	CA FEMS		
		DATA SHE	
	SECTION 1 ◆	IDENTIFICA'	TION
Magellan Midstream Partners		For Emergency	Source Information Contact:
One Williams Center			(877-852-0015 or +1 (760) 602-8700
Tulsa, OK 74172	1		`
GHS PRODUCT IDENTIFIER:	CHEMICAL FAMI	LY: Petroleum	<b>PRODUCT USES:</b> Used primarily as a fuel
PROPANE	Hydrocarbon		source for internal combustion engines.
SEC	TION 2 * HAZ		FICATION
		ASSIFICATIONS	II I D II C' I C
Flammable Gas - Categ	•		S Under Pressure-Liquefied Gas
May contain or release poisonous h	ydrogen sulfide ga	ns	
	GHS LA	BEL ELEMENTS	
		ropane	
GHS PICTOGRAMS	5		Signal Word
			DANGER
	Hazari	STATEMENTS	
Contains gas under pressure, may e	explode if heated		Extremely flammable gas
	PRECAUTION	NARY STATEMENT	rs
	Pr	evention	
Do not eat, drink or smoke when using	this product		nlight, store in ventilated place
Wash thoroughly after handling	1 / 61 /1		gas/mist/vapors/spray
No smoking. Keep away from heat/spa			
Eliminate all ignition sources if safe to		esponse	
Leaking gas fire: Do not extinguish, un		nned safely	
	iless leak eati be sto		concerned: Call a POISON CENTER or
Store in ventilated place		doctor/physician	
	S	Storage	
Store in a well-ventilated place Keep cool		Protect from sur	nlight
	L	Disposal	
Dispose of contents/container in accord			rnational regulations.
		RINFORMATION	
Magellan Midstream Partners	One Willia	ams Center	Tulsa, OK 74172
SECTION 3 ▼	COMPOSITION	N/INFORMATION	ON OF INGREDIENTS
Ingredient	CAS N	UMBER	PERCENTAGE (%)
Propane	74-9	98-6	60-100
n-butane	å	97-8	0-10
Isobutane	75-2		0-10
Ethane	74-8	34-0	0-10
Methane	74-8	32-8	0-1

Hydrogen Sulfide	7783-06-4	0-0.5
Try drogen Bunide	7705 00 1	0 0.5

### **SECTION 4 + FIRST AID MEASURES**

**EYES:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids, Get Medical Aid.

**SKIN:** Quickly remove contaminated clothing. In case of frostbite or freeze burns seek immediate medical attention.

**INGESTION:** Risk is low since it is a gas. Call a physician and/or transport to an emergency facility immediately.

**INHALATION:** Get medical aid immediately. Remove from exposure to fresh air immediately. If not breathing, give Cardiopulmonary Resuscitation. If breathing is difficult, give oxygen.

NOTE TO PHYSICIAN: TREAT SYMPTOMATICALLY AND SUPPORTIVELY

### SECTION 5 % FIRE-FIGHTING MEASURES

**EXTREMELY FLAMMABLE!** This material is extremely flammable/explosive! Exposure to materials adjacent to container may start addition fires/explosions. Keep any source of heat away from material, e.g., smoking, heat, sparks.

**SUITABLE EXTINGUISHING MEDIA:** Stop flow of material first if it can be done safely. Water fog, dry chemical, foam, or Carbon Dioxide. Use water spray to cool nearby containers and structure exposed to fire. Water fog or spray are of value in cooling tanks and containers but may not achieve extinguishment.

**HAZARDOUS REACTIONS/DECOMPOSITION:** Burning or excessive heating may produce carbon monoxide and carbon dioxide, also other harmful gases/vapors including oxides and/or other compounds of chlorine, manganese, and bromine.

**SPECIAL PROTECTIVE ACTIONS FOR FIREFIGHTERS:** For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment. This may include self-contained breathing apparatus to protect against the hazardous effects of combustion products and oxygen deficiencies. If firefighters cannot work upwind to the fire, respiratory protective equipment must be worn. Cool tanks and containers exposed to fire with water. Notify appropriate authorities if liquid enters sewer/waterways.

