SAFETY DATA SHEET

M49060 - EN

DEBUTANIZER BOTTOMS

SDS No.: M49060
Rev. Num. 00-New

SDS Revision Date: 25-Jan-2017

SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Company Identification:	Occidental Chemical Corporation 5005 LBJ Freeway P.O. Box 809050 Dallas, TX 75380-9050 1-800-752-5151
24 Hour Emergency Telephone Number:	1-800-733-3665 or 1-972-404-3228 (USA); CANUTEC (Canada): 1-613-996-6666; CHEMTREC (within USA and Canada): 1-800-424-9300; CHEMTREC (outside USA and Canada): +1 703-527-3887; CHEMTREC Contract No: CCN16186
To Request an SDS:	MSDS@oxy.com or 1-972-404-3245
Customer Service:	1-800-752-5151 or 1-972-404-3700
Product Identifier:	**DEBUTANIZER BOTTOMS**
Synonyms:	HYDROTREATED PYROLYSIS GASOLINE, PYROLYSIS GASOLINE, C5-C9 GASOLINE, PYGAS
Product Use:	Chemical feed stock
Chemical Family:	High Benzene Light Naphtha

DEBUTANIZER BOTTOMS

SDS No.: M49060
SDS Revision Date: 25-Jan-2017
Supersedes Date: New Product
Rev. Num.00-New

SECTION 2. HAZARDS IDENTIFICATION

OSHA REGULATORY STATUS: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

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EMERGENCY OVERVIEW:

Color: Pale, yellow
Physical State: Liquid
Odor: Hydrocarbon

Signal Word: **DANGER**

MAJOR HEALTH HAZARDS: MAY BE HARMFUL IF SWALLOWED. MAY BE HARMFUL IN CONTACT WITH SKIN. MAY BE HARMFUL IF INHALED. MAY CAUSE CANCER. MAY CAUSE GENETIC DEFECTS. SUSPECTED OF DAMAGING FERTILITY OR THE UNBORN CHILD. MAY CAUSE DROWSINESS OR DIZZINESS. CAUSES SKIN IRRITATION. CAUSES SERIOUS EYE IRRITATION. CAUSES DAMAGE TO HEMATOLOGIC SYSTEM (BLOOD) THROUGH PROLONGED OR REPEATED EXPOSURES. CAUSES DAMAGE TO PERIPHERAL NERVOUS SYSTEM THROUGH PROLONGED OR REPEATED EXPOSURE. MAY CAUSE LIVER AND KIDNEY DAMAGE. MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS.

PHYSICAL HAZARDS: EXTREMELY FLAMMABLE LIQUID AND VAPOR.

AQUATIC TOXICITY: TOXIC TO AQUATIC LIFE WITH LASTING EFFECTS.

ECOLOGICAL HAZARDS: MARINE POLLUTANT.

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GHS CLASSIFICATION:

GHS: PHYSICAL HAZARDS:	Flammable Liquid - Cat. 1 Extremely Flammable
GHS: CONTACT HAZARD - SKIN:	Category 2 - Causes skin irritation
GHS: CONTACT HAZARD - EYE:	Category 2A - Causes serious eye irritation
GHS: ASPIRATION HAZARD:	Category 1 - May be fatal if swallowed and enters airways
GHS: TARGET ORGAN TOXICITY (SINGLE EXPOSURE):	Category 3 - May cause drowsiness or dizziness
GHS: TARGET ORGAN TOXICITY (REPEATED EXPOSURE):	Category 1 - Causes damage to HEMATOPOIETIC SYSTEM through prolonged or repeated exposure
GHS: CARCINOGENICITY:	Category 1B - May cause cancer
GHS: GERM CELL MUTAGENICITY:	Category 1B - May cause genetic defects
GHS: REPRODUCTION TOXIN:	Category 2 - Suspected of damaging fertility or the unborn

DEBUTANIZER BOTTOMS

SDS No.: M49060
SDS Revision Date: 25-Jan-2017
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Rev. Num.00-New

	child
HAZARDOUS TO AQUATIC ENVIRONMENT - CHRONIC HAZARD:	Category 2 - Toxic to aquatic life with long lasting effects

GHS SYMBOL: Flame, Exclamation mark, Health hazards, Environmental hazard

GHS SIGNAL WORD: **DANGER**

GHS HAZARD STATEMENTS:

