Administration (Non-Mandatory Form) Form Approved OMB No. 1218-0072  Mote: Blank Spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.  Supplier's Name Magna Industires, Inc.  Administration (Non-Mandatory Form) Form Approved OMB No. 1218-0072  Note: Blank Spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.  Emergency Telephone Number 1-800-424-9300	Material Safety Data Sheet May be used to comply with OSHA's		U.S. Departmer			
Address   Telephone Number for Information   1-30-242-9300   Telephone Number   1-800-424-9300   Telephone Number   1-800-424-9400   Telephone Number   1-800-424-9400   Telephone Number   1-800-424-9400   Telep	Hazard Communication Standard 29					
Mote: Dises 5 paces are not parmitted. If any Interest Present Prese	CFR 1910.1200. Standard must be		\$30,000 31,000 \$1,000 10 10 10 10 10 10 10 10 10 10 10 10			
Identity (As Used on Label and List)   Identity (As Used on Label and Carlon Identity (As Used on Label and Carlon Identity (As Used	consulted for specific requirements.		Form Approved	OMB No. 1218-0072		
###   ###	Identity (As Used on Label and List)		item is not applicat	ble, or no information is		
Signifier's Name Magna Industries, Inc.    Emergency Telephone Number   1-800-424-9300						
Emergency Telephone Number   1-800-424-9300     1						
Address   Audress   Audr			<b>Emergency Tel</b>	ephone Number		
1-323-261-7293   Date Prepared   September 24, 2001   Signature of Prepared   September 24, 2001   September			1-800-424-9	300		
Date Prepared   September 24, 2001   Signature of Preparer (Optional)	Address		Contracted and the contract of			
September 24, 2001   Signature of Preparer (Optional)	Number, Street, City and Zip Code					
Signature of Preparer (Optional)  SECTION II - Hazardous Ingredients/ Identity Information  - Hazardous Components Specific Chemical Identity, Common Name(s)  Butane (n-Butane) CAS #106-97-8  NA 800 PPM NIOSH - 800 PPM 80  Propane (n-Propane, Propyl Hydride) CAS #74-98-6  1,000 PPM 1,000 PPM NIOSH - 1,000 PPM 20  NFPA Hazard Ratings  Health - 1 Flammability - 4 Reactivity - 0  SECTION III - Physical/Chemical Characteristics  SECTION III - Physical/Chemical Characteristics  Boiling Point  10.9°F Specific Gravity (H <sub>2</sub> O = 1)  2 Evaporation Rate (Butyl Acetate = 1)  NA  Vapor Pressure (mm Hg)  1823 Melting Point  NA  Vapor Density (Air = 1)  2 Evaporation Rate (Butyl Acetate = 1)  SECTION IV - Fire and Explosion Hazard Data  Flash Point (Method Used)  -120°F (O.C.)  Flammable Limits NA LEL 1.8  LEL 1.8  LEL 1.8  LEL 8.4  Extinguishing Media Carbon dioxide, dry chemical, fog or water spray. Special Fire Fighting Procedures  Unusual Fire and Explosion Hazards Will form explosive mixtures in air. Vapors from liquified gas initially heavier than air and spread along ground. Vapors may travel to ignition source and flash back.  SECTION V - Reactivity Data  Unusual Fire and Explosion of Syproducts Combustion may produce carbon monoxide.  Hazardous Decomposition or Byproducts Combustion may produce carbon monoxide.  Hazardous Decomposition or Byproducts Combustion may produce carbon monoxide.  Hazardous Decomposition or Byproducts Combustion may produce carbon monoxide.  Hazardous Polymerization  May Occur  Yes Yes Yes Ingestion?  Yes Yes Yes  Pastinguid gases.  OSHA Regulated?  No  Signs and Symptoms of Exposure			MEC   12   12   12   12   13   14   14   14   14   14   14   14			
SECTION II - Hazardous Ingredients/ Identity Information    Azardous Components   Specific Chemical Identity, Common Name(s)						
Acade   Acad	Cleveland, Ohio 44102		Signature of Pi	reparer (Optional)		