#### **SEE SECTION 9 FOR FLAMMABILITY PROPERTIES**

SECTIO	SECTION 6 ❖ ACCIDENTAL RELEASE MEASURES						
PERSONAL PRECAUTIONS	ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Evacuate personnel to safe areas. Use personal protective equipment. All equipment used when handling the product must be grounded. Ensure adequate ventilation. Take precautionary measures against static discharges. Keep people away from and upwind of spill/leak. Stop leak if you can do it without risk.						
METHODS FOR CONTAINMENT	A gas suppressing foam may be used to reduce gas. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Dike far ahead of liquid spill for later disposal.						
METHODS FOR CLEANING UP	Use clean non-sparking tools to collect absorbed material. Dike far ahead of liquid spill for later disposal.						
OTHER INFORMATION Water spray may reduce gas; but may not prevent ignition in closed spaces.							
SE	CTION 7 💥 HANDLING AND STORAGE						
Prior to working with this	product workers should be trained on its proper handling and storage						
PRECAUTIONS FOR SAFETY HANDLING	<ul> <li>Handle as a flammable gas.</li> <li>Keep away from heat, sparks, and open flame! Electrical equipment should be approved for classified area. Bond and ground containers during product transfer to reduce the possibility of static-initiated fire or explosion.</li> <li>Ensure adequate ventilation, keep away from open flames, hot surfaces and sources of ignition.</li> <li>Do not allow back feed into container</li> <li>Purge air from system before introducing gas</li> <li>Use properly selected piping and equipment for this material</li> </ul>						
STORAGE PROCEDURES	➤ Keep away from flame, sparks, excessive temperatures and open flame. Use approved vented containers.						

	>	Store upright with valve protection cap in place and firmly secured to prevent
		falling or being knocked over.
	>	Keep containers closed and clearly labeled. Empty product containers or vessels
		may contain explosive gas. Do not pressurize, cut, heat, weld or expose such
		containers to sources of ignition.
		Store in a well-ventilated area. This storage area should comply with NFPA 30
		"Flammable and Combustible Liquid Code".
	>	Avoid storage near incompatible materials.
INCOMPATIBILITIES	<b>A</b>	Keep away from strong oxidizers.

# **SECTION 8 # EXPOSURE CONTROLS / PERSONAL PROTECTION**

EXPOSURE LIMITS								
Chemical Name	ACGIH TLV (2017)	OSHA PEL	NIOSH IDLH					
Propane	TWA: Not Listed	TWA: 1,000 ppm	2,100 ppm					
Butane	TWA: None STEL: 1,000 ppm	TWA: None	800 ppm (REL)					
Ethane	TWA: 1,000 ppm	TWA: None	TWA: None					
Methane	TWA: 1,000 ppm	TWA: None	TWA: None					
Hydrogen Sulfide	TWA: 1 ppm STEL: 5 ppm	Ceiling: 20 ppm Peak: 50 ppm	100 ppm					

**ENGINEERING CONTROLS:** Use adequate ventilation to keep gas concentrations of this product below occupational exposure and flammability limits, particularly in confined areas.

### PERSONAL PROTECTIVE EQUIPMENT

- **EYES:** Eye protection (ANSI Z87.1 approved) should be worn whenever there is a likelihood of misting or splashing/spraying liquid. Suitable eyewash station should be available. Contact lenses must not be worn.
- **SKIN/BODY:** Chemical protective clothing such as of E.I. DuPont TyChem®, Saranex® or equivalent recommended based on degree of exposure. Note: The resistance of specific material may vary from product to product as well as with degree of exposure. Consult manufacturer specifications for specific information.
- **HAND PROTECTION:** Gloves constructed of nitrile, neoprene, or PVC are recommended. Consult manufacturer specifications for specific information.
- > **RESPIRATORY PROTECTION:** A NIOSH approved air purifying respirator (APR) with properly selected cartridges may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by APRs is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known or any other circumstances where APRs may not provide adequate protection.
- > OTHER HYGIENIC AND WORK PRACTICES: Use good personal hygiene practices. In case of skin contact, wash with mild soap and water or a waterless hand cleaner. Immediately remove soaked clothing and wash thoroughly before reuse.

