Chem-Impex International Inc.

Tel: (630) 766-2112
E-mail: sales@chemimpex.com
Shipping and Correspondence:
935 Dillon Drive
Wood Dale, IL 60191 USA

Fax: (630) 766-2218
Web site: www.chemimpex.com
Manufacturing site:
825 Dillon Drive
Wood Dale, IL 60191 USA

SAFETY DATA SHEET

SECTION 1. CHEMICAL IDENTIFICATION

CATALOG #: 34428

NAME: Isobutyl alcohol

SYNONYMS: 2-Methyl-1-propanol

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 3), H226 SKIN IRRITATION (CATEGORY 2), H315 SERIOUS EYE DAMAGE (CATEGORY 1), H318

SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (CATEGORY 3), RESPIRATORY SYSTEM, CENTRAL NERVOUS SYSTEM, H335, H336

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)

| H226 | FLAMMABLE LIQUID AND VAPOUR. |
|------|-----------------------------------|
| H315 | CAUSES SKIN IRRITATION. |
| H318 | CAUSES SERIOUS EYE DAMAGE. |
| H335 | MAY CAUSE RESPIRATORY IRRITATION. |
| | |

| 11310 | Chooses serious et e brivinge. |
|----------------------|---|
| H335 | MAY CAUSE RESPIRATORY IRRITATION. |
| H336 | MAY CAUSE DROWSINESS OR DIZZINESS. |
| | |
| PRECAUTIONARY STAT | TEMENT(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. |
| P261 | AVOID BREATHING DUST/ FUME/ GAS/ MIST/ VAPOURS/ |
| | SPRAY. |
| P264 | WASH SKIN THOROUGHLY AFTER HANDLING. |
| P271 | USE ONLY OUTDOORS OR IN A WELL-VENTILATED AREA |
| P280 | WEAR PROTECTIVE GLOVES/ EYE PROTECTION/ FACE |
| | PROTECTION. |
| P303 + P361 + P353 | IF ON SKIN (OR HAIR): REMOVE/ TAKE OFF IMMEDIATELY |
| | ALL CONTAMINATED CLOTHING. RINSE SKIN WITH WATER/ |
| | SHOWER. |
| P304 + P340 + P312 | IF INHALED: REMOVE PERSON TO FRESH AIR AND KEEP |
| | COMFORTABLE FOR BREATHING. CALL A POISON |
| | CENTER/DOCTOR IF YOU FEEL UNWELL. |
| P305 + P351 + P338 + | IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL |
| P310 | MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND |
| | EASY TO DO. CONTINUE RINSING. IMMEDIATELY CALL A |
| | POISON CENTER/DOCTOR. |
| P332 + P313 | IF SKIN IRRITATION OCCURS: GET MEDICAL ADVICE/ |
| | ATTENTION. |
| 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: $C_4H_{10}O$

MW: 74.12

CAS-NO. 78-83-1

PURITY: 99 - 100% (GC)

HAZARDOUS COMPONENTS

| COMPONENT | CLASSIFICATION | CONCENTRATION |
|------------------|------------------------------|---------------|
| Isobutyl alcohol | | |
| | FLAM. LIQ. 3; SKIN IRRIT. 2; | <= 100 % |
| | EYE DAM. 1; STOT SE 3; H226, | |
| | H315, H318, H335, H336 | |

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 CONSULT A PHYSICIAN. SHOW THIS SAFETY DATA

SHEET TO THE DOCTOR IN ATTENDANCE.MOVE OUT

OF DANGEROUS AREA.

IF INHALED IF BREATHED IN, MOVE PERSON INTO FRESH AIR. IF

NOT BREATHING, GIVE ARTIFICIAL RESPIRATION.

CONSULT A PHYSICIAN.

IN CASE OF SKIN WASH OFF WITH SOAP AND PLENTY OF WATER.

CONTACT CONSULT A PHYSICIAN.

IN CASE OF EYE RINSE THOROUGHLY WITH PLENTY OF WATER FOR AT

CONTACT LEAST 15 MINUTES AND CONSULT A PHYSICIAN.

IF SWALLOWED DO NOT INDUCE VOMITING. NEVER GIVE ANYTHING

BY MOUTH TO AN UNCONSCIOUS PERSON. RINSE MOUTH WITH WATER. CONSULT A PHYSICIAN.