Butane (n-Butane) CAS #106-97-8 NA 800 PPM NIOSH - 800 PPM 80  Propane (n-Propane, Propyl Hydride) CAS #74-98-6 1,000 PPM 1,000 PPM NIOSH - 1,000 PPM 20  NFPA Hazard Ratings Hailth - 1 Flammability - 4 Reactivity - 0 SECTION III - Physical/Chemical Characteristics  Boiling Point NA Vapor Pressure (mm Hg) 1823 Melting Point NA Vapor Pensure (mm Hg) 2 Evaporation Rate (Butyl Acetate = 1) >1  Solubility in Water © 77°C, 17cc per 1000 cc of Water Appearance and Odor Clear, Odorless  SECTION IV - Fire and Explosion Hazard Data Extinguishing Media Carbon dioxide, dry chemical, fog or water spray. Special Fire Fighting Procedures Confine fire to immediate area. Disperse liquid or vapor if leaks occur.  Unusual Fire and Explosion Hazards Will form explosive mixtures in air. Vapors from liquified gas initially heavier than air and spread along ground. Vapors may travel to ignition source and flash back.  SECTION V - Reactivity Data  SECTION V - Reactivity Data  SECTION V - Health Hazard Data Route(s) of Entry Inhalation? Skin? Yes Promocontact with liquid gases.  Hazardous Polymerization Will Not Occur X NA  Signs and Symptoms of Exposure		Identity Information			Other Limite	
Butane (n-Butane) CAS #106-97-8 NA 800 PPM NIOSH - 800 PPM 80  Propane (n-Propane, Propyl Hydride) CAS #74-98-6 1,000 PPM 1,000 PPM NIOSH - 1,000 PPM 20  NFPA Hazard Ratings Health - 1 Flammability - 4 Reactivity - 0  SECTION III - Physical/Chemical Characteristics  Boiling Point 10,9°F Specific Gravity (H <sub>2</sub> O = 1) 0.56  Vapor Pressure (mm Hg) 1823 Melting Point NA Vapor Density (Air = 1) 2 Evaporation Rate (Butyl Acetate = 1) >1  Solubility in Water © 77°C, 17cc per 1000 cc of Water  Appearance and Odor Clear, Odorless  SECTION IV - Fire and Explosion Hazard Data Flash Point (Method Used) -120°F (O.C.) Flammable Limits NA LEL 1.8 UEL 8.4  Extinguishing Media Carbon dioxide, dry chemical, fog or water spray.  Special Fire Fighting Procedures Will form explosive mixtures in air. Vapors from liquified gas initially heavier than air and spread along ground. Vapors may travel to ignition source and flash back.  SECTION V - Reactivity Data  Stability Unstable Conditions to Avoid Stable X Heat, Sparks, Open Flames.  Incompatibility (Materials to Avoid)  Stable X Heat, Sparks, Open Flames.  Incompatibility (Materials to Avoid)  Stable X Heat, Sparks, Open Flames.  Incompatibility (Materials to Avoid)  Stable X Heat, Sparks, Open Flames.  Route(s) of Entry Inhalation? Skin? Yes Yes  Health Hazard (Acute and Chronic)  Extreme flammability; vapor clouds easily ignited; simple asphyxiation; frostbite to skin and eyes from contact with liquid gases.  Carcinogenicity NTP? IARC Monographs? OSHA Regulated?  No Signs and Symptoms of Exposure		www.Mamas/al	OCHA DEL	ACCILITIV		% (Ontional
Propane (n-Propane, Propyl Hydride) CAS #74-98-6 1,000 PPM 1,000 PPM NIOSH - 1,000 PPM 20  NFPA Hazard Ratings  Health - 1 Flammability - 4 Reactivity - 0  SECTION III - Physical/Chemical Characteristics  Boiling Point 10.9°F Specific Gravity (H <sub>2</sub> O = 1) 0.56  Vapor Pressure (mm Hg) 1823 Melting Point NA  Vapor Density (Air = 1) 2 Evaporation Rate (Butyl Acetate = 1) >1  Solubility in Water @ 7°C, 17cc per 1000 cc of Water  Appearance and Odor Clear, Odorless  SECTION IV - Fire and Explosion Hazard Data  Flash Point (Method Used) -120°F (O.C.) Flammable Limits NA LEL 1.8 UEL 8.4  Extinguishing Media Carbon dioxide, dry chemical, fog or water spray.  SecTiON V - Reactivity Data  Stability  Unstable area. Disperse liquid or vapor if leaks occur.  Unusual Fire and Explosion Hazards  Will form explosive mixtures in air. Vapors from liquified gas initially heavier than air and spread along ground. Vapors may travel to ignition source and flash back.  SECTION V - Reactivity Data  Stability  Unstable Combustion may produce carbon monoxide.  Hazardous Decomposition or Byproducts Combustion may produce carbon monoxide.  Hazardous Polymerization May Occur X Heat, Sparks, Open Flames.  Route(s) of Entry Inhalation? Yes	0 · 0000 1500 Act (400 000)					
Health - 1   Health - 0   Flammability - 4   Reactivity - 0   Reactivity	Butane (n-Butane) CAS #106-97-	8	NA	800 PPM	NIOSH - 800 PPM	80
