



**MATERIAL SAFETY DATA SHEET (MSDS)
DEMETHANIZED RAW FEED MIX**

IDENTITY (As Used on Label and List) Demethanized Raw Feed Mix (DOT ID No: UN 1075)	(Hazard Rating: Health-1/Fire-4/Reactivity-1) DOT Hazard Classification: 2.1 (Flammable Gas)
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Section I – Chemical Product and Company Identification

Manufacturer's Name MARKWEST	Emergency Phone Number Markwest (800) 730-8388 / CHEMTREC (800) 424-9300
Address (Number, Street, City, State and ZIP code) 1515 Arapahoe Street	Telephone Number for Information: (800) 730-8388
Tower 1, Suite 1600	Date Prepared June 21, 2011
Denver, Colorado 80202-2126	Signature of Preparer (optional) N/A

Section II – Hazardous Ingredients/Identity Information

Hazardous Components (CAS)	OSHA PEL	ACGIH TLV	NIOSH	% (optional)
Propane (74-98-6)	1000 ppm	1000 ppm	1000 ppm	61.0
Ethane (74-84-0)	1000 ppm	1000 ppm		1.5
Isobutane (75-28-5)	none	1000 ppm	800 ppm	<25.0 Combined
Benzene (71-43-2)	1 ppm ST 5 ppm	0.5 ppm ST 2.5	0.1 ppm ST 1 ppm	<0.5
Normal Butane (106-97-8)	none	1000 ppm	800 ppm	<0.5
Cyclohexane (110-82-7)	300 ppm	300 ppm	300ppm	1.8
Xylene (1330-20-7)	100 ppm	100 ppm	100 ppm ST 150 ppm	<0.1
Toluene (108-88-3)	200 ppm C 300 ppm peak 500 ppm	50 ppm	100 ppm ST 150	0.3

Section III – Physical/Chemical Characteristics

Boiling Point N/D	Specific Gravity (H ₂ O = 1): .37 to .7
Vapor Pressure: 7 atm @ 20C	Melting Point: N/A
Vapor Density (AIR = 1): 1.04 to 4	Evaporation Rate (Butyl Acetate = 1): Very Rapid
Solubility in Water: Slight	
Appearance and Odor: Clear colorless liquid under pressure; distinct hydrocarbon odor.	

Section IV – Fire and Explosion Hazard Data

Flash Point (Method Used): -211° F (-135° C) Varies greatly with composition	Flammable Limits	LEL ~1.4%	UEL ~13%
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Medical Conditions Generally Aggravated by Exposure:

Personnel with pre-existing skin disorders, impaired liver function or CNS and respiratory diseases should avoid exposure to this material.

Emergency and First Aid Procedures:

Eyes: Rinse immediately with water. Remove contact lenses. Flush with water for 10-15 minutes. Consult a physician.

Skin: Wash affected areas with soap and water. If evidence of frostbite, warm frostbitten areas gradually and get medical help if there is evidence of tissue damage.

Swallowed: Rinse mouth with water. Drink 1-2 glasses of milk or water. Do not induce vomiting unless directed by a physician

Inhaled: Remove to fresh air. If breathing has stopped, restore breathing at once. Administer oxygen and get medical help.

Section VII – Precautions for Safe Handling and Use

Steps to be taken in Case Material is Released or Spilled:

Eliminate and prevent source of ignition. Supply maximum ventilation. Use water fog to evaporate or ventilate. Protect body contact with liquid. If in a confined space, wear self-contained breathing apparatus. For small containers, remove leaking container to remote area and allow to bleed off. Consult with local fire jurisdiction as necessary. .

Waste Disposal Method:

Conduct waste gas (not liquid) to a furnace by means of piping and incinerate with caution in accordance with state and local applicable government regulations, if any.

Precautions to Be Taken in Handling and Storing:

Store small containers in well-ventilated area, away from heat, direct sunlight and sources of ignition. Prohibit smoking in areas of storage or use. Keep isolated from cylinders of oxygen, chlorine and other oxidizers. Protect against damaging valves on containers. Be sure personnel are trained in proper procedures for handling compressed gas containers.

Other Precautions:

A minimum of a 20% vapor space (or outage) should be maintained on all containers of liquefied petroleum gas.

Section VIII – Control Measures

Respiratory Protection (Specify Type):

NIOSH approved self-contained breathing apparatus; accompanied by sufficient water spray to reduce the risk of fire or explosion is required when concentration in the air exceeds TLV. Control occupational exposures below 1 ppm benzene rather than 300 ppm gasoline TLV.

Ventilation:	Local Exhaust	Special
	Mechanical (General)	Other Explosion proof ventilation as needed to keep concentration in the air below TLV.

Protective Gloves Insulated impervious industrial quality gloves	Eye Protection Safety glasses (minimum); face shield or goggles
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Other Protective Clothing or Equipment:

Appropriate, impervious clothing for prolonged or repeated contact. NOMEX or equivalent type clothing when applicable.

Work/Hygienic Practices

N/A

N/A – Not Applicable

N/D – Not Determined

~ -- Approximately

* -- Based on LP (Gas)