GHS - Physical Hazard Statement(s)
• EXTREMELY FLAMMABLE LIQUID AND VAPOR

GHS - Health Hazard Statement(s)
• Causes skin irritation
• Causes serious eye irritation
• May cause genetic defects
• May cause cancer
• Suspected of damaging fertility or the unborn child
• May cause drowsiness or dizziness
• Causes damage to hematopoietic system (blood) through prolonged or repeated exposure
• H373 - May cause damage to liver, kidney, digestive system, olfactory and auditory senses, and peripheral nervous system through prolonged or repeated exposure
• May be fatal if swallowed and enters airways

GHS - Environmental Hazard Statement(s)
• Toxic to aquatic life with long lasting effects

GHS - Precautionary Statement(s) - Prevention
• Obtain special instructions before use
• Do not handle until all safety precautions have been read and understood
• Keep away from heat/sparks/open flames/hot surfaces. — No smoking
• Keep container tightly closed
• Ground/ bond container and receiving equipment
• Use explosion-proof equipment (electrical equipment, ventilating equipment, lighting equipment, etc.)
• Use only non-sparking tools
• Take precautionary measures against static discharge
• Do not breathe mist, vapors, or spray
• Wash skin and contaminated clothing thoroughly after handling
• Do not eat, drink or smoke when using this product
• Use only outdoors or in a well-ventilated area
• Avoid release to the environment
• Wear protective gloves, protective clothing, eye, and face protection

• Use respiratory protection as required

GHS - Precautionary Statement(s) - Response
• In case of fire: use dry chemical, carbon dioxide (CO2), foam, water fog or spray to extinguish
• IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower
• IF ON SKIN: Wash with plenty of soap and water
• Specific treatment: See section 4 of the safety data sheet (SDS)
• If skin irritation or rash occurs: Get medical advice/attention
• Take off immediately all contaminated clothing and wash it before reuse
• IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
• If eye irritation persists: Get medical advice/attention
• IF INHALED: Remove person to fresh air and keep comfortable for breathing
• Get medical advice/attention if you feel unwell
• IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
• Contain release

GHS - Precautionary Statement(s) - Storage
• Store in a well-ventilated place
• Keep cool
• Store in a secure manner
• Keep container tightly closed

GHS - Precautionary Statement(s) - Disposal
• Dispose of contents and container in accordance with applicable local, regional, national, and/or international regulations

Physical Hazards Not Otherwise Classified
• Not Classified

See Section 11: TOXICOLOGICAL INFORMATION

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: HYDROTREATED PYROLYSIS GASOLINE, PYROLYSIS GASOLINE, C5-C9 GASOLINE, PYGAS

Component	Percent [%]	CAS Number
Gasoline, pyrolysis, debutanizer bottoms	>95	68606-10-0

Notes: *PyGas Hydrocarbon product stream [68606-10-0] is a complex combination of hydrocarbons obtained from the fractionation of depropanizer bottoms. It consists of hydrocarbons having carbon numbers predominantly greater than C5 and less than C9. This product contains the following hazardous chemicals: Benzene [71-43-2]; Toluene [108-88-3]; n-Hexane [110-54-3] Styrene [100-42-5]; Xylene (Mixed Isomers) [1330-20-7]; and C6-C8 Non Aromatic Naphthas [8002-05-9].*

SECTION 4. FIRST AID MEASURES

SKIN CONTACT: If on skin or hair, wash with plenty of soap and water. If skin irritation occurs, get medical advice/attention. Take off contaminated clothing and wash before reuse. Discard footwear which cannot be decontaminated. Discard contaminated leather goods.

EYE CONTACT: If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

INGESTION: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. If swallowed, rinse mouth. Do not induce vomiting: contains petroleum distillates and/or aromatic solvents.

Most Important Symptoms/Effects (Acute and Delayed):

Acute Symptoms/Effects:

Inhalation (Breathing): IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a poison center, doctor, or physician if you feel unwell.

Delayed Symptoms/Effects:

Target Organ Effects: Hematopoietic System. Liver. Kidney. Peripheral Nervous System (PNS). Ototoxicity and hearing loss.