Health - 1 Flammability - 4 Reactivity - 0  SECTION III - Physical/Chemical Characteristics  Boiling Point  10.9°F Specific Gravity (H <sub>2</sub> O = 1) 0.56  Vapor Pressure (mm Hg) 1823 Melting Point NA  Vapor Density (Air = 1) 2 Evaporation Rate (Butyl Acetate = 1) Solubility in Water Q: 77°C, 17cc per 1000 cc of Water Appearance and Odor Clear, Odorless  SECTION IV - Fire and Explosion Hazard Data  Flash Point (Method Used) -120°F (O.C.) Flammable Limits NA LEL 1.8 UEL 8.4  Extinguishing Media Carbon dioxide, dry chemical, fog or water spray.  Special Fire Fighting Procedures Confine fire to immediate area. Disperse liquid or vapor if leaks occur.  Unusual Fire and Explosion Hazards Will form explosive mixtures in air. Vapors from liquified gas initially heavier than air and spread along ground. Vapors may travel to ignition source and flash back.  SECTION V - Reactivity Data  Stability Unstable Statole Vine Acetate Stable Vine Acetate St	Propane (n-Propane, Propyl Hydr	ide) CAS #74-98-6	1,000 PPM	1,000 PPM	NIOSH - 1,000 PPN	1 20
Flammability - 4 Reactivity - 0  SECTION III - Physical/Chemical Characteristics  Boiling Point  10.9°F Specific Gravity (H <sub>2</sub> O = 1) 0.56  Vapor Pressure (mm Hg) 1823 Melting Point NA  Vapor Density (Air = 1) 2 Evaporation Rate (Butyl Acetate = 1)  Solubility in Water Appearance and Odor Clear, Odorless  SECTION IV - Fire and Explosion Hazard Data Flash Point (Method Used) Flash Point (Method Used) Flash Point (Method Used) Flash Point (Method Used) Flash Point (Fighting Procedures  Will form explosive mixtures in air. Vapors from liquified gas initially heavier than air and spread along ground. Vapors may travel to ignition source and flash back.  SECTION VI - Reactivity Data  Stability Unstable Stable X Heat, Sparks, Open Flames.  Incompatibility (Materials to Avoid) Strong acids, alkalis and oxidizers.  Hazardous Decomposition or Byproducts Combustion may produce carbon monoxide.  Hazardous Polymerization May Occur Will Not Occur X Na  SECTION VI - Health Hazard Data Route(s) of Entry Inhalation? Skin? Yes Yes Yes Yes Yes  Yes  Carcinogenicity NTP? IARC Monograph? OSHA Regulated? No Signs and Symptoms of Exposure	NFPA Hazard Ratings		HMIS Ratings			
Flammability - 4 Reactivity - 0  SECTION III - Physical/Chemical Characteristics  Boiling Point  10.9°F Specific Gravity (H <sub>2</sub> O = 1) 0.56  Vapor Pressure (mm Hg) 1823 Melting Point NA  Vapor Density (Air = 1) 2 Evaporation Rate (Butyl Acetate = 1)  Solubility in Water Appearance and Odor Clear, Odorless  SECTION IV - Fire and Explosion Hazard Data Flash Point (Method Used) Flash Point (Method Used) Flash Point (Method Used) Flash Point (Method Used) Flash Point (Fighting Procedures  Will form explosive mixtures in air. Vapors from liquified gas initially heavier than air and spread along ground. Vapors may travel to ignition source and flash back.  SECTION VI - Reactivity Data  Stability Unstable Stable X Heat, Sparks, Open Flames.  Incompatibility (Materials to Avoid) Strong acids, alkalis and oxidizers.  Hazardous Decomposition or Byproducts Combustion may produce carbon monoxide.  Hazardous Polymerization May Occur Will Not Occur X Na  SECTION VI - Health Hazard Data Route(s) of Entry Inhalation? Skin? Yes Yes Yes Yes Yes  Yes  Carcinogenicity NTP? IARC Monograph? OSHA Regulated? No Signs and Symptoms of Exposure	Health - 1		Heal	lth - 0		
Reactivity - 0  Reactivity (H <sub>2</sub> O = 1)  Reacti						