SECTION 9 & PHYSICAL AND CHEMICAL PROPERTIES							
<b>BOILING POINT</b> (760 MM HG): -44 °F/ -42.2 °C	PERCENT VOLATILE BY VOLUME: 100%						
SPECIFIC GRAVITY ( $H_2O = 1$ ): 0.59	VISCOSITY UNITS, TEMP: Not Applicable						
<b>EVAPORATION RATE</b> ( <b>BuAc = 1</b> ): Unavailable	<b>GAS DENSITY (AIR =1):</b> 1.5						
VAPOR PRESSURE AT 25°C: 8.4 Atmospheres	SOLUBILITY IN WATER: Insoluble						
APPEARANCE AND ODOR: Colorless, odorless gas un	inless odorized, then rotten eggs odor						
FLASH POINT: (Method Used) NA (Gas)	FLAMMABLE LIMITS: LEL: 2.1%						
FLASH FOINT: (Method Osed) NA (Gas)	UEL: 9.5%						
<b>AUTOIGNITION TEMPERATURE:</b> 500 °F / 260 °C	VOC CONTENT: 100%						

# SECTION 10 X STABILITY AND REACTIVITY

**CHEMICAL STABILITY:** Stable under normal temperatures and pressures

HAZARDOUS REACTION POTENTIAL: Will not occur

**CONDITIONS TO AVOID:** Avoid high temperatures, open flames, sparks, welding, smoking and other ignition sources.

**INCOMPATIBLE PRODUCTS:** Keep away from strong oxidizers.

MATERIALS TO AVOID: Keep away from strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke).

**HAZARDOUS POLYMERIZATION:** Has not been reported.

### **SECTION 11 ® TOXICOLOGICAL INFORMATION**

#### **PROPANE**

Propane is a simple asphyxiant at high concentrations, with reports of mild irritation. Signs of exposure may include dizziness and drowsiness.

Toxicity									
Type Of Dose	Specie	Result	Type Of Dose	Specie	Result	Type Of Dose	Specie	Result	
$LD_{50(oral)} \\$	Rat	Not Available	LD <sub>50(dermal)</sub>	Rabbit	Not Available	LC <sub>50(inh)</sub>	Rat (15 minutes)	>800,000 ppm	

Specific organ toxicity, single exposure: No data available | Specific organ toxicity, repeated exposure: No data available

#### **CARCINOGENICITY**

IARC	Not Listed
NTP	Not Listed

California (Prop 65): Not NIOSH: Not Listed **ACGIH:** Not Listed **OSHA:** Not Listed Listed

### MUTAGENICITY, TERATOGENICITY AND REPRODUCTIVE EFFECTS

Respiratory or Skin sensitization: No data available	Germ cell mutagenicity: No data available
Reproductive toxicity: No data available	Teratogenicity: No data available.
Skin Corrosion/irritation: Gas is not irritating, however, frostbite and burns may occur due to being a liquefied product	Serious eye damage: Gas is not irritating, however, frostbite and burns may occur due to being a liquefied product
Synergistic effects: No data available	Aspiration hazard: No data available

RTECS #: TX2275000

### **BUTANE**

Butane is a colorless gas with no odor, although an odorant is sometimes added to the gas to provide warning of its presence. Health effects may include drowsiness, narcosis, asphyxia; cardiac arrhythmia at high concentrations and frostbite from contact with liquid.

#### TOXICITY

Type Of Dose	Specie	Result	Type Of Dose	Specie	Result	Type Of Dose	Specie	Result
LC <sub>50(inh)</sub>	Mouse (2 hours)	$680 \text{ g/M}^3$	LD <sub>50(dermal)</sub>	Rabbit	No Data	LC <sub>50(inh)</sub>	Rat (4 hours)	658 g/M <sup>3</sup>

Specific organ toxicity, single exposure: May cause drowsiness or dizziness

Specific organ toxicity, repeated exposure: may cause damage to organs from repeated or prolonged exposure. May cause nervous system damage.

# **CARCINOGENICITY**

Testicular tumors shown in rats.