Medical Conditions Aggravated by Exposure: Preexisting disorders of the following organs or systems which may be aggravated by exposure to this material include: respiratory system (including asthma and other breathing disorders), gastrointestinal system, liver, kidney, heart, and nervous system.

Notes to Physician: There is no antidote, treat symptomatically. Coughing may indicate that pulmonary aspiration has likely occurred. Symptomatic exposure should be treated with oxygen. Aspiration may cause pulmonary edema and pneumonitis. Treat bronchospasm and hypoxia if they occur. Consider EKG monitoring to detect cardiac arrhythmias. Epinephrine and other sympathomimetic drugs may initiate cardiac arrhythmias in individuals exposed to this material. Vomiting and diarrhea are common and may require an antiemetic or IV fluids if severe.

SECTION 5. FIRE-FIGHTING MEASURES

Fire Hazard: EXTREMELY FLAMMABLE LIQUID AND VAPOR. The material is a vapor explosion hazard. Vapors or gases may ignite at distant sources and flash back.

Extinguishing Media: Use dry chemical, carbon dioxide, foam, or water spray, General purpose synthetic foams (including AR-AFFF type) are preferred, Water may be ineffective, A direct water stream may spread the fire, Use water spray to keep fire-exposed containers cool, Contain fire water run-off, if possible. Fire water run-off, if not contained, may cause environmental damage

Unusual Hazards: When heated (fire conditions), vapors/decomposition products may be released forming flammable/explosive mixtures in air.

Fire Fighting: Keep unnecessary people away, isolate hazard area and deny entry. Wear NIOSH approved positive-pressure self-contained breathing apparatus operated in pressure demand mode. Wear protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during fire

fighting operations.

Component	Immediately Dangerous to Life/ Health (IDLH)
Petroleum distillates (naphtha) 8002-05-9	1100 ppm IDLH
Benzene 71-43-2	500 ppm IDLH
Toluene 108-88-3	500 ppm IDLH
Styrene 100-42-5	700 ppm IDLH
Ethyl benzene 100-41-4	800 ppm IDLH

Sensitivity to Static Discharge: Electrostatic charges may build up during handling and may form ignitable vapor-air mixtures in storage containers. Ground equipment in accordance with industry standards and best practices such as NFPA 77 [Recommended Practices on Static Electricity (2007)] and American Petroleum Institute (API) RP Recommended Practice 2003 [Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents (2008)].

Flash point: < -40 (°C)

Method: CC - Closed Cup

Auto-ignition Temperature: > 250 °C

GHS: PHYSICAL HAZARDS:
- Flammable Liquid - Cat. 1 Extremely Flammable

Physical Hazards Not Otherwise Classified
- Not Classified

SECTION 6. ACCIDENTAL RELEASE MEASURES

Occupational Release: Keep all sources of ignition away from spill/release. Vapors or gases may ignite at distant ignition sources and flash back. Contain liquids and prevent discharges to streams or sewers, control or stop the loss of volatile materials to the atmosphere. Fire fighting foam may be useful in certain situations to reduce vapors. Consider evacuation of personnel located downwind. Liquid material may be removed with industrial vacuum truck equipped with zero emissions hydrocarbon scrubber and properly rated to handle highly flammable liquids and vapors.

Personal Precautions:
Keep people away from and upwind of spill/leak. Pay attention to flashback. Evacuate unnecessary personnel to safe areas. Evacuation of surrounding area may be necessary for large spills. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Environmental Precautions:
Methods and Materials for Containment and Cleaning Up:
Additional Disaster Prevention Measures:

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling:
This material presents a fire hazard. Fire hazard is greater as liquid temperature rises. Liquid quickly evaporates and may form a vapor cloud which can catch fire and burn with explosive force. Invisible vapor spreads quickly and can be set on fire by many sources such as welding equipment, electric motors/switches, and pilot lights. Precautions to prevent static-initiated fire or explosion during transfer, storage or handling, include but are not limited to these examples: (1) Ground and bond containers during product transfers. Grounding and bonding may not be adequate protection to prevent ignition or explosion of hydrocarbon liquids and vapors that are static accumulators. (2) Special slow load procedures for "switch loading" must be followed to avoid the static ignition hazard that can exist when higher flash point material (such as fuel oil or diesel) is loaded into tanks previously containing low flash point products (such gasoline or naphtha). (3) Storage tank level floats must be effectively bonded. For more information on precautions to prevent static-initiated fire or explosion, see NFPA 77, Recommended Practice on Static Electricity (2007), and API Recommended Practice 2003, Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents (2008).

