



PREFERRED CHEMICAL NAME:		PENTANE		CAS #:	109-66-0
Molecular Wt.	72.15	Molecular Formula:	C ₅ H ₁₂	Structural Molecular Formula:	CH ₃ (CH ₂) ₃ CH ₃
Alternate Chemical Names:		n-Pentane (NIOSH)			
DOT UN # :	1265 (pentanes)	RTECS # :	RZ9450000	NFPA 704: H-F-R-Special Hazard:	1 – 4 – 0
Physical State - Description:		Colorless Liquid; Mild Gasoline-Like Odor Odor Threshold: 2.2 ppm			

PHYSICAL DATA					
Property	Value	Source	Property	Value	Source
Melting – Freezing Point:	-201.51°F (-129.73°C) @ 14.696 psia	GPSA	Boiling Point:	96.91°F (36.06°C) @ 14.696 psia	GPSA
Critical Temperature:	385.6°F (196.4°C)	GPSA	Critical Pressure:	488.6 psia	GPSA
Autoignition Temperature:	588°F (309°C)	GENIUM	Flash Point (closed cup):	-56°F (-49°C)	GENIUM
Lower Flammability Limit:	1.4%	GPSA	Upper Flammability Limit:	8.3%	GPSA
Vapor Pressure:	15.575 psia @ 100°F (38°C)	GPSA	Vapor Specific Gravity (air = 1):	2.4911	GPSA
Liquid Density (weight in vacuum):	5.261 lb/gal @ 14.696 psia @ 60°F (16°C)	GPSA	Vapor Density:	0.190 lb/cu. ft. @ 14.696 psia @ 60°F (16°C)	GPSA
Liquid Specific Gravity (water = 1):	0.6311 @ 60°F/60°F (16°C/16°C)	GPSA	Conversion:	1 ppm = 2.95 mg/m ³ 1 ppm = 0.00295 mg/l	NIOSH

HAZARD OVERVIEWS		
Hazard	Overview	Source
HEALTH	Irritating to eyes/skin/respiratory tract. Also Causes: dizziness, headache. Chronic Effects: dermatitis.	GENIUM
FIRE	Highly flammable! Can form explosive mixtures in the air. Use dry chemical, carbon dioxide, or foam. Water is not effective for fighting fire, but should be used to cool containers. Fight fire from maximum distance. A dangerous fire and explosion hazard.	GENIUM
REACTIVITY	Stable. Hazardous polymerization cannot occur. Avoid: heat; ignition sources; sparks; oxidizing agents. Incompatible with: strong oxidizing agents; plastics; rubber coatings. Hazardous decomposition products: oxides of carbon.	GENIUM
SPECIAL HAZARD	None.	GENIUM

TOXICITY/EXPOSURE INFORMATION					
Data Term	Toxic Limit Value	Source	Data Term	Toxic Limit Value	Source
ERPG-1 :	None Listed	AIHA	TLV TWA :	600 ppm	ACGIH
ERPG-2 :	None Listed	AIHA	TLV STEL :	None Listed	ACGIH
ERPG-3 :	None Listed	AIHA	PEL TWA:	1000 ppm (2950 mg/m ³)	OSHA
IDLH :	1500 ppm	NIOSH	PEL STEL:	None Listed	OSHA
Classification	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



LISTING OF SUBSTANCE ON PERTINENT SAFETY/ENVIRONMENTAL PROGRAMS						
Y/N	Program	Statute	Regulation	Limits or Values		
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