Boiling Point   10.9°F   Specific Gravity (H <sub>2</sub> O = 1)   0.56   Vapor Pressure (mm Hg)   1823   Melting Point   NA   Vapor Density (Air = 1)   2   Evaporation Rate (Butyl Acetate = 1)   >1   Solubility in Water   @ 77°C, 17cc per 1000 cc of Water   Appearance and Odor   Clear, Odorless   SECTION IV - Fire and Explosion Hazard Data   Flash Point (Method Used)   -120°F (O.C.)   Flammable Limits   NA   LEL 1.8   UEL 8.4   Extinguishing Media   Carbon dioxide, dry chemical, fog or water spray.  Special Fire Fighting Procedures   Confine fire to immediate area. Disperse liquid or vapor if leaks occur.  Unusual Fire and Explosion Hazards   Will form explosive mixtures in air. Vapors from liquified gas initially heavier than air and spread along ground.   Vapors may travel to ignition source and flash back.  SECTION V - Reactivity Data   Unstable   Conditions to Avoid   SECTION V - Reactivity Data   Stable   X   Heat, Sparks, Open Flames.   Incompatibility (Materials to Avoid)   Strong acids, alkalis and oxidizers.   Hazardous Decomposition or Byproducts Combustion may produce carbon monoxide.   Hazardous Polymerization   May Occur   Conditions to Avoid   NA   SECTION VI - Health Hazard Data   Route(s) of Entry   Inhalation?   Skin?   Ingestion?   Yes						
Boiling Point   10.9°F   Specific Gravity (H₂O = 1)   0.56	Treactivity 0					
Boiling Point   10.9°F   Specific Gravity (H₂O = 1)   0.56	SECTION III - Physical/Chemical Ch	aracteristics				
Vapor Pressure (mm Hg)  Vapor Pressure (mm Hg)  Vapor Density (Air = 1)  Solubility in Water  © 77°C, 17cc per 1000 cc of Water Appearance and Odor Clear, Odorless  SECTION IV - Fire and Explosion Hazard Data Flash Point (Method Used)  -120°F (O.C.)  Flammable Limits NA  LEL 1.8  UEL 8.4  Extinguishing Media Carbon dioxide, dry chemical, fog or water spray. Special Fire Fighting Procedures  Unusual Fire and Explosion Hazards than air and spread along ground. Vapors may travel to ignition source and flash back.  SECTION V - Reactivity Data  Stability  Unstable Stable X Heat, Sparks, Open Flames.  Incompatibility (Materials to Avoid) Hazardous Decomposition or Byproducts Combustion may produce carbon monoxide.  Hazardous Polymerization May Occur Will Not Occur X NA  SECTION VI - Health Hazard Data  Route(s) of Entry Inhalation? Yes Yes Yes Yes Yes Yes OSHA Regulated? No Signs and Symptoms of Exposure			Specific Gravi	ty (H <sub>2</sub> O = 1)	0.56	
Vapor Density (Air = 1)  Solubility in Water  @ 77°C, 17cc per 1000 cc of Water Appearance and Odor Clear, Odorless SECTION IV - Fire and Explosion Hazard Data Flash Point (Method Used)  -120°F (O.C.) Flammable Limits NA LEL 1.8 UEL 8.4  Extinguishing Media Carbon dioxide, dry chemical, fog or water spray. Special Fire Fighting Procedures Unusual Fire and Explosion Hazards than air and spread along ground. Vapors may travel to ignition source and flash back.  SECTION V - Reactivity Data Stability  Unstable Stable X Heat, Sparks, Open Flames.  Incompatibility (Materials to Avoid) Hazardous Decomposition or Byproducts Combustion may produce carbon monoxide. Hazardous Polymerization May Occur Conditions to Avoid Will Not Occur X NA  SECTION VI - Health Hazard Data Route(s) of Entry Inhalation? Skin? Yes Yes Yes  Health Hazards (Acute and Chronic) Extreme flammability; vapor clouds easily ignited; simple asphyxiation; frostbite to skin and eyes from contact with liquid gases.  Carcinogenicity NTP? IARC Monographs? OSHA Regulated? No No No OSHA Regulated? Signs and Symptoms of Exposure		1823		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	NA	
Solubility in Water				ate (Butyl Acetate = 1)	>1	8
Appearance and Odor SECTION IV - Fire and Explosion Hazard Data Flash Point (Method Used) -120°F (O.C.) Flammable Limits NA LEL 1.8 UEL 8.4 Extinguishing Media Carbon dioxide, dry chemical, fog or water spray. Special Fire Fighting Procedures Confine fire to immediate area. Disperse liquid or vapor if leaks occur. Unusual Fire and Explosion Hazards than air and spread along ground. Vapors may travel to ignition source and flash back.  SECTION V - Reactivity Data Stability Unstable Stable X Heat, Sparks, Open Flames.  Incompatibility (Materials to Avoid) Hazardous Decomposition or Byproducts Combustion may produce carbon monoxide. Hazardous Polymerization May Occur Will Not Occur Will Not Occur Will Not Occur Yes Yes Yes Yes  Health Hazards (Acute and Chronic) Extreme flammability; vapor clouds easily ignited; simple asphyxiation; frostbite to skin and eyes from contact with liquid gases.  Carcinogenicity NTP? IARC Monographs? No No Signs and Symptoms of Exposure		@ 77°C, 17cc per 10			-4.5	