Safe Storage Conditions:
Vapors may polymerize in vents or flame arrestors of storage tanks. Inspect tank vents regularly. Increase monitoring frequency if stored at great than 70F. Minimize storage time if possible. Avoid heat, flames, sparks, static electricity, and other sources of ignition. Containers that have been emptied, will retain product residue and vapor and should be handled as if they were full. Containers should be periodically vented to relieve pressure. Do not vent to the atmosphere. Keep product and empty container away from heat and sources of ignition. Do not use cutting or welding torches, open flames or electric arcs on empty or full containers.

Incompatibilities/ Materials to Avoid:
Oxidizing agents, Corrosive to copper and copper bearing alloys

Additional Information: Avoid work practices that may release volatile components in the atmosphere. Avoid release to the environment.

GHS: PHYSICAL HAZARDS:
- Flammable Liquid - Cat. 1 Extremely Flammable

Physical Hazards Not Otherwise Classified
- Not Classified

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Regulatory Exposure Limit(s): As listed below.

Component	OSHA Final PEL TWA	OSHA Final PEL STEL	OSHA Final PELCeiling
Petroleum distillates (naphtha) 8002-05-9	500 ppm 2000 mg/m^3	-----	-----
Benzene 71-43-2	10 ppm 1 ppm	5 ppm	25 ppm

DEBUTANIZER BOTTOMS

Toluene 108-88-3	200 ppm	-----	300 ppm
Styrene 100-42-5	100 ppm	-----	200 ppm
Ethyl benzene 100-41-4	100 ppm 435 mg/m^3	-----	-----
Xylene (Dimethylbenzene) 1330-20-7	100 ppm 435 mg/m^3	-----	-----

OEL: Occupational Exposure Limit; OSHA: United States Occupational Safety and Health Administration; PEL: Permissible Exposure Limit; TWA: Time Weighted Average; STEL: Short Term Exposure Limit

NON-REGULATORY EXPOSURE LIMIT(S): As listed below.

Component	ACGIH TWA	ACGIH STEL	ACGIH Ceiling	OSHA TWA (Vacated)	OSHA STEL (Vacated)	OSHA Ceiling (Vacated)
Petroleum distillates (naphtha)	-----	-----	-----	400 ppm 1600 mg/m^3	-----	-----
Benzene	0.5 ppm	2.5 ppm	-----	10 ppm	50 ppm	25 ppm
Toluene	20 ppm	-----	-----	100 ppm 375 mg/m^3	150 ppm 560 mg/m^3	-----
Styrene	20 ppm	40 ppm	-----	50 ppm 215 mg/m^3	100 ppm 425 mg/m^3	-----
Ethyl benzene	20 ppm	-----	-----	100 ppm 435 mg/m^3	125 ppm 545 mg/m^3	-----
Xylene (Dimethylbenzene)	100 ppm	150 ppm	-----	100 ppm 435 mg/m^3	150 ppm 655 mg/m^3	-----

- *The Non-Regulatory United States Occupational Safety and Health Administration (OSHA) limits, if shown, are the Vacated 1989 PEL's (vacated by 58 FR 35338, June 30, 1993).*

- The American Conference of Governmental Industrial Hygienists (ACGIH) is a voluntary organization of professional industrial hygiene personnel in government or educational institutions in the United States. The ACGIH develops and publishes recommended occupational exposure limits each year called Threshold Limit Values (TLVs) for hundreds of chemicals, physical agents, and biological exposure indices.

ENGINEERING CONTROLS: Use closed systems when possible. Use flange guards for pressurized systems. Ensure adequate ventilation, especially in confined areas. Exposure monitoring should be performed to determine acceptability of engineering controls as required by governmental regulations.

PERSONAL PROTECTIVE EQUIPMENT:

Skin and Body Protection: Where there is a possibility of benzene contact to eyes or skin, safety showers, eye-wash fountains, and cleansing facilities shall be installed and maintained. If splashes are likely to occur, wear chemical resistant clothing and footwear (aprons, suits, boots, etc.). In certain situations, a full body suit with hood and boots may provide short term protection. Consider using flame resistant, anti-static safety clothing and footwear.

