

215 S.E. 6th Ave.
HILLSBORO, OR 97123

SECTION I

PRODUCT CODE NUMBER: 6012 For EtOH: ACGIH-TLV/TWA= 1000 ppm; OSHA-TLV PEL/TWA=1000 ppm. For MeOH: ACGIH-TLV/TWA= 200 ppm (skin) STEL=250 ppm; OSHA-PEL/TWA= 200 ppm

MANUFACTURER'S NAME: Shell, Oil Company

MANUFACTURER'S ADDRESS: PO Box 4320, Houston, TX 77210 Emergency No: 713-473-9461

PRODUCT: Alcohol, denatured COMMON NAME: same

GENERIC NAME: same CHEMICAL NAME: same

CHEMICAL FAMILY: same DOT PROPER SHIPPING NAME: Denatured Alcohol

WARNING STATEMENTS: Flammable Liquid. Keep away from heat, sparks and open flames. Keep containers tightly closed. Store away from strong oxidizing agents in a cool, dry place with adequate explosion-proof ventilation. Ground equipment to prevent accumulation of static charge. If pouring or transferring materials, (cont.)

SECTION II - INGREDIENTS

	%	TLV
WARNING! CONT.		
containers must be bonded and grounded. Do NOT weld, heat or drill on or near container; even emptied containers can contain explosive vapors.		
CAS No: Mixture	gal.	
S.D.A. No. 3A (190 proof)	100	
Methyl Alcohol (MeOH)	10	
Methyl isobutyl ketone (MIBK)	1	
Contains: 100 gal ethyl alcohol (EtOH) (190 proof) and 5 gal MeOH.		

* Threshold limit value set by (A) OSHA, (B) ACGIH, (C) See Section III, (D) Other, (NE) Not Established (Units are in PPM unless otherwise specified)

SECTION III - PHYSICAL DATA

APPROXIMATE BOILING RANGE: 165-176 VAPOR PRESSURE: ca. 44 @

VAPOR DENSITY: ca 1.5 SOLUBILITY IN WATER: complete

SPECIFIC GRAVITY: 0.8130 PERCENT VOLATILE: 100

EVAPORATION RATE: ca 1.4 Appearance & Odor: Colorless, clear liquid with
alcohol odor.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT RANGE: 59 °F (TMC) EXTINGUISHING MEDIA: Alcohol foam, CO₂, water spray,
No special procedures. Cool exposed tanks with dry chemical

FIRE FIGHTING PROCEDURES: water. DOT FLAMMABILITY CLASSIFICATION: ethyl alcohol 3.3 lower 19.0 upper

UNUSUAL FIRE AND EXPLOSION HAZARDS: No unusual hazards. Handle as a flammable liquid.

SECTION V - EMERGENCY AND FIRST AID PROCEDURES

EYE CONTACT: Flush with low pressure water for 15 minutes. Get medical help if irritation persists.

SKIN CONTACT: Wash thoroughly with soap and water. Then rinse.

INHALATION: If breathing is affected, remove victim to fresh air and get medical help. Administer oxygen or artificial respiration if necessary.

INGESTION: Do not give liquids if victim is unconscious or very drowsy. Otherwise, give no more than 2 glasses of water and induce vomiting by giving 30cc (2 tablespoons) Syrup of Ipecac. If Ipecac is unavailable, give two glasses of water and induce vomiting by touching finger to back of victim's throat. Keep victim's head below hips while vomiting. Get medical attention.

SECTION VI - PHYSIOLOGICAL EFFECTS AND HEALTH INFORMATION

ACUTE EFFECTS Overexposure to vapors may cause irritation of the eyes, nose, and throat. Headache and drowsiness may occur. Liquid is poisonous by ingestion. Excessive contact may cause skin dehydration.

~~OVEREXPOSURE~~ IRS- The Bureau of Alcohol, Tobacco, and Firearms of the IRS has issued regulations governing the production, procurement and use of ethanol. All users must comply with these regulations.

SECTION VII - REACTIVITY DATA

STABILITY (Conditions to Avoid) Stable. Reacts with strong oxidizing agents. Avoid heat, sparks, and open flames.

INCOMPATIBILITY (Materials to Avoid): N/A

HAZARDOUS DECOMPOSITION PRODUCTS: CO from incomplete combustion.

HAZARDOUS POLYMERIZATION (Conditions to Avoid): Will not occur.

SECTION VIII - SPILL OR LEAK PROCEDURES

PROCEDURES IN CASE OF RELEASE OR SPILL Eliminate all ignition sources. Wear approved respirator. Dike and remove liquid with vacuum truck or by pumping into salvage vessels or flush away with large quantities of water.

WASTE DISPOSAL METHOD: Reclaim if possible; remove to a state approved hazardous waste facility for disposal. See also, Other Precautions.

SECTION IX - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: Use a NIOSH approved respirator to prevent overexposure if vapor levels may or do exceed the limits. Use either an atmosphere supplying respirator or an air purifying respirator for organic vapors ~~and~~ in compliance with 29 CFR 1910.134.

PROTECTIVE GLOVES: Wear plastic or rubber gloves to prevent skin contact.

EYE PROTECTION: Wear goggles as required to prevent eye contact.

Eye bath and safety shower should be available. Provide explosion proof ventilation to control vapor levels in

OTHER PROTECTIVE EQUIPMENT: the work place.

SECTION X - STORAGE AND SPECIAL PRECAUTIONS

HANDLING AND STORING PRECAUTIONS: Storage facilities must meet the requirements of the Bureau of Alcohol, Tobacco, and Firearms of the IRS, and conform to local and state fire regulations. Also follow the NFPA Code No. 30 "Fire and Combustible Liquids" and Code No. 77 "Static Electricity."

OTHER PRECAUTIONS: EPA-RCA- As produced, Shell ETIMOL is not a waste. If discarded or intended to be discarded as is, it is an ignitable hazardous waste as defined in 40 CFR 261.21. The EPA hazardous waste number is D001.

SECTION XI - DOCUMENTARY INFORMATION

PRODUCT CODE NUMBER: _____

ISSUE DATE: March 29, 1982

REPLACES MSDS NUMBER: _____

PREVIOUS PRODUCT CODE NUMBER: _____

PREVIOUSLY ISSUED: _____