



<b>PREFERRED CHEMICAL NAME:</b>		<b>ISOBUTANE</b>		<b>CAS #:</b>	75-28-5
<b>Molecular Wt.</b>	58.12	<b>Molecular Formula:</b>	C <sub>4</sub> H <sub>10</sub>	<b>Structural Molecular Formula:</b>	CH <sub>3</sub> CH(CH <sub>3</sub> ) <sub>2</sub>
<b>Alternate Chemical Names:</b>		1,1-dimethyl ethane			
<b>DOT UN # :</b>	1969 (isobutane) 1075 (petroleum gases, liquefied)	<b>RTECS # :</b>	TZ4300000	<b>NFPA 704: H-F-R-Special Hazard:</b>	1 - 4 - 0
<b>Physical State - Description:</b>		Colorless Gas; Liquid Under Pressure; Slight Petroleum Color Odor Threshold: 2.9 mg/m <sup>3</sup>			

<b>PHYSICAL DATA</b>					
Property	Value	Source	Property	Value	Source
Melting – Freezing Point (@ saturation pressure):	-255.28°F (-159.6°C) @ 14.696 psia	GPSA	Boiling Point:	10.74°F (-11.81°C) @ 14.696 psia	GPSA
Critical Temperature:	274.96°F (134.98°C)	GPSA	Critical Pressure:	529.1 psia	GPSA
Autoignition Temperature:	860°F (460°C)	GENIUM	Flash Point (closed cup):	-117°F (-83°C)	GENIUM
Lower Flammability Limit:	1.8%	GPSA	Upper Flammability Limit:	8.4%	GPSA
Vapor Pressure:	72.39 psia @ 100°F (38°C)	GPSA	Vapor Specific Gravity (air = 1):	2.0068	GPSA
Liquid Density (weight in vacuum, saturation pressure):	4.694 lb/gal @ 60°F (16°C)	GPSA	Vapor Density:	0.153 lb/cu. ft. @ 14.696 psia @ 60°F (16°C)	GPSA
Liquid Specific Gravity (water = 1, saturation pressure):	0.5630 @ 60°F/60°F (16°C/16°C)	GPSA	Conversion:	1 ppm = 2.38 mg/m <sup>3</sup> 1 ppm = 0.00238 mg/l	NIOSH

<b>HAZARD OVERVIEWS</b>		
Hazard	Overview	Source
<b>HEALTH</b>	May cause frostbite/chemical burns. Also Causes: asphyxiation, CNS depression, dizziness, fatigue, decreased vision, mood disturbances, headache, confusion, cyanosis, incoordination, anesthesia, respiratory arrest, irregular heartbeat. Chronic Effects: cardiac sensitizer.	GENIUM
<b>FIRE</b>	Flammable. Can form explosive mixtures in the air. Shut off gas flow. For small fires, use dry chemical or carbon dioxide. For large fires, use water spray or fog.	GENIUM
<b>REACTIVITY</b>	Stable. Hazardous polymerization cannot occur. Avoid: exposure to heat, ignition sources, and oxidizers. Incompatible with: heat; flame; oxidizers. Hazardous decompositions products: acrid smoke; irritating fumes.	GENIUM
<b>SPECIAL HAZARD</b>	None.	GENIUM

<b>TOXICITY/EXPOSURE INFORMATION</b>					
Data Term	Toxic Limit Value	Source	Data Term	Toxic Limit Value	Source
ERPG-1 :	None Listed	AIHA	TLV TWA :	1000 ppm	ACGIH
ERPG-2 :	None Listed	AIHA	TLV STEL :	None Listed	ACGIH
ERPG-3 :	None Listed	AIHA	PEL TWA:	None Listed	OSHA
IDLH :	Not Determined	NIOSH	PEL STEL:	None Listed	OSHA



<b>TOXICITY/EXPOSURE INFORMATION (continued)</b>					
<b>Classification</b>	10 Min Exposure	30 Min Exposure	1 Hour Exposure	4 Hour Exposure	8 Hour Exposure
AEGL-1:	None Listed	None Listed	None Listed	None Listed	None Listed
AEGL-2:	None Listed	None Listed	None Listed	None Listed	None Listed
AEGL-3:	None Listed	None Listed	None Listed	None Listed	None Listed

<b>LISTING OF SUBSTANCE ON PERTINENT SAFETY/ENVIRONMENTAL PROGRAMS</b>						
<b>Y/N</b>	<b>Program</b>	<b>Statute</b>	<b>Regulation</b>	<b>Limits or Values</b>		
N	EPCRA EHS	Section 302 of SARA Title III Emergency Planning	40 CFR Part 355	TPQ:		
				RQ:		
N	CERCLA	Section 304 of SARA Title III Emergency Notification	40 CFR Part 302	RQ:		
N	EPCRA Section 313	Section 313 of SARA Title III Toxic Release Inventory Reporting	40 CFR Part 372			
Y	RMP	Section 112(r) of CAAA 1990 Risk Management Plan	40 CFR Part 68	TQ:	10,000	lbs
Y	PSM	Section 304 of CAAA 1990 Process Safety Management	29 CFR Part 1910.119	TQ:	10,000	lbs
Y	NDEP-CAPP	Nevada Revised Statutes 459.3816 Chemical Accident Prevention Program	NAC 459.9533	TQ:	10,000	lbs