IARC	Not Listed
NTP	Not Listed

California (Prop 65): Not listed as carcinogen NIOSH: Not Listed				ACGIH: Not Listed				OSHA: Not Listed	
		MUTAGENICITY	, TERATOGE	NICITY	Y AND	REPRODU	CTIVE EFFE	CTS	
Respiratory or	Skin sensitiz	ation: No data av	vailable	(	Germ	n cell mutag	enicity: No d	ata available	
Reproductive t	•			,	Terate	ogenicity: I	No data availa	able	
		as is not irritatin ur due to being a	_						owever, frostbite
product	•		•		ana b	ourns may o	ccur due to b	eing a liquefie	a product
Synergistic eff		available			Aspir	ration hazar	d: No data av	ailable	
RTECS #: EJ4	200000								
METHANE									
available to bre As less oxygen	eathe, sympto becomes av	oms such as rapio	l breathing, rand vomiting, coxygen can can	apid he collaps ause pe	eart ra se, co erman	ate, clumsin onvulsions,	ess, emotiona coma and dea	al upsets and fath can occur.	If less oxygen is atigue can result. Symptoms occur ain and heart.
Type Of Dose	Specie	Result	Type Of Dose	Spec	Í	Result	Type Of Dose	Specie	Result
LD <sub>50(oral)</sub>	Rat	No Data	LD <sub>50(dermal)</sub>	Rabb	oit	No Data	LC <sub>50(inh)</sub>	Mouse (2 hours)	500,000 ppm
Specific organ drowsiness or o		gle exposure: Ma		da	amage ause r	e to organs nervous sys		d exposure: n d or prolonged	nay cause I exposure. May
IARC			CARC	LINUG		ot Listed			
NTP					Not Listed				
California (I	Prop 65): No	NIOSH NIOSH	I: Not Listed	Į.	ACGIH: Not Listed OSHA: Not Listed				
		MUTAGENICITY	, TERATOGE	NICITY	Y AND	REPRODU	CTIVE EFFE	CTS	
		ation: No data av	vailable				enicity: No d		
Reproductive t				,	Terate	ogenicity: I	No data availa	able	
		as is not irritatin ur due to being a	· .			•	•	ot irritating, ho eing a liquefie	owever, frostbite ed product
Synergistic eff	ects: No data	available			Aspir	ration hazar	d: No data av	ailable	
RTECS #: PA	490000								
				ETHA.	NE				
available to bro As less oxygen	Ethane is a flammable, colorless gas with no odor. A high concentration can displace oxygen in the air. If less oxygen is available to breathe, symptoms such as rapid breathing, rapid heart rate, clumsiness, emotional upsets and fatigue can result. As less oxygen becomes available, nausea and vomiting, collapse, convulsions, coma and death can occur. Symptoms occur more quickly with physical effort. Lack of oxygen can cause permanent damage to organs including the brain and heart.								
Type Of			Type Of	Toxic	ıty 		Type Of		
Dose	Specie	Result	Dose	Spec	ie	Result	Dose	Specie	Result
LD <sub>50(oral)</sub>	Rat	No Data	LD <sub>50(dermal)</sub>	Rabb	oit	No Data	LC <sub>50(inh)</sub>	Mouse (2 hours)	No Data
	Specific organ toxicity, single exposure: May cause drowsiness or dizziness  Specific organ toxicity, repeated exposure: may cause damage to organs from repeated or prolonged exposure. May cause nervous system damage.								