MOST IMPORTANT SYMPTOMS AND

EFFECTS, BOTH ACUTE AND DELAYED

THE MOST IMPORTANT KNOWN SYMPTOMS AND EFFECTS ARE DESCRIBED IN THE LABELLING (SEE

SECTION 2.2) AND/OR IN SECTION 11

INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED NO DATA AVAILABLE

SECTION 5. FIRE AND EXPLOSION DATA

EXTINGUISHING MEDIA

SUITABLE USE WATER SPRAY, ALCOHOL-RESISTANT FOAM, DRY

EXTINGUISHING MEDIA CHEMICAL OR CARBON DIOXIDE.

SPECIAL HAZARDS ARISING FROM THE

SUBSTANCE OR MIXTURE

NO DATA AVAILABLE

ADVICE FOR WEAR SELF CONTAINED BREATHING APPARATUS FOR

FIREFIGHTERS FIRE FIGHTING IF NECESSARY.

FURTHER INFORMATION USE WATER SPRAY TO COOL UNOPENED CONTAINERS.

SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSONAL
PRECAUTIONS,
PROTECTIVE
EQUIPMENT AND
EMERGENCY
PROCEDURES

USE PERSONAL PROTECTIVE EQUIPMENT. AVOID BREATHING VAPOURS, MIST OR GAS. ENSURE ADEQUATE VENTILATION. REMOVE ALL SOURCES OF IGNITION. EVACUATE PERSONNEL TO SAFE AREAS. BEWARE OF VAPOURS ACCUMULATING TO FORM

EXPLOSIVE CONCENTRATIONS. VAPOURS CAN

ACCUMULATE IN LOW AREAS.

FOR PERSONAL PROTECTION SEE SECTION 8.

ENVIRONMENTAL PRECAUTIONS

PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO. DO NOT LET PRODUCT ENTER DRAINS.

METHODS AND MATERIALS FOR CONTAIN SPILLAGE, AND THEN COLLECT WITH AN ELECTRICALLY PROTECTED VACUUM CLEANER OR BY

CONTAINMENT AND CLEANING UP

WET-BRUSHING AND PLACE IN CONTAINER FOR DISPOSAL ACCORDING TO LOCAL REGULATIONS (SEE

SECTION 13).

REFERENCE TO OTHER **SECTIONS**

FOR DISPOSAL SEE SECTION 13.

SECTION 7. HANDLING AND STORAGE

HANDLING

PRECAUTIONS FOR SAFE AVOID CONTACT WITH SKIN AND EYES. AVOID

INHALATION OF VAPOUR OR MIST.

KEEP AWAY FROM SOURCES OF IGNITION - NO

SMOKING. TAKE MEASURES TO PREVENT THE BUILD

UP OF ELECTROSTATIC CHARGE. FOR PRECAUTIONS SEE SECTION 2.2.

CONDITIONS FOR SAFE STORAGE, INCLUDING

ANY INCOMPATIBILITIES

KEEP CONTAINER TIGHTLY CLOSED IN A DRY AND WELL-VENTILATED PLACE. CONTAINERS WHICH ARE OPENED MUST BE CAREFULLY RESEALED AND KEPT

UPRIGHT TO PREVENT LEAKAGE.

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

| COMPONENT | CAS-NO. | VALUE | CONTROL | BASIS |
|------------------|---------|------------------------------------|-------------------|--------------------------|
| | | | PARAMETERS | |
| Isobutyl alcohol | 78-83-1 | TWA | 50 PPM | USA. ACGIH THRESHOLD |
| | | | | LIMIT VALUES (TLV) |
| | REMARKS | EYE IRRITATION | | |
| | | SKIN IRRITATION | | |
| | | TWA | 50.000000 PPM | USA. ACGIH THRESHOLD |
| | | | | LIMIT VALUES (TLV) |
| | | EYE IRRITATI | ON | |
| | | SKIN IRRITATION | | |
| | | TWA | 100.000000 PPM | USA. OCCUPATIONAL |
| | | | 300.000000 | EXPOSURE LIMITS (OSHA) - |
| | | | MG/M3 | TABLE Z-1 LIMITS FOR AIR |
| | | | | CONTAMINANTS |
| | | THE VALUE IN MG/M3 IS APPROXIMATE. | | |

| TWA | 50.000000 PPM | USA. NIOSH |
|------------------------------------|---------------|--------------------------|
| | 150.000000 | RECOMMENDED EXPOSURE |
| | MG/M3 | LIMITS |
| TWA | 50 PPM | USA. NIOSH |
| | 150 MG/M3 | RECOMMENDED EXPOSURE |
| | | LIMITS |
| TWA | 100 PPM | USA. OCCUPATIONAL |
| | 300 MG/M3 | EXPOSURE LIMITS (OSHA) - |
| | | TABLE Z-1 LIMITS FOR AIR |
| | | CONTAMINANTS |
| THE VALUE IN MG/M3 IS APPROXIMATE. | | |
| TWA | 50 PPM | USA. OSHA - TABLE Z-1 |
| | 150 MG/M3 | LIMITS FOR AIR |
| | | CONTAMINANTS - 1910.1000 |
| PEL | 50 PPM | CALIFORNIA PERMISSIBLE |
| | 150 MG/M3 | EXPOSURE LIMITS FOR |
| | | CHEMICAL CONTAMINANTS |

