANOL SOLUTION (SD31 ALCOHOL); HAZARD CLASS: 3; UN 1170; PKG: I
I. ICAO (AIR): PROPER SHIPPING NAME: ETHANOL SOLUTION (SD3A
ALCOHOL); HAZARD CLASS: 3; UN 1170; PKG: I I.

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

SARA Title III Information: SARA 302: ETHYL ALCOHOL(64-17-5) AND METHYL
ALCOHOL(67-56-1): NO RQ AND TPQ REGULATIONS. SARA 313: ETHYL
ALCOHOL: LIST - NO AND CHEMICAL CATG.: NO; METHYL ALCOHOL: LIST -
YES; CHEMICAL CATG. - NO. (CONTD. FROM TOXICOLOGICAL) LIVER
CANCER. MOST INDUSTRIAL ETHANOL CONTAINS DENATURANTS THAT RENDER IT
UNDESIRABLE TO DRINK. CANCER LISTS: INGREDIENT: ETHYL ALCOHOL
(64-17-5): NTP CARCINOGEN: KNOWN - NO; ANT
ICIPATED - NO; IARC
CATEGORY - NONE. METHYL ALCOHOL (67-56-1): NTP CARCINOGEN : KNOWN-
NO; NTP ANTICIPATED - NO; IARC CATEGORY - NONE.
Federal Regulatory Information: ETHYL ALCOHOL (64-17-5): RCRA, CERCLA-
NO; TSCA - 261.33 - NO; 8(D) - NO; METHYL ALCOHOL (67-56-1): RCRA,
CERCLA - 5,000; TSCA - 261.33 -U154; 8(D) - NO. (CONTD. FROM
"SPILL RELEASE") REPORTING SPILLS AND RELEASES TO SOIL, WATER, AND
AIR IN EXCESS OF REPORTABLE QUANTITIES. THE TOLL FREE NUMBER FOR TH

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

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