				CARC	CINOC	GENIC	ITY				
IARC		CARCINOGENICITY  Not Listed									
NTP		Not Listed  Not Listed									
California (Prop. 65): Not			NIOSE	<b>OSH:</b> Not Listed		ACGIH: Not Listed				OSHA: Not Listed	
		MUTAGEN	ICITY	, TERATOGE	NICIT	ΓΥ ANI	REPRODU	CTIVE EFFE	CTS		
Respiratory or Skin sensitization: No data available Germ cell mutagenicity: No data available											
Reproductive t	•					Terat	ogenicity: 1	No data avail	able		
Skin Corrosion frostbite and be product				•		Serious eye damage: Gas is not irritating, however, frostbite and burns may occur due to being a liquefied product					
Synergistic eff	ects: No data	a available				Aspiration hazard: No data available					
RTECS #: KH											
				Hydre	OGEN	v Suli	FIDE				
Hydrogen sulfide is a toxic, flammable colorless gas with a distinct "rotten-egg" smell. Inhalation of high concentrations can cause severe eye, nose and mucous membrane damage, dizziness, headache, and nausea. Exposure to higher concentrations can result in unconsciousness, coma, and death. Chronic exposure can damage memory, nerve tissue, facial muscles, and eyes.								er concentrations			
T Of	1				Toxi	icity		T Of			Γ
Type Of Dose	Specie	Resu	lt	Type Of Dose	Spe	ecie	Result	Type Of Dose	Spec		Result
LD <sub>50(oral)</sub> Solution	Rat	2,300 μ		LD <sub>50(dermal)</sub>	Rab	obit	No Data	LC <sub>50(inh)</sub>	Mou (1 ho	-	634 ppm
Specific organ toxicity, single exposure: May cause severe eye, nose and mucous membrane irritation. Higher concentrations may cause chemical asphyxiation.  Specific organ toxicity, repeated exposure: Not Classified concentrations may cause chemical asphyxiation.											
	1			CARC	CINO	GENIC					
IARC							t Listed				
NTP	man (5). N	at I intend	NII	OCII. Nati:	41	No	t Listed	Not I istad		OCII	A. Not I inted
California (Prop 65): Not Listed NIOSH: Not Listed ACGIH: Not Listed OSHA: Not Listed  MUTAGENICITY, TERATOGENICITY AND REPRODUCTIVE EFFECTS							A: Not Listed				
Respiratory or											
Respiratory or Skin sensitization: No data available Reproductive toxicity: Not Classified Teratogenicity: Not Classified.											
Skin Corrosion/irritation: will cause skin irritation  Serious eye damage, irritation -rabbit: serious eye irritation								eye irritation			
Synergistic effects: No Data  Aspiration hazard: May be fatal if swallowed and enters airway.											
RTECS #: MX1225000											
SECTION 12 * ECOLOGICAL INFORMATION											
PROPANE											
TOXICITY											
Type Of Do	se	Specie		Result		Type	Of Dose	Specie			Result
LC <sub>50</sub>				No Data			EC <sub>50</sub>				No Data
EC <sub>50</sub>			No Data			EC <sub>50</sub>				No Data	
PERSISTENCE AND DEGRADABILITY/BIOACCUMULATIVE POTENTIAL/ MOBILITY IN SOIL											
						availab					
METHANE/ETHANE											
TOXICITY											
Type Of Dose Spe		Specie		Result		Typ	e Of Dose	Spec	cie		Result

LC <sub>50</sub>		No Data	EC <sub>50</sub>	T		No Data		
EC <sub>50</sub>		No Data	EC <sub>50</sub>			No Data		
LC30	PERSIS	PERSISTENCE AND DEGRADABILITY/MOBILITY			L L			
	1 22101		a available	1 11 0 0 11	<u> </u>			
			ATIVE POTENTIAL					
Log Low		No Data	BCF			No Data		
K <sub>ow</sub> (n-Octanol/Water	r Partition Coeffici	ient)	l		N	To Data		
			UTANE	<u> </u>				
			XICITY					
Type Of Dose	Specie	Result	Type Of Dose	Specie		Result		
LC <sub>50</sub>		No Data	EC <sub>50</sub>			No Data		
EC <sub>50</sub>		No Data	EC <sub>50</sub>			No Data		
	PERSIS	STENCE AND DEGRA	ADABILITY/MOBILIT	Y IN SOIL	,			
		No dat	a available					
		BIOACCUMUL	ATIVE POTENTIAL					
Log Low		2.89	BCF	1		1.78 - 1.97		
Kow (n-Octanol/Water	r Partition Coeffici	ent)				2.89		
		Hydrog	EN SULFIDE					
		To	XICITY					
Type Of Dose	Specie	Result	Type Of Dose	Spe	cie	Result		
LC <sub>50</sub>	Bluegill	0.0448 mg/L 96 hours	EC <sub>50</sub>	Water	Flea	No Data		
LC <sub>50</sub>	Bluegill	0.016 mg/L 96 hours	EC <sub>50</sub> Micr		otox	ox No Data		
		BIOACCUMULA	ATIVE POTENTIAL					
Log Pow		No Data BCF No Data						
	SECTION	ON 13 * DISPO	DSAL CONSIDE	RATION	S			
Not Meant To Be All								
Dispose of in accorda								
Waste Disposal Meth	od: Should not be	released into the env	rironment.					
Contaminated Packag	ging: Dispose of in	accordance with loc	al regulations.					
	SECTION	I 14   TRANSF	PORTATION INF	ORMAT	ION			
Not Meant To Be All								
Element		U.S. DOT	IMDG		IATA			
UN Number		UN 1075	UN 1075		UN 1075			
UN Proper Shipping	Name Petroleur	m Gases, Liquefied	Petroleum Gases, Liquefied		Petroleum Gases, Liquefied			
Hazard Class		2.1	2.1		2.1			
Placard/Label			107	5				
Environmental Ha	zard	No	No N		No			