EXPOSURE CONTROLS

APPROPRIATE ENGINEERING CONTROLS

HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICE. WASH HANDS BEFORE BREAKS AND AT THE END OF WORKDAY.

PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE PROTECTION TIGHT

TIGHTLY FITTING SAFETY GOGGLES. FACESHIELD (8-INCH MINIMUM). USE EQUIPMENT FOR EYE PROTECTION TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR EN 166(EU).

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.

SPLASH CONTACT

MATERIAL: NITRILE RUBBER

MINIMUM LAYER THICKNESS: 0.2 MM

BREAK THROUGH TIME: 30 MIN

MATERIAL TESTED: DERMATRIL P (KCL 743, SIZE M)

IF USED IN SOLUTION, OR MIXED WITH OTHER SUBSTANCES, AND UNDER CONDITIONS WHICH DIFFER FROM EN 374, CONTACT THE SUPPLIER OF THE CE APPROVED GLOVES. THIS RECOMMENDATION IS ADVISORY ONLY AND MUST BE EVALUATED BY AN INDUSTRIAL HYGIENIST AND SAFETY OFFICER FAMILIAR WITH THE SPECIFIC SITUATION OF ANTICIPATED USE BY OUR CUSTOMERS. IT SHOULD NOT BE CONSTRUED AS OFFERING AN APPROVAL FOR ANY SPECIFIC USE SCENARIO.

BODY PROTECTION

COMPLETE SUIT PROTECTING AGAINST CHEMICALS, FLAME RETARDANT ANTISTATIC PROTECTIVE CLOTHING. THE TYPE OF PROTECTIVE EQUIPMENT MUST BE SELECTED ACCORDING TO THE CONCENTRATION AND AMOUNT OF THE DANGEROUS SUBSTANCE AT THE SPECIFIC WORKPLACE.

RESPIRATORY PROTECTION

WHERE RISK ASSESSMENT SHOWS AIR-PURIFYING RESPIRATORS ARE APPROPRIATE USE A FULL-FACE RESPIRATOR WITH MULTIPURPOSE COMBINATION (US) OR TYPE ABEK (EN 14387) RESPIRATOR CARTRIDGES AS A BACKUP TO ENGINEERING CONTROLS. IF THE RESPIRATOR IS THE SOLE MEANS OF PROTECTION, USE A FULL-FACE SUPPLIED AIR RESPIRATOR. USE RESPIRATORS AND COMPONENTS TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR CEN (EU).

CONTROL OF ENVIRONMENTAL EXPOSURE PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO. DO NOT LET PRODUCT ENTER DRAINS.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE Clear, colorless mobile liquid

ODOUR ALCOHOL-LIKE
ODOUR THRESHOLD NO DATA AVAILABLE
PH NO DATA AVAILABLE

MELTING

POINT/FREEZING POINT

INITIAL BOILING POINT 107 - 109 °C

AND BOILING RANGE

FLASH POINT 28 °C EVAPORATION RATE 0.6

FLAMMABILITY (SOLID, NO DATA AVAILABLE

GAS)

UPPER/LOWER UPPER EXPLOSION LIMIT: 10.6 %(V) FLAMMABILITY OR LOWER EXPLOSION LIMIT: 1.7 %(V)

EXPLOSIVE LIMITS

VAPOUR PRESSURE 8 HPA (6 MMHG) AT 20 C

VAPOUR DENSITY 2.55

RELATIVE DENSITY

WATER SOLUBILITY 70 G/L AT 20 C - COMPLETELY MISCIBLE

PARTITION COEFFICIENT: LOG POW: 1 AT 25 C

N- OCTANOL/WATER

AUTO-IGNITION 427 C

TEMPERATURE

DECOMPOSITION NO DATA AVAILABLE

TEMPERATURE

VISCOSITY 4.00 MM2/S AT 20 C EXPLOSIVE PROPERTIES NO DATA AVAILABLE OXIDIZING PROPERTIES NO DATA AVAILABLE

OTHER SAFETY INFORMATION

SURFACE TENSION 69.7 MN/M AT 20 C

RELATIVE VAPOUR 2.55

DENSITY

SECTION 10. STABILITY AND REACTIVITY

REACTIVITY NO DATA AVAILABLE

CHEMICAL STABILITY STABLE UNDER RECOMMENDED STORAGE

CONDITIONS.