SECTION IV - Fire and Explosion Hazard Data Flash Point (Method Used) -120°F (O.C.) Flammable Limits NA LEL 1.8 UEL 8.4  Extinguishing Media Carbon dioxide, dry chemical, fog or water spray.  Special Fire Fighting Procedures Confine fire to immediate area. Disperse liquid or vapor if leaks occur.  Unusual Fire and Explosion Hazards Will form explosive mixtures in air. Vapors from liquified gas initially heavier than air and spread along ground. Vapors may travel to ignition source and flash back.  SECTION V - Reactivity Data  Stability Unstable Conditions to Avoid Stable X Heat, Sparks, Open Flames.  Incompatibility (Materials to Avoid) Strong acids, alkalis and oxidizers.  Hazardous Decomposition or Byproducts Combustion may produce carbon monoxide.  Hazardous Polymerization May Occur Conditions to Avoid Will Not Occur X NA  SECTION VI - Health Hazard Data  Route(s) of Entry Inhalation? Skin? Yes Yes Yes  Health Hazards (Acute and Chronic)  Extreme flammability; vapor clouds easily ignited; simple asphyxiation; frostbite to skin and eyes from contact with liquid gases.  Carcinogenicity NTP? IARC Monographs? OSHA Regulated?  No No No No			00 00 01 110101			
Flash Point (Method Used)  Flash Point (Method Used)  Flammable Limits NA LEL 1.8 UEL 8.4  Extinguishing Media Carbon dioxide, dry chemical, fog or water spray.  Special Fire Fighting Procedures  Confine fire to immediate area. Disperse liquid or vapor if leaks occur.  Unusual Fire and Explosion Hazards  Will form explosive mixtures in air. Vapors from liquified gas initially heavier than air and spread along ground. Vapors may travel to ignition source and flash back.  SECTION V - Reactivity Data  Stability  Unstable  Stable  X Heat, Sparks, Open Flames.  Hazardous Decomposition or Byproducts Combustion may produce carbon monoxide.  Hazardous Polymerization  May Occur  Will Not Occur  X NA  SECTION VI - Health Hazard Data  Route(s) of Entry  Inhalation?  Yes  Yes  Yes  Health Hazards (Acute and Chronic)  Extreme flammability; vapor clouds easily ignited; simple asphyxiation; frostbite to skin and eyes from contact with liquid gases.  Carcinogenicity  NTP?  IARC Monographs?  No  Signs and Symptoms of Exposure	SECTION IV - Fire and Explosion Ha					
Extinguishing Media Carbon dioxide, dry chemical, fog or water spray.  Special Fire Fighting Procedures Unusual Fire and Explosion Hazards than air and spread along ground.  Vapors may travel to ignition source and flash back.  SECTION V - Reactivity Data  Stability  Unstable Stable Vapors may travel to ignition source and flash back.  SECTION V - Reactivity Data  Unstable Stable Vapors may travel to ignition source and flash back.  SECTION V - Reactivity Data  Unstable Stable Vapors may travel to ignition source and flash back.  SECTION V - Reactivity Data  Strong acids, alkalis and oxidizers.  Hazardous Decomposition or Byproducts Combustion may produce carbon monoxide.  Hazardous Polymerization May Occur Will Not Occur Will Not Occur Vapors from liquid gas initially heavier  Conditions to Avoid Conditions to Avoid Vapors may travel to ignition source and flash back.  Section V - Reactivity Data  Stable X Heat, Sparks, Open Flames.  Conditions to Avoid Will Not Occur X NA  SECTION VI - Health Hazard Data  Route(s) of Entry Inhalation? Vapors may travel to ignition source and flash back.  Skin? Ingestion? Yes Yes Yes Yes  Health Hazards (Acute and Chronic) Extreme flammability; vapor clouds easily ignited; simple asphyxiation; frostbite to skin and eyes from contact with liquid gases.  Carcinogenicity No No No No Signs and Symptoms of Exposure			Flammable Lin	mits NA	LEL 1.8	UEL 8.4
Confine fire to immediate area. Disperse liquid or vapor if leaks occur.						