Hand Protection: Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: NITRILE, NEOPRENE. NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove

supplier.

Protective Material Types:
Nitrile, Neoprene

Respiratory Protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). When an air purifying respirator is not adequate for spills and/or emergencies of unknown concentrations, an approved self-contained breathing apparatus operated in the pressure demand mode is required.

Component	Immediately Dangerous to Life/ Health (IDLH)
Petroleum distillates (naphtha) 8002-05-9	1100 ppm IDLH
Benzene 71-43-2	500 ppm IDLH
Toluene 108-88-3	500 ppm IDLH
Styrene 100-42-5	700 ppm IDLH
Ethyl benzene 100-41-4	800 ppm IDLH

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid
Color:	Pale, yellow
Odor:	Hydrocarbon
Odor Threshold [ppm]:	Not reliable to prevent excessive exposure.
Molecular Weight:	79
Chemical Family:	High Benzene Light Naphtha
Boiling Point/Range:	25-200 °C
Melting Point/Range:	Not applicable to liquids
Vapor Pressure:	0.11-733 hPa @ 25 °C
Vapor Density (air=1):	3.0-4.0
Relative Density/Specific Gravity (water=1):	0.68-0.79
Water Solubility:	17.2-2000 mg/L @ 25 °C
Partition Coefficient (n-octanol/water):	2.13-3.9 @ 25 °C (77 °F)
Flash point:	< -40 (°C)
Method:	CC - Closed Cup
Auto-ignition Temperature:	> 250 °C
Viscosity:	0.429 cP

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability: Decomposes on heating.

Incompatibilities/ Materials to Avoid: Oxidizing agents, Corrosive to copper and copper bearing alloys.

Hazardous Decomposition Products: Decomposition products depend on temperatures, air supply and the presence of other materials.

Hazardous Polymerization: Will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

TOXICITY DATA:

PRODUCT TOXICITY DATA: DEBUTANIZER BOTTOMS

LD50 Oral:	LD50 Dermal:	LC50 Inhalation:
> 2000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 2000 - < 4869 ppm (Rat)

COMPONENT TOXICITY DATA:
Note: The component toxicity data is populated by the LOLI database and may differ from the product toxicity data given.

Component	LD50 Oral:	LD50 Dermal:	LC50 Inhalation:
Petroleum distillates (naphtha) 8002-05-9	4300	2000	-----
Benzene 71-43-2	810 mg/kg (Rat)	8200 mg/kg (Rabbit)	44.66 mg/L (4 hr-Rat)
Toluene 108-88-3	2600 mg/kg (Rat)	12000 mg/kg (Rabbit)	12.5 mg/L (4 hr-Rat)
Styrene 100-42-5	1000 mg/kg (Rat)	-----	11.7 mg/L (4 hr-Rat)
Ethyl benzene 100-41-4	3500 - 4820	2000 - 15400	5.04 - 17.2
Xylene (Dimethylbenzene) 1330-20-7	3500 - 4820 mg/kg (Rat)	2000 - 4350 mg/kg (Rabbit)	5.04 - 29.08 mg/L (4 hr-Rat)

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POTENTIAL HEALTH EFFECTS:

Eye contact: May cause severe eye irritation. May cause slight corneal injury. Effects may be slow to heal. Vapors may cause mild eye irritation with tearing, redness, or a

stinging or burning feeling.

Skin contact: Brief skin contact may cause irritation with local redness. Prolonged contact and/or occlusion may cause more serious irritation and possibly burns. May cause more severe response on covered skin (under clothing, gloves). Long-term contact may cause the skin to dry and crack or develop a rash. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. Prolonged or widespread skin contact may result in absorption of harmful amounts.

Inhalation: May cause Central Nervous System (CNS) depression (narcotic effects). In confined spaces or poorly ventilated areas, vapor can readily accumulate causing unconsciousness and death. Inhalation may cause coughing, choking, irritation and pulmonary edema.

Ingestion: Gastrointestinal irritation, nausea, vomiting and diarrhea. Monitor CNS status, cardiac, renal and hepatic functions.

