

## MATERIAL SAFETY DATA SHEET

### BUTYL CARBITOL 1091

#### ===== SECTION I

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#### ===== SECTION 2 – HAZARDOUS INGREDIENTS/IDENTITY

HAZARDOUS COMPONENTS	CAS #	OCCUPATIONAL EXPOSURE LIMITS			VAPOR PRESSURE mm Hg@ Temp	WEIGHT %
		OSHA-PEL	ACGIH-TLV	MFR-TLV		
Diethylene Glycol n-Butyl Ether	000112-345	N/E	N/E	35ppm	0.1 77F	100

+++NO TOXIC CHEMICAL (S) SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III AND OF 40 CFR 372 ARE PRESENT.

#### ==== SECTION 3 – PHYSICAL & CHEMICAL CHARACTERISTICS

**Boiling Point:** 446 Deg F  
**Specific Gravity (H2O=1):** 1.0  
**Evaporation Rate:** SLOWER THAN ETHER  
**Vapor Density (Air = 1):** HEAVIER THAN AIR  
**Solubility in Water :** COMPLETELY MISCIBLE.  
**Appearance and odor:** COLORLESS LIQUID W/MILD ODOR.

#### ==== SECTION 4 – FIRE & EXPLOSION DATA

**Flash Point:** 226 Deg F      **Method Used:** PMCC  
**Flammable Limits in Air % by Volume-**      **LEL-** 0.9%      **UEL-** 24.6%

**Extinguisher Media:** FOAM, ALCOHOL FOAM, CO2, DRY CHEMICAL, WATER FOG

**Special Fire Fighting Procedures:** WEAR SELF-CONTAINED BREATHING APPARATUS & PROTECTIVE CLOTHING TO PROTECT AGAINST HAZARDOUS EFFECTS OF NORMAL COMBUSTION.

**Unusual Fire & Explosion Hazards:** COMBUSTIBLE!! CLOSED CONTAINERS MAY EXPLODE IF EXPOSED TO EXTREME HEAT. USE WATER-SPRAY TO KEEP FIRE-EXPOSED CONTAINERS COOL.

#### HMIS RATING

HEALTH	1
FLAMMABILITY	1
REACTIVITY	0
PERSONAL PROTECTION	E

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===== **SECTION 5 – PHYSICAL HAZARDS (REACTIVITY DATA)**

**Stability:**  
STABLE

**Conditions to Avoid**  
KEEP AWAY FROM HEAT, SPARKS,  
& OPEN FLAME.

**Incompatibility (Materials to Avoid):**  
ISOLATE FROM STRONG OXIDIZING MATERIALS.

**Hazardous Decomposition Products:**  
NONE KNOWN

**Hazardous Polymerization:**  
WILL NOT OCCUR

===== **SECTION 6 – HEALTH HAZARD**

**Acute/Chronic:** EXPOSURES HAVING NO ADVERSE EFFECTS ON THE MOTHER SHOULD HAVE NO EFFECT ON THE FETUS. BIRTH DEFECTS ARE UNLIKELY. MUTAGENITY TESTS ON ANIMALS HAVE SHOWN NEGATIVE IN SOME & POSITIVE IN OTHERS.

**Signs & Symptoms Of Exposure:**

**Inhalation:** SINGLE EXPOSURE TO VAPORS IS NOT LIKELY TO BE HAZARDOUS, HOWEVER, EXCESSIVE EXPOSURE MAY CAUSE LIVER, KIDNEY AND BLOOD EFFECTS

**Ingestion:** AMOUNTS INGESTED IN CASUAL HANDLING OF THE MATERIAL MAY NOT CAUSE INJURY, HOWEVER, INGESTION OF LARGER AMOUNTS MAY CAUSE INJURY.

**Skin Absorption:** THE LD50 FOR SKIN ABSORPTION IN RABBITS IS APPROXIMATELY 4g/kg. A SINGLE PROLONGED EXPOSURE IS NOT LIKELY TO RESULT IN THE MATERIAL BEING ABSORBED THROUGH THE SKIN IN HARMFUL AMOUNTS.

**Skin Contact:** PROLONGED EXPOSURE MAY CAUSE SKIN IRRITATION.

**Eye Contact:** MAY CAUSE MODERATE IRRITATION WITH CORNEAL INJURY.

**Medical Conditions Generally Aggravated by Exposure:** NONE KNOWN

**CARCINOGENICITY:** NTP? *NO.* IARC MONOGRAPHS? *NO.* OSHA? *NO.*

**Emergency & First Aid Procedures:**

- 1. Eye Contact:** IMMEDIATELY FLUSH EYES W/FLOWING WATER FOR AT LEAST 15 MINUTES WHILE HOLDING THE EYELIDS OPEN. IF IRRITATION PERSISTS, CALL A PHYSICIAN.
- 2. Skin Contact:** WASH SKIN THOROUGHLY W/MILD SOAP & WATER. IF IRRITATION PERSISTS, CALL A DOCTOR
- 3. Inhalation:** IF THERE ARE ACUTE OR CHRONIC SYMPTOMS, MOVE PERSON TO FRESH AIR, GIVE ARTIFICIAL RESPIRATION, CALL A PHYSICIAN.

===== **SECTION 7 – SPECIAL PRECAUTIONS & SPILL/LEAK PROCEDURES**

**Precautions to be taken** STORE & USE IN A WELL-VENTILATED AREA.  
**In Handling & Storage:** DO NOT STORE OR USE NEAR OPEN FLAME, SPARKS OR HOT SURFACES. KEEP CONTAINERS TIGHTLY CLOSED.

**In case Material is Released or Spilled:** ELIMINATE OPEN FLAMES OR IGNITION IN THE VICINITY OF VAPOR. STOP SOURCE OF LEAK. ABSORB LARGE SPILLS W/ABSORBENT CLAY OR OTHER SUITABLE MATERIALS.

**Waste Disposal Methods:** PLACE CONTAMINATED MATERIALS IN DISPOSABLE CONTAINERS INCINERATE OBSERVING LOCAL, STATE, & FEDERAL HEALTH, SAFETY & POLLUTION LAWS.

===== **SECTION 8 – SPECIAL PROTECTION INFORMATION/CONTROL MEASURES**

**Respiratory Protection:** WEAR APPROVED NIOSH RESPIRATORY PROTECTIVE EQUIPMENT

**Ventilation:** USE ADEQUATE VENTILATION TO KEEP AIRBORNE CONCENTRATION BELOW EXPOSURE STANDARDS.

**Protective Gloves:** USE WATERPROOF GLOVES FOR DIRECT HANDLING.

**Eye Protection:** USE CHEMICAL SAFETY GOGGLES.

**Other Protective clothing or equipment:** EYEWASH FOUNTAIN, SAFETY SHOWERS, SOLVENT RESISTANT APRONS ARE RECOMMENDED.

**Work/Hygienic Practices:** LAUNDER CONTAMINATED CLOTHING BEFORE REUSE.

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