Unusual Fire and Explosion Hazards than air and spread along ground. Vapors may travel to ignition source and flash back.  SECTION V - Reactivity Data  Stability  Unstable Stable Stop Strong acids, alkalis and oxidizers.  Hazardous Decomposition or Byproducts Combustion may produce carbon monoxide.  Hazardous Polymerization May Occur Will Not Occur Will Not Occur No  SECTION VI - Health Hazard Data  Route(s) of Entry Inhalation? Extreme flammability; vapor clouds easily ignited; simple asphyxiation; frostbite to skin and eyes from contact with liquid gases.  Carcinogenicity NTP? IARC Monographs? No  No  No  No  No  Simple asphystoms of Exposure		Confine fire to imme	diate area. Dispe	erse liquid or vapor if leal	ks occur.	
than air and spread along ground. Vapors may travel to ignition source and flash back.  SECTION V - Reactivity Data  Stability  Unstable Stable X Heat, Sparks, Open Flames.  Incompatibility (Materials to Avoid) Strong acids, alkalis and oxidizers.  Hazardous Decomposition or Byproducts Combustion may produce carbon monoxide.  Hazardous Polymerization May Occur Will Not Occur X NA  SECTION VI - Health Hazard Data Route(s) of Entry Inhalation? Yes Yes Yes  Health Hazards (Acute and Chronic) Extreme flammability; vapor clouds easily ignited; simple asphyxiation; frostbite to skin and eyes from contact with liquid gases.  Carcinogenicity NTP? IARC Monographs? No No Signs and Symptoms of Exposure	Unusual Fire and Explosion Hazard	s Will form explosive	mixtures in air. \	Vapors from liquified gas	initially heavier	
SECTION V - Reactivity Data  Stability  Unstable Stable X Heat, Sparks, Open Flames.  Incompatibility (Materials to Avoid) Hazardous Decomposition or Byproducts Hazardous Polymerization  May Occur Will Not Occur X NA  SECTION VI - Health Hazard Data Route(s) of Entry Health Hazards (Acute and Chronic) Extreme flammability; vapor clouds easily ignited; simple asphyxiation; frostbite to skin and eyes from contact with liquid gases.  Carcinogenicity No No No  No  Conditions to Avoid X NA  Section VI - Health Hazard Data NA  Skin? Yes Yes Yes Yes Yes Yes Yes  Carcinogenicity No	than air and spread along ground.	Vapors may travel to	ignition source ar	nd flash back.		
Stability    Unstable   X   Heat, Sparks, Open Flames.						
Stable   X   Heat, Sparks, Open Flames.		Unstable			Conditions to Avo	oid
Hazardous Decomposition or Byproducts Combustion may produce carbon monoxide.  Hazardous Polymerization  May Occur Will Not Occur X NA  SECTION VI - Health Hazard Data  Route(s) of Entry Inhalation? Yes Yes Yes  Health Hazards (Acute and Chronic) Extreme flammability; vapor clouds easily ignited; simple asphyxiation; frostbite to skin and eyes from contact with liquid gases.  Carcinogenicity NTP? IARC Monographs? No No No OSHA Regulated? No No		Stable		Χ	Heat, Sparks, Ope	n Flames.
Hazardous Decomposition or Byproducts Combustion may produce carbon monoxide.  Hazardous Polymerization    May Occur   X   NA	Incompatibility (Materials to Avoid)	Strong acids, alkalis	and oxidizers.			