SIGNS AND SYMPTOMS OF EXPOSURE:

Eye exposure signs and symptoms may include red and burning eyes. Skin exposure signs and symptoms may include redness and skin burns. Respiratory system exposure sign and symptoms may include coughing and shortness of breath. Gastrointestinal system exposure signs and symptoms may include nausea, vomiting, and diarrhea. Inhalation may cause central nervous system depression and drowsiness.

Inhalation (Breathing): IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a poison center, doctor, or physician if you feel unwell.

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GHS HEALTH HAZARDS:

GHS: ACUTE TOXICITY - ORAL: Category 5 - May be harmful if swallowed.

GHS: ACUTE TOXICITY - DERMAL: Category 5 - May be harmful in contact with skin.

GHS: ACUTE TOXICITY - INHALATION: Category 5 - May be harmful if inhaled.

GHS: CONTACT HAZARD - EYE: Category 2A - Causes serious eye irritation

GHS: CONTACT HAZARD - SKIN: Category 2 - Causes skin irritation.

Skin Absorbent / Dermal Route? Yes.

GHS: CARCINOGENICITY:
Category 1B - May cause cancer.

Carcinogenicity comment: Benzene does appear in the OSHA Specifically Regulated Substances (29 CFR 1910.1028).

SPECIFIC TARGET ORGAN TOXICITY (Single Exposure):
Category 3 - Narcotic Effects

SPECIFIC TARGET ORGAN TOXICITY (Repeated or Prolonged Exposure):

Category 1: Hematopoetic system (benzene). Category 2: peripheral neuropathy (n-hexane); liver and kidney (toluene); ototoxicity and hearing loss (styrene)

ASPIRATION HAZARD:
Category 1 - May be fatal if swallowed and enters airways

OTHER HAZARDS:
Benzene is a major component of this product; therefore, it is important to determine the applicability of OSHA's Benzene Standard to potential exposure scenarios that may be encountered by workers. In addition, benzene is listed with a SKIN notation by ACGIH. ACGIH's SKIN designation refers to the potential significant contribution to the overall exposure by the cutaneous route, including mucous membranes and the eyes, by contact with vapors and liquids. The SKIN notation also alerts the industrial hygienist that overexposure may occur following dermal contact with liquid and vapors, even when airborne exposures are at or below the TLV®.

SECTION 12. ECOLOGICAL INFORMATION

ECOTOXICITY DATA:

Ecotoxicity - Available LOLI Data for Components: The component ecotoxicity data is populated by the LOLI database and may differ from the product ecotoxicity data given

Component	Freshwater Fish	Invertebrate Toxicity:	Algae Toxicity:	Other Toxicity:
Gasoline, pyrolysis, debutanizer bottoms	No data available	-----	56 mg/L (72 h - Pseudokirchneriella subcapitata)	No data available
Petroleum distillates (naphtha)	No data available	< 0.26 mg/L EC50	No data available	No data available
Benzene	No data available	8.76 - 15.6 mg/L EC50 = 10 mg/L EC50	29 mg/L (72 h - Pseudokirchneriella subcapitata)	No data available
Toluene	No data available	5.46 - 9.83 mg/L EC50 = 11.5 mg/L EC50	12.5 mg/L (72 h - Pseudokirchneriella subcapitata) 433 mg/L (96 h - Pseudokirchneriella subcapitata)	No data available
Styrene	No data available	3.3 - 7.4 mg/L EC50	0.15 - 3.2 mg/L (96 h - Pseudokirchneriella subcapitata) 0.46 - 4.3 mg/L (72 h - Pseudokirchneriella subcapitata) 0.72 mg/L (96 h - Pseudokirchneriella subcapitata) 1.4 mg/L (72 h - Pseudokirchneriella subcapitata)	No data available

Ethyl benzene	No data available	1.8 - 2.4 mg/L EC50	1.7 - 7.6 mg/L (96 h - Pseudokirchneriella subcapitata) 2.6 - 11.3 mg/L (72 h - Pseudokirchneriella subcapitata) 11 mg/L (72 h - Pseudokirchneriella subcapitata) 4.6 mg/L (72 h - Pseudokirchneriella subcapitata) 438 mg/L (96 h - Pseudokirchneriella subcapitata)	No data available
Xylene (Dimethylbenzene)	No data available	= 0.6 mg/L LC50 = 3.82 mg/L EC50	11 mg/L (72 h - Pseudokirchneriella subcapitata)	No data available

Aquatic Toxicity:
The material is expected to be toxic to aquatic life with long lasting effects

FATE AND TRANSPORT:

BIODEGRADATION: Readily biodegrades.