Packing Group	Not applicable		N	ot applicable	Not ap	pplicable	
	SECTION 15	) REGU	JLATOR	Y INFORMA	TION		
Aganay				Listing			
	Agency				only, consult specific		
OSHA				All ingredients are listed as hazardous under 29 CFR 1910.1200			
CERCLA RQ's				Hydrogen Sulfide- TPQ: 500 pounds and EPCRA			
(40 CFR Part 302)			RQ: 100 pounds				
CERCLA/SARA - Section 3	1/212 (Title III	Acute He		Yes	Chronic Health:	No	
Hazard Categories):	11/312 (11tie III	Fire Haza		Yes	Pressure Hazard:	No	
Trazaru Categories).		Reactive	Reactive Hazard: No				
CERCLA RQ's (40 CFR Par	t 102)			Hydrogen Sul	fide – 100 pounds		
TSCA 8(a)			Not Listed				
TSCA 8(b)		Not Listed					
SARA (40 CFR Part 355) TP	~	Hydrogen Sulfide					
SARA 304/311/312 extremel	y hazardous	Hydrogen Sulfide					
substances		Trydrogen Sumde					
SARA 302/304 emergency potification	Hydrogen Sulfide						
SARA 302/304/311/312 haza	rdous chamicals	Hydrogen Sylfide					
RCRA	Hydrogen Sulfide None Listed						
State Regulations: Massachusetts, New Jersey, Ne			nd				
Pennsylvania	vew Tork a	Propane and Hydrogen Sulfide			Sulfide		
SARA 311/312 SDS distribu	entory - haz	ard	d Hydrogen Sulfide: Fire hazard, Immediate		nmediate (acute)		
identification			health hazard, Delayed (chronic) health hazard.				
EPA Form R Toxic Chemical Release Inventory				Hydrogen Sulfide			
Clean Water Act (CWA) 307				Not Listed			
Clean Water Act (CWA) 311				Not Listed			
Clean Air Act Section			Listed				
112(b) Hazardous Air Polluta							
Clean Air Act Section 602 C	Not Listed						
Clean Air Act Section 602 Cl				Not Listed			

# SECTION 16 # OTHER INFORMATION



NFPA LABEL



### HMIS III LABEL

# Personal Protection Index

NPCA recommends that PPE codes be determined by the employer, who is familiar with the actual conditions under which chemicals in the facility are used.

Acronym List					
°F=degrees Fahrenheit	°C=degrees Celsius	ACGIH= American Conference of Industrial Hygienists			
APR=Air Purifying Respirator	BCF= Bioconcentration Factor	BuAc=Butyl Acetate			
CAS=Chemical Abstract Service	CERCLA= Comprehensive Environmental Response, Compensation, and Liability Act				

