MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name	**LEADED AVGAS (US - CAN)**
MSDS number	5698
Version #	19
Revision date	01-25-2011
CAS #	Mixture
Synonym(s)	80/87 AVIATION GASOLINE * 100 LOW LEAD AVIATION GASOLINE * AVGAS
Manufacturer	Flint Hills Resources Pine Bend, LLC P.O. Box 64596 St. Paul, MN 55164-0596, US

Telephone numbers - 24 hour emergency assistance

Chemtrec	800-424-9300
Flint Hills Resources, LP	651-437-0676

Telephone numbers - general assistance

8-5 (M-F, CST)	651-437-0700
8-5 (M-F, CST) MSDS Assistance	316-828-7988
Email: msdsrequest@fhr.com	

2. Hazards Identification

Emergency overview

DANGER!

80/87 AVGAS IS A CLEAR, RED LIQUID WITH A GASOLINE ODOR
100 LOW LEAD IS A CLEAR, BLUE LIQUID WITH A GASOLINE ODOR

HEALTH HAZARDS
VAPORS MAY CAUSE EYE AND RESPIRATORY TRACT IRRITATION
BREATHING HIGH CONCENTRATIONS CAN CAUSE IRREGULAR HEARTBEATS WHICH MAY BE FATAL
MAY BE HARMFUL OR FATAL IF SWALLOWED
MAY CAUSE LUNG DAMAGE
OVEREXPOSURE MAY CAUSE CNS DEPRESSION
SEE "TOXICOLOGICAL INFORMATION" (SECTION 11) FOR MORE INFORMATION

FLAMMABILITY HAZARDS
EXTREMELY FLAMMABLE LIQUID AND VAPOR
VAPOR MAY CAUSE FLASH FIRE OR EXPLOSION

REACTIVITY HAZARDS
STABLE

Potential health effects

Routes of exposure

Inhalation, ingestion, skin and eye contact.

Eyes

Contact may cause pain and severe reddening and inflammation of the conjunctiva. Effects may become more serious with repeated or prolonged contact.

Skin

Contact may cause reddening, itching and inflammation. Skin contact may cause harmful effects in other parts of the body.

Inhalation

Breathing high concentrations may be harmful. May cause central nervous system depression or effects. Symptoms may include headache, excitation, euphoria, dizziness, incoordination, drowsiness, light-headedness, blurred vision, fatigue, tremors, convulsions, loss of consciousness, coma, respiratory arrest and death, depending on the concentration and duration of exposure. Breathing high concentrations of this material, for example, in a confined space or by intentional abuse, can cause irregular heartbeats which can cause death.

Overexposure to this material may cause systemic damage including target organ effects listed under "Toxicological Information" (Section 11).

Ingestion

Swallowing this material may be harmful. May cause irritation of the mouth, throat and gastrointestinal tract. Symptoms may include salivation, pain, nausea, vomiting and diarrhea.

Aspiration into lungs may cause chemical pneumonia and lung damage.

Exposure may also cause central nervous system symptoms similar to those listed under "Inhalation" (see Inhalation section).

3. Composition / Information on Ingredients

Components	CAS #	Concentration*
ALKYLATE	68527-27-5	> 99 %
N-HEXANE	110-54-3	0 - 1 %
TETRAETHYL LEAD	78-00-2	< 0.1 %
DIBROMOETHANE	106-93-4	0 - 0.04 %
BENZENE	71-43-2	30 ppm

*Values do not reflect absolute minimums and maximums; these values are typical which may vary from time to time.

Composition comments

This Material Safety Data Sheet is intended to communicate potential health hazards and potential physical hazards associated with the product(s) covered by this sheet, and is not intended to communicate product specification information. For product specification information, contact your Flint Hills Resources, LP representative.

4. First Aid Measures

First aid procedures

Eye contact

Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Get medical attention if irritation persists.

Skin contact

Immediately wash skin with plenty of soap and water after removing contaminated clothing and shoes. Get medical attention if irritation develops or persists.

Place contaminated clothing in closed container for storage until laundered or discarded. If clothing is to be laundered, inform person performing operation of contaminant's hazardous properties. Discard contaminated leather goods.

Inhalation

Remove to fresh air. If not breathing, institute rescue breathing. If breathing is difficult, ensure airway is clear and give oxygen. If heart has stopped, immediately begin cardiopulmonary resuscitation (CPR).

Keep affected person warm and at rest. GET IMMEDIATE MEDICAL ATTENTION.

Ingestion

Do not induce vomiting because of danger of aspirating liquid into lungs, causing serious damage and chemical pneumonitis. If spontaneous vomiting occurs, keep head below hips to prevent aspiration and monitor for breathing difficulty. Never give anything by mouth to an unconscious person.

Keep affected person warm and at rest. GET IMMEDIATE MEDICAL ATTENTION.

Notes to physician

INHALATION: This material (or a component) sensitizes the myocardium to the effects of sympathomimetic amines. Epinephrine and other sympathomimetic drugs may initiate cardiac arrhythmias in individuals exposed to this material. Administration of sympathomimetic drugs should be avoided.

INGESTION: If ingested this material represents a significant aspiration and chemical pneumonitis hazard. Induction of emesis is not recommended.

5. Fire Fighting Measures

Flammable properties

Extremely flammable. Vapors form flammable or explosive mixtures with air at room temperature. Vapor or gas may spread to distant ignition sources and flash back.