POSSIBILITY OF HAZARDOUS REACTIONS VAPOURS MAY FORM EXPLOSIVE MIXTURE WITH AIR.

CONDITIONS TO AVOID HEAT, FLAMES AND SPARKS

INCOMPATIBLE STRONG OXIDIZING AGENTS, ACID CHLORIDES, ACID MATERIALS ANHYDRIDES STRONG OXIDIZING AGENTS, ACID

CHLORIDES, ACID ANHYDRIDES

HAZARDOUS DECOMPOSITION PRODUCTS HAZARDOUS DECOMPOSITION PRODUCTS FORMED UNDER FIRE CONDITIONS. - CARBON OXIDES OTHER DECOMPOSITION PRODUCTS - NO DATA

AVAILABLE

IN THE EVENT OF FIRE: SEE SECTION 5

SECTION 11. TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS

ACUTE TOXICITY LD50 ORAL - RAT - FEMALE - 3,350 MG/KG

LC50 INHALATION - RAT - MALE AND FEMALE - 4 H -

24.6 MG/L

LD50 DERMAL - RABBIT - FEMALE 2,460 MG/KG

LD50 INTRAPERITONEAL - RAT - 720 MG/KG

SKIN SKIN - RABBIT

CORROSION/IRRITATION RESULT: IRRITATING TO SKIN. - 24 H

SERIOUS EYE EYES - RABBIT

DAMAGE/EYE IRRITATION RESULT: RISK OF SERIOUS DAMAGE TO EYES. - 24 H

RESPIRATORY OR SKIN

SENSITISATION

NO DATA AVAILABLE

GERM CELL HAMSTER
MUTAGENICITY FIBROBLAST

RESULT: NEGATIVE

MOUSE - MALE AND FEMALE

RESULT: NEGATIVE

CARCINOGENICITY

CARCINOGENICITY - RAT - ORAL

TUMORIGENIC: EQUIVOCAL TUMORIGENIC AGENT BY RTECS CRITERIA. SKIN AND APPENDAGES: OTHER: TUMORS. LEUKAEMIA

CARCINOGENICITY - RAT - SUBCUTANEOUS

TUMORIGENIC:CARCINOGENIC BY RTECS CRITERIA. GASTROINTESTINAL:TUMORS.

LIVER:TUMORS.

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 IDENTIFIED AS A CARCINOGEN OR POTENTIAL

CARCINOGEN BY OSHA.

REPRODUCTIVE TOXICITY REPRODUCTIVE TOXICITY - RAT - MALE AND

FEMALE - INHALATION (VAPOUR)

NO SIGNIFICANT ADVERSE EFFECTS WERE

REPORTED

SPECIFIC TARGET ORGAN

TOXICITY - SINGLE

EXPOSURE

MAY CAUSE RESPIRATORY IRRITATION. -

RESPIRATORY TRACT

MAY CAUSE DROWSINESS OR DIZZINESS. - CENTRAL

NERVOUS SYSTEM

SPECIFIC TARGET ORGAN TOXICITY - REPEATED

EXPOSURE

NO DATA AVAILABLE

ASPIRATION HAZARD NO DATA AVAILABLE

ADDITIONAL INFORMATION

REPEATED DOSE TOXICITY RAT - MALE AND FEMALE - INHALATION (VAPOUR) -

NOAEL : >= 7.5 MG/L

RTECS: NP9625000

COUGH, SHORTNESS OF BREATH, HEADACHE, NAUSEA, VOMITING, CENTRAL NERVOUS SYSTEM DEPRESSION, TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