CHEMTREC= Chemical		1		
Transportation Emergency Center	CNS=Central Nervous System	CWA=Clean Water Act		
DOT=Department of Transportation	EC50= Effective Concentration Fifty	EPA=Environmental Protection Agency		
g/Kg=Grams per Kilogram	g/M³=Grams per Cubic Meter	GHS=Global Harmonization System		
H <sub>2</sub> O=Water	HAP=Hazardous Air Pollutants	HMIS= Hazardous Materials Identification System		
IARC= International Agency for	IATA= International Air Transport	IMDG= International Maritime		
Research on Cancer	Association	Dangerous Goods		
LC <sub>50</sub> =Lethal Concentration Fifty	LD <sub>50</sub> =Lethal Dose Fifty	LEL=Lower Explosive Limit		
Log P <sub>ow</sub> =Octanol/water partition coefficient	mg/Kg=Milligrams per Kilogram	mg/L=Milligrams per Liter		
mL/Kg=Milliliters per Kilogram	mm HG=millimeters of mercury	NFPA=National Fire Protection Association		
NIOSH= National Institute for Occupational Safety and Health	NTP=National Toxicology Program	OSHA=Occupational Safety and Health Administration		
PEL=Permissible Exposure Limit	ppm=Parts per Million	RCRA=Resource Conservation and Recovery Act		
RQ=Reportable Quantities	RTECS=Registry of Toxic Effects of Chemical Substances	SARA= Superfund Amendments and Reauthorization Act		
SDS=Safety Data Sheet	STEL=Short Term Exposure Limit			
TLV=Threshold Limit Value	TPQ=Threshold Planning Quantity	TSCA=Toxic Substance and Control Act		
TWA=Time Weighted Average	UEL=Upper Explosive Limit	VOC=Volatile Organic Compounds		
°F=degrees Fahrenheit	°C=degrees Celsius	ACGIH= American Conference of Industrial Hygienists		
APR=Air Purifying Respirator	BCF= Bioconcentration Factor	BuAc=Butyl Acetate		
CANUTEC= Canadian Transport Emergency Centre	CAS=Chemical Abstract Service	CERCLA= Comprehensive Environmental Response, Compensation, and Liability Act		
CHEMTREC= Chemical Transportation Emergency Center	CNS=Central Nervous System	CWA=Clean Water Act		
DOT=Department of Transportation	EC50= Effective Concentration Fifty	EPA=Environmental Protection Agency		
g/Kg=Grams per Kilogram	g/M <sup>3</sup> =Grams per Cubic Meter	GHS=Global Harmonization System		
H <sub>2</sub> O=Water	HAP=Hazardous Air Pollutants	HMIS= Hazardous Materials Identification System		
IARC= International Agency for Research on Cancer	IATA= International Air Transport Association	IMDG= International Maritime Dangerous Goods		
LC <sub>50</sub> =Lethal Concentration Fifty	LD <sub>50</sub> =Lethal Dose Fifty	LEL=Lower Explosive Limit		
Log Pow =Octanol/water partition coefficient	mg/Kg=Milligrams per Kilogram	mg/L=Milligrams per Liter		
mL/Kg=Milliliters per Kilogram	mm HG=millimeters of mercury	NFPA=National Fire Protection Association		
NIOSH= National Institute for Occupational Safety and Health	NTP=National Toxicology Program	OSHA=Occupational Safety and Health Administration		
PEL=Permissible Exposure Limit	ppm=Parts per Million	RCRA=Resource Conservation and Recovery Act		
RQ=Reportable Quantities	SARA= Superfund Amendments and Reauthorization Act	SDS=Safety Data Sheet		
SETIQ= Emergency Transportation System for the Chemical Industry; Mexico	STEL=Short Term Exposure Limit	TPQ=Threshold Planning Quantity		

**MATERIAL NAME: Propane** 



**SDS #: MMP-009** 

TSCA=Toxic Substance and Control Act

TWA=Time Weighted Average

UEL=Upper Explosive Limit

VOC=Volatile Organic Compounds

SDS REVISIONS: Sections 3, 8, 11, 12 and 15 ingredients.

**SDS CREATION DATE:** <u>07/02/16</u> **REVISION #1:** 04/19/17

Cass Willay

Cass Willard, CIH

### **DISCLAIMER**

The information in this SDS was obtained from sources which we believe are reliable. HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY WARRANTY, EXPRESSED OR IMPLIED, REGARDING ITS ACCURACY. Some conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THE PRODUCT. All product measurements such as flash point, *etc.* are considered approximate values. All data provided by Magellan Midstream Partners, L.P., or supplier. This SDS was prepared and is to be used only for this product.

SDS DEVELOPER:

DATE: <u>04/19/17</u>