BIOACCUMULATIVE POTENTIAL: Low Bioaccumulation Potential.

ADDITIONAL ECOLOGICAL INFORMATION: Material is volatile and is expected to partition to air.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste from material:
All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Report spills if applicable. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. FOR UNUSED & UNCONTAMINATED PRODUCT, the recommended options include recycle and reuse. If disposing as a waste, it is likely that the pyrolysis gasoline would be classified as a hazardous waste. Therefore, it should be managed according to all applicable regulations and be sent to a licensed facility for treatment and disposal.

Container Management:
Do not re-use empty containers. May contain product residues which could produce flammable vapors. Recovered liquids may be sent to an EPA permitted reclaimer or incineration facility.

SECTION 14. TRANSPORT INFORMATION

LAND TRANSPORT

U.S. DOT 49 CFR 172.101:

Status: Regulated.
UN NUMBER: UN1268
PROPER SHIPPING NAME: PETROLEUM DISTILLATES, N.O.S. (Gasoline, pyrolysis, debutanizer bottoms)
HAZARD CLASS/ DIVISION: 3
PACKING GROUP: I
LABELING REQUIREMENTS: Marine Pollutant

RQ (lbs): RQ 10 Lbs. (Benzene)

CANADIAN TRANSPORTATION OF DANGEROUS GOODS:

Status: Regulated.
UN NUMBER: UN1268
SHIPPING NAME: PETROLEUM DISTILLATES, N.O.S. (Gasoline, pyrolysis, debutanizer bottoms)
CLASS OR DIVISION: 3
PACKING/RISK GROUP: I
LABELING REQUIREMENTS: Marine Pollutant

SECTION 15. REGULATORY INFORMATION

U.S. REGULATIONS

OSHA REGULATORY STATUS:
This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

CERCLA SECTIONS 102a/103 HAZARDOUS SUBSTANCES (40 CFR 302.4):
If a release is reportable under CERCLA section 103, notify the state emergency response commission and local emergency planning committee. In addition, notify the National Response Center at (800) 424-8802 or (202) 426-2675.

Component	CERCLA Reportable Quantities:
Benzene	10 lb (final RQ)
Toluene	1000 lb (final RQ)
Styrene	1000 lb (final RQ)
Xylene (Dimethylbenzene)	100 lb (final RQ)
Ethyl benzene	1000 lb (final RQ)

SARA EHS Chemical (40 CFR 355.30)
If a release is reportable under EPCRA, notify the state emergency response commission and local emergency planning committee. If the TPQ is met, facilities are subject to reporting requirements under EPCRA Sections 311 and 312.

DEBUTANIZER BOTTOMS

SDS No.: M49060 **SDS Revision Date:** 25-Jan-2017
Supersedes Date: New Product **Rev. Num.**00-New

EPCRA SECTIONS 311/312 HAZARD CATEGORIES (40 CFR 370.10):
Acute Health Hazard, Chronic Health Hazard, Fire Hazard

EPCRA SECTION 313 (40 CFR 372.65):
The following chemicals are listed in 40 CFR 372.65 and may be subject to Community Right-to Know Reporting requirements

Component	Status:
Petroleum distillates (naphtha)	0.1 %
Benzene	0.1 %
Toluene	1.0 %
Styrene	0.1 %
Ethyl benzene	0.1 %
Xylene (Dimethylbenzene)	1.0 %

OSHA PROCESS SAFETY (PSM) (29 CFR 1910.119):
The PSM standard may apply to processes which involve a flammable liquid or gas in a quantity of 10,000 pounds (4535.9 kg) or more.

NATIONAL INVENTORY STATUS

U.S. INVENTORY STATUS: Toxic Substance Control Act (TSCA): All components are listed or exempt.

TSCA 12(b): This product is not subject to export notification.

Canadian Chemical Inventory: All components of this product are listed on either the DSL or the NDSL.