Hazardous Polymerization    May Occur   X	Hazardous Decomposition or Bypro		ay produce carbo	on monoxide.	Ta	
Route(s) of Entry  Inhalation? Yes  Yes  Yes  Health Hazards (Acute and Chronic) Extreme flammability; vapor clouds easily ignited; simple asphyxiation; frostbite to skin and eyes from contact with liquid gases.  Carcinogenicity  NTP? IARC Monographs? No  No  Signs and Symptoms of Exposure		May Occur				
Route(s) of Entry  Inhalation? Yes  Yes  Yes  Health Hazards (Acute and Chronic) Extreme flammability; vapor clouds easily ignited; simple asphyxiation; frostbite to skin and eyes from contact with liquid gases.  Carcinogenicity  NTP? IARC Monographs? No  No  Signs and Symptoms of Exposure		Will Not Occur		X	NA NA	1
Health Hazards (Acute and Chronic) Extreme flammability; vapor clouds easily ignited; simple asphyxiation; frostbite to skin and eyes from contact with liquid gases.  Carcinogenicity  NTP? IARC Monographs? No No No No OSHA Regulated? No					Ingestion?	
Health Hazards (Acute and Chronic)  Extreme flammability; vapor clouds easily ignited; simple asphyxiation; frostbite to skin and eyes from contact with liquid gases.  Carcinogenicity  NTP?  NO  NO  NO  NO  NO  NO  NO  NO  NO  N	Route(s) of Entry		Skin?	Yes		
Carcinogenicity NTP? IARC Monographs? OSHA Regulated? No No No No	Extreme flammability; vapor clouds	)	asphyxiation; fro		om contact with	
No N		NTDO	IADO Mana	anha?	OSHA Pagulated	>
Signs and Symptoms of Exposure  Drowsiness or dizziness possible at low concentrations of the gases.	Carcinogenicity		IARC Monogr			
Drowsiness or dizziness possible at low concentrations of the gases.	Signs and Symptoms of Exposure					
	Drowsiness or dizziness possible	at low concentrations o	f the gases.			

Medical Conditions Generally Aggravated by Exposure

Personnel with pre-existing chronic respiratory diseases should avoid exposure to these gases.							
<b>Emergency and First Aid Procedures</b>							
Remove affected personnel from con	Remove affected personnel from contaminated area to fresh air. For respiratory distress, give air, oxygen, and administer						
cardio-pulmonary resuscitation as needed. For burns to eye, remove contact lenses and immediately flush with water							
for at least 15 minutes. Frozen skin should be flooded with warm water (105-115°F).							
SECTION VII - Precautions for Safe Handling and Use							
Steps to be Taken in Case Material is Released or Spilled							
Remove all ignition sources. Ventilate area of leak to disperse the gas.							
Waste Disposal Method							
Discharge at moderate rate in well ventilated area without ignition sources.							
Precautions to be Taken in Handling	and Storing						
Store in a cool, dry place. Keep away from heat, sparks and flame. Do not store in temperatures exceeding 120°F or							
in direct sunlight.							
Other Precautions							
Do not store with strong acids (e.g. hydrochloric acid, sulphuric acid), strong bases (e.g. sodium hydroxide, potassium							
hydroxide), oxidizing agents (e.g. perchlorates, peroxides, permanganates, chlorates, nitrates, chlorine, fluorine,							
bromine) and mixtures of nickel carb	onyl and oxygen.						
SECTION VIII - Control Measures							
Respiratory Protection (Specify Type)							
Not required for normal use. For excessive gas concentrations use NIOSH/MSHA approved SCBA.							
Ventilation			Special				
	Maintain level below .2	25 LEL.	NA				
	Mechanical		Other				
	(General)						
3	Maintain level below .25 LEL.		NA				
Protective Gloves	Eye Protection						
Rubber Gloves.	ANSI Approved Chemical Workers Goggles.						
Other Protective Clothing or Equipment							
Not Required.							
Work/Hygenic Practices							
On skin contact with butane, immediately immerse the affected body part in warm water.							
SECTION IX - Shipping Information							
WHMIS Classification: A - Compressed Gas B-1 - Flammable Gas							
Department of Transportation:	Proper Shipping	Hazard Classification	UN No.				
	Name	Mark Code					
	Lighters, containing	2.1	1057				
	flammable gas						