

# MATERIAL SAFETY DATA SHEET

For R&D use only. Not for drug, household or other uses.

Click <http://www.lookchem.com/cas-71/71-36-3.html> for suppliers of this product.

## Composition/Information on Ingredient

**Cas:**  
71-36-3  
**Code:**  
M

**RTECS:**  
EO1400000  
**Code:**  
M

**Name:**  
BUTANOL (SARA 313) (CERCLA) VP = 5 @ 20C

**Other REC Limits:**  
NONE RECOMMENDED

**OSHA PEL:**  
NOT ESTABLISHED  
**Code:**  
M

**OSHA STEL:**

**Code:**

**ACGIH TLV:**  
50 PPM  
**Code:**  
M

**ACGIHSTEL:**  
N/P  
**Code:**

## Control Measures

**Respiratory Protection:**  
4 OPEN AREAS, APPROVED MECHANICAL RESPIRATOR. RESTRICTED AREAS, APPROVED CHEM/MECHANICAL FILTERS. CONFINED AREAS, APPROVED AIRLINE-TYPE RESPIRATORS OR HOODS. NIOSH APPROVED RESPIRATOR DURING/AFTER APLIC ATION.

**Ventilation:**  
APPROVED SPRAY BOOTH, GENERAL DILUTION, LOCAL EXHAUST IN VOLUME AND PATTERN SUFFICIENT TO KEEP LEVELS BELOW TLV.

**Protective Gloves:**  
REQUIRED

**Eye Protection:**  
SPASH PROOF GOGGLES

**Other Protective Equipment:**  
Equipment NONE

**Work Hygienic Practices:**  
NONE

**Supplemental Safety and Health:**  
\*\* DONT ATTEMPT TO CLEAN RESIDUE. DISPOSE OF CONTAINER IN ENVIRONMENTALLY SAFE MANNER IN ACCORDANCE W/GOVERNMENT REGULATIONS. FOR WORK ON TANK, REFER TO OSHA ANSI 249.1 & OTHER GOVERNMENT/INDUSTRIAL R EFERENCES.

## Health Hazards Data

**LD50LC50Mixture:**  
NK

**Route Of Entry Inds - Inhalation:**  
YES

**Skin:**  
YES

**Ingestion:**  
YES

**Carcinogenicity Inds - NTP:**  
NO

**IARC:**  
NO

**OSHA:**  
NO

**Health Hazards Acute And Chronic:**  
INHAL: IRRITATION OF RESPIRATORY TRACT, NS DEPRESSION, HEADACHE, DIZZY, STAGGERING GAIT, CONFUSION, UNCONSCIOUS, COMA, HARMFUL/FATAL. SKIN: IRRITANT. EYE: IRRITANT. PERMANT BRAIN/NS DAMAGE, LIVER ABN ORMALITIES.

**Explanation Of Carcinogenicity:**  
NK 3

**Signs And Symptions Of Overexposure:**  
NK

**Medical Cond Aggravated By Exposure:**  
NONE

**First Aid:**  
INHAL: REMOVE TO FRESH AIR, GIVE OXYGEN, GET MED AID. SKIN: WASH W/WATER, REMOVE CONTAM CLOTHING. LAUNDER BEFORE REUSE, GET MED AID. INGEST: GET MED AID. GIVE 1-2 GLASSES WATER. DONT INDUCE VOMIT. KEE P HEAD BELOW HIPS TO PREVENT ASPIRATION.

**Spill Release Procedures:**  
REMOVE ALL IGNIT SOURCES. MOP, ADD ABSORBENT. USE NON-SPARKING TOOLS. ADEQUATE VENT. MOVE LEAKING CONTAINERS OUTDOORS. AVOID RUNOFF TO WATERWAYS. NOTIFY FIRE/HEALTH AGENCIES.

**Neutralizing Agent:**  
NK

**Waste Disposal Methods:**  
RECLAIM MATERIAL. INCINERATE OR USE SANITARY LANDFILL IN ACCORDANCE W/FEDERAL, STATE AND LOCAL REGULATIONS. DONT INCINERATE CLOSED CONTAINERS. SEAL DRUMS TIGHTLY.

**Handling And Storage Precautions:**  
STORE IN WELL VENTILATED WAREHOUSE. KEEP OUT OF SUNLIGHT OR HEAT. KEEP CONTAINERS CLOSED. NO SMOKING.  
\*\*DRILL/GRIND/EXPOSE TO HEAT OR OTHER IGNITS.

**Other Precautions:**  
CONTAINERS SHOULD BE GROUNDED WHEN POURING. AVOID FREEFALL OF LIQUID. CLOSE CONTAINER AFTER EACH USE. DONT TRANSFER CONTENTS TO BOTTLES OR ANY UNLABELED CONTAINERS. EMPTY CONTAINERS RETAIN RESIDUE, DO NT PRESSURIZE/CUT/WELD/BRAISE/SOULDER/\*\*

## Fire and Explosion Hazard Information

**Flash Point Method:**  
SCC

**Flash Point:**

**Flash Point Text:**  
41.0F,5.0C

**Autoignition Temp:**

**Autoignition Temp Text:**  
NK

**Lower Limits:**  
0.9

**Upper Limits:**  
NK

**Extinguishing Media:**  
FOAM, ALCOHOL FOAM, CO2, DRY CHEMICAL, WATER FOG.

**Fire Fighting Procedures:**  
WATER MAY BE INEFFECTIVE. USE WATER TO COOL HEAT EXPOSED CONTAINERS. AVOID EXPOSURE TO FUMES. USE SCBA IN ENCLOSED AREAS. \*W/STRONG OXIDIANTS.

**Unusual Fire/Explosion Hazard:**  
TOXIC GASES EVOLVE IN BURNING. KEEP CNTNRS TIGHTLY CLSD. KEEP FROM IGNITS. CLSD CNTNRS EXPLODE IN HEAT. DONT APPLY TO HOT SURFACES. DONT STORE/MIX \*

## Physical/Chemical Properties

**HCC:**

**NRC/State LIC No:**  
NK

**Net Prop WT For Ammo:**

**Boiling Point:**

**B.P. Text:**  
133 TO 399F

**Melt/Freeze Pt:**

**M.P/F.P Text:**  
NK

**Decomp Temp:**

**Decomp Text:**  
NK

**Vapor Pres:**  
NK

**Vapor Density:**  
>AIR

**Volatile Org Content %:**

**Spec Gravity:**  
NK

**VOC Pounds/Gallon:**

**PH:** NK

**VOC Grams/Liter:**

**Viscosity:**  
NK

**Evaporation Rate & Reference:**  
SLOWER THAN ETHER

**Solubility in Water:**  
NK

**Appearance and Odor:**  
NK

**Percent Volatiles by Volume:**  
71.0

**Corrosion Rate:**  
NK

## Reactivity Data

**Stability Indicator:**  
YES

**Stability Condition To Avoid:**  
TEMPS IN EXCESS OF 150F IN CLOSED CONTAINER. EXPOSURE TO ALL IGNITS INCLUDING HEAT.

**Materials To Avoid:**  
OXIDIZING ATENTS

**Hazardous Decomposition Products:**  
CO2 AND CO. 5

**Hazardous Polymerization Indicator:**  
NO

**Conditions To Avoid Polymerization:**  
NK

## Toxicological Information

**Information:**N/P

## MSDS Transport Information

**Information:**N/P

## Regulatory Information

**Sara Title III Information:** N/P

**Federal Regulatory Information:** N/P

**State Regulatory Information:** N/P

## Other Information

**Other Information:**N/P

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WARRANTY  
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Lookchem shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.

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