Component	DSL	NDSL
Gasoline, pyrolysis, debutanizer bottoms 68606-10-0	Not Listed	X
Petroleum distillates (naphtha) 8002-05-9	Listed	Not Listed
Benzene 71-43-2	Listed	Not Listed
Toluene 108-88-3	Listed	Not Listed
Styrene 100-42-5	Listed	Not Listed
Ethyl benzene 100-41-4	Listed	Not Listed
Xylene (Dimethylbenzene) 1330-20-7	Listed	Not Listed

STATE REGULATIONS

Component	California Proposition 65 Cancer WARNING:	California Proposition 65 CRT List - Male reproductive	California Proposition 65 CRT List - Female reproductive	Massachusetts Right to Know Hazardous Substance List	New Jersey Right to Know Hazardous Substance List	New Jersey Special Health Hazards Substance List

DEBUTANIZER BOTTOMS

SDS No.: M49060
SDS Revision Date: 25-Jan-2017
Supersedes Date: New Product
Rev. Num.00-New

		toxin:	toxin:			
Petroleum distillates (naphtha) 8002-05-9	Not Listed	Not Listed	Not Listed	Listed	2648	Not Listed
Benzene 71-43-2	Listed developmental toxicity	Not Listed	Not Listed	Listed	0197	carcinogen; flammable - third degree; mutagen
Toluene 108-88-3	developmental toxicity	Not Listed	Not Listed	Listed	1866	flammable - third degree
Styrene 100-42-5	Not Listed	Not Listed	Not Listed	Listed	1748	flammable - third degree; mutagen; reactive - second degree
Xylene (Dimethylbenzene) 1330-20-7	Not Listed	Not Listed	Not Listed	Listed	2014	flammable - third degree
Ethyl benzene 100-41-4	Listed	Not Listed	Not Listed	Listed	0851	flammable - third degree

Component	New Jersey - Environmental Hazardous Substance List	Pennsylvania Right to Know Hazardous Substance List	Pennsylvania Right to Know Special Hazardous Substances	Pennsylvania Right to Know Environmental Hazard List	Rhode Island Right to Know Hazardous Substance List
Petroleum distillates (naphtha) 8002-05-9	Listed	Listed	Not Listed	Not Listed	Listed
Benzene 71-43-2	Listed	Listed	Present	Present	Not Listed
Toluene 108-88-3	Listed	Listed	Not Listed	Present	Listed
Styrene 100-42-5	Listed	Listed	Not Listed	Present	Listed
Xylene (Dimethylbenzene) 1330-20-7	Listed	Listed	Not Listed	Present	Listed
Ethyl benzene 100-41-4	Listed	Listed	Not Listed	Present	Listed

CANADIAN REGULATIONS

• This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations

Component	Canadian Chemical Inventory:	NDSL:	WHMIS - Classifications of Substances:
Gasoline, pyrolysis, debutanizer bottoms	Not Listed	Present	
Petroleum distillates (naphtha)	Listed Present (that participate in atmospheric photochemical reactions except those under item number 65 on the Toxic Substances List source)		B2
Benzene	Listed		B2,D2A,D2B

	Present (that participate in atmospheric photochemical reactions except those under item number 65 on the Toxic Substances List source)		
Toluene	Listed Present (that participate in atmospheric photochemical reactions except those under item number 65 on the Toxic Substances List source)		B2,D2A,D2B
Styrene	Listed Present (that participate in atmospheric photochemical reactions except those under item number 65 on the Toxic Substances List source)		B2,D2A
Ethyl benzene	Listed Present (that participate in atmospheric photochemical reactions except those under item number 65 on the Toxic Substances List source)		B2,D2A,D2B
Xylene (Dimethylbenzene)	Listed Present (that participate in atmospheric photochemical reactions except those under item number 65 on the Toxic Substances List source)		B2,D2A,D2B

SECTION 16. OTHER INFORMATION

Prepared by: OxyChem Corporate HESS - Product Stewardship

Rev. Date: 25-Jan-2017

Reason for Revision:
• New Product

IMPORTANT:
The information presented herein, while not guaranteed, was prepared by technical personnel and is true and accurate to the best of our knowledge. NO WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A

DEBUTANIZER BOTTOMS

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OSHA Standard 29 CFR 1910.1200 requires that information be provided to employees regarding the hazards of chemicals by means of a hazard communication program including labeling, safety data sheets, training and access to written records. We request that you, and it is your legal duty to, make all information in this Safety Data Sheet available to your employees

End of Safety Data Sheet