SECTION 12. ECOLOGICAL INFORMATION

TOXICITY

TOXICITY TO FISH FLOW-THROUGH TEST LC50 - PIMEPHALES

PROMELAS (FATHEAD MINNOW) - 1,430 MG/L - 96 H

TOXICITY TO DAPHNIA AND

OTHER AQUATIC INVERTEBRATES

STATIC TEST EC50 - DAPHNIA PULEX (WATER FLEA) -

1,100 MG/L - 48 H

TOXICITY TO ALGAE STATIC TEST EC50 - PSEUDOKIRCHNERIELLA

SUBCAPITATA - 1,799 MG/L - 72 H

TOXICITY TO BACTERIA GROWTH INHIBITION IC50 - SLUDGE TREATMENT ->

1,000 MG/L - 16 H

PERSISTENCE AND DEGRADABILITY

BIODEGRADABILITY AEROBIC - EXPOSURE TIME 28 D

RESULT: 70 - 80 % - READILY BIODEGRADABLE

BIOACCUMULATIVE

POTENTIAL

NO DATA AVAILABLE

MOBILITY IN SOIL NO DATA AVAILABLE

RESULTS OF PBT AND VPVB ASSESSMENT

PBT/VPVB ASSESSMENT NOT AVAILABLE AS

CHEMICAL SAFETY ASSESSMENT NOT

REQUIRED/NOT CONDUCTED

OTHER ADVERSE EFFECTS NO DATA AVAILABLE

SECTION 13. DISPOSAL CONSIDERATIONS

WASTE TREATMENT METHODS

PRODUCT BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH

AN AFTERBURNER AND SCRUBBER BUT EXERT EXTRA

CARE IN IGNITING AS THIS MATERIAL IS HIGHLY

FLAMMABLE. OFFER SURPLUS AND NON-RECYCLABLE

SOLUTIONS TO A LICENSED DISPOSAL COMPANY. CONTACT A LICENSED PROFESSIONAL WASTE DISPOSAL SERVICE TO DISPOSE OF THIS MATERIAL.

CONTAMINATED PACKAGING

DISPOSE OF AS UNUSED PRODUCT.

SECTION 14. TRANSPORT INFORMATION

DOT (US)

PROPER SHIPPING NAME: ISOBUTANOL N.O.S. (Isobutyl alcohol)

UN NUMBER: 1212 CLASS: 3 PACKING GROUP: III

REPORTABLE QUANTITY 5000 LBS

(RQ):

POISON INHALATION NO

HAZARD:

IMDG

PROPER SHIPPING NAME: ISOBUTANOL N.O.S. (Isobutyl alcohol)

UN NUMBER: 1212
CLASS: 3
PACKING GROUP: III
EMS-NO: F-E, S-D

IATA

PROPER SHIPPING NAME: ISOBUTANOL N.O.S. (Isobutyl alcohol)

UN NUMBER: 1212 CLASS: 3 PACKING GROUP: III

SECTION 15. REGULATORY INFORMATION

SARA 302 COMPONENTS NO CHEMICALS IN THIS MATERIAL ARE SUBJECT TO

THE REPORTING REQUIREMENTS OF SARA TITLE III,

SECTION 302.

SARA 313 COMPONENTS THIS MATERIAL DOES NOT CONTAIN ANY CHEMICAL

COMPONENTS WITH KNOWN CAS NUMBERS THAT EXCEED THE THRESHOLD (DE MINIMIS) REPORTING LEVELS ESTABLISHED BY SARA TITLE III, SECTION 313

SARA 311/312 HAZARDS FIRE HAZARD, ACUTE HEALTH HAZARD

MASSACHUSETTS RIGHT TO KNOW COMPONENTS

CAS-NO. REVISION DATE

Isobutyl alcohol 78-83-1 04-24-1993

PENNSYLVANIA RIGHT TO KNOW COMPONENTS

CAS-NO. REVISION DATE

Isobutyl alcohol 78-83-1 04-24-1993

NEW JERSEY RIGHT TO KNOW COMPONENTS

CAS-NO. REVISION DATE

Isobutyl alcohol 78-83-1 04-24-1993

CALIFORNIA PROP. 65 COMPONENTS

THIS PRODUCT DOES NOT CONTAIN ANY CHEMICALS KNOWN TO STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS, OR ANY OTHER REPRODUCTIVE HARM.

SECTION 16. OTHER INFORMATION

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

EYE DAM SERIOUS EYE DAMAGE FLAM. LIQ. FLAMMABLE LIQUIDS

H226 FLAMMABLE LIQUID AND VAPOUR.

H315 CAUSES SKIN IRRITATION.

H318 CAUSES SERIOUS EYE DAMAGE.

H335 MAY CAUSE RESPIRATORY IRRITATION. H336 MAY CAUSE DROWSINESS OR DIZZINESS.

SKIN IRRIT. SKIN IRRITATION

STOT SE SPECIFIC TARGET ORGAN TOXICITY - SINGLE

EXPOSURE

HMIS RATING

HEALTH HAZARD: 2

CHRONIC HEALTH

HAZARD:

FLAMMABILITY: 3 PHYSICAL HAZARD 0

NFPA RATING

HEALTH HAZARD: 2 FIRE HAZARD: 3 REACTIVITY HAZARD: 0

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)

IMPORTANT:

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VERSION: 3.1. REVISION DATE: 01/27/2017