Static accumulator (nonconductive) flammable or combustible liquid may form ignitable vapor-air mixtures in storage tanks. Bonding and grounding may be insufficient to eliminate the hazard from static accumulation.

Explosion hazard if exposed to extreme heat.

Extinguishing media

Suitable extinguishing media

Use water spray, dry chemical, carbon dioxide or fire-fighting foam for Class B fires to extinguish fire.

Protection of firefighters

Specific hazards arising from the chemical

Combustion may produce COx, NOx, SOx, reactive hydrocarbons, irritating vapors, and other decomposition products in the case of incomplete combustion.

Fire fighting equipment/instructions

Material will burn in a fire.

Shut off source of flow if possible.

Evacuate area and fight fire from a safe distance.

If leak or spill has not ignited, ventilate area and use water spray to disperse gas or vapor and to protect personnel attempting to stop a leak. Use water spray to cool adjacent structures and to protect personnel.

Containers can build up pressure if exposed to heat (fire). Stay away from storage tank ends. Withdraw immediately in case of rising sound from venting safety device or any discoloration of storage tank due to fire.

Be aware that a BLEVE (Boiling Liquid Expanding Vapor Explosion) may occur unless surfaces are kept cool with water.

Firefighters must wear NIOSH approved positive pressure breathing apparatus (SCBA) with full face mask and full protective equipment.

6. Accidental Release Measures

Environmental precautions

Eliminate all sources of ignition. Isolate hazard area and deny entry.

If material is released to the environment, take immediate steps to stop and contain release. Caution should be exercised regarding personnel safety and exposure to the released material. Notify local, provincial and/or federal authorities, if required.

Other information

Keep unnecessary people away. Isolate area for at least 50 meters (164 feet) in all directions to preserve public safety. For large spills, if downwind consider initial evacuation for at least 300 meters (1000 feet)..

Keep ignition sources out of area and shut off all ignition sources. Absorb spill with inert material (e. g. dry sand or earth) then place in a chemical waste container. Large Spills: Dike far ahead of liquid spill for later disposal.

Use a vapor suppressing foam to reduce vapors. Stop leak when safe to do so.

See Exposure Controls/Personal Protection (Section 8).

Emergency action

Eliminate and/or shut off ignition sources and keep ignition sources out of the area. Keep unnecessary people away; isolate hazard area and deny entry. Stay upwind. Isolate for 800 meters (1/2 mile) in all directions if tank, rail car or tank truck is involved in fire. Evacuate area endangered by release as required. (See Exposure Controls/Personal Protection, Section 8.)

7. Handling and Storage

Handling

Electrostatic charge may accumulate and create a hazardous condition when handling this material.

Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (such as tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate procedures to mitigate the hazard.

Static accumulator (nonconductive) flammable or combustible liquid may form ignitable vapor-air mixtures in storage tanks. Bond and ground lines and equipment (tank, transfer lines, pump, floats, etc.) used during transfer to reduce the possibility of static spark-initiated fire or explosion.

Bonding and grounding may be insufficient to eliminate the hazard from static accumulation. Additional precautions should be considered consistent with the current NFPA 77, Recommended Practice on Static Electricity, the current API Recommended Practice 2003, Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents and OSHA Standard 29 CFR 1910.106, Flammable and Combustible Liquids.

Use non-sparking tools. Do not cut, grind, drill, weld or reuse containers unless adequate precautions are taken against these hazards.

Do not eat, drink or smoke in areas of use or storage.

Storage

Store in tightly closed containers in a cool, dry, isolated, well-ventilated area away from heat, sources of ignition and incompatibles. Avoid contact with strong oxidizers.

Empty containers may contain material residue. Do not reuse without adequate precautions.

Do not eat, drink or smoke in areas of use or storage.

8. Exposure Controls / Personal Protection

Occupational exposure limits

ACGIH

Components	Type	Value	Form
BENZENE (71-43-2)	STEL	2.5 ppm	Skin
	TWA	0.5 ppm	Skin
N-HEXANE (110-54-3)	TWA	50.0 ppm	Skin
TETRAETHYL LEAD (78-00-2)	TWA	0.1 mg/m3	Skin

U.S. - OSHA

Components	Type	Value	Form
BENZENE (71-43-2)	Ceiling	25.0 ppm	Skin
	STEL	5.0 ppm	Skin
	TWA	1.0 ppm	Skin
DIBROMOETHANE (106-93-4)	Ceiling	30.0 ppm	
	TWA	20.0 ppm	
N-HEXANE (110-54-3)	PEL	500.0 ppm	
		1800.0 mg/m3	
	TWA	1800.0 mg/m3	
		500.0 ppm	
TETRAETHYL LEAD (78-00-2)	TWA	0.075 mg/m3	Skin

U.S. - Minnesota (MNOSHA)

Components	Type	Value
BENZENE (71-43-2)	STEL	5.0 ppm
	TWA	1.0 ppm
DIBROMOETHANE (106-93-4)	Ceiling	50.0 mg/m3
	STEL	30.0 ppm
	TWA	20.0 ppm
N-HEXANE (110-54-3)	TWA	180.0 mg/m3
		50.0 ppm
TETRAETHYL LEAD (78-00-2)	TWA	0.075 mg/m3

Engineering controls

Ventilation and other forms of engineering controls are the preferred means for controlling exposures.

Personal protective equipment

Eye / face protection	Keep away from eyes. Eye contact can be avoided by using indirect-vent goggles and/or face shield. Have eye washing facilities readily available where eye contact can occur.
Skin protection	Dermal exposure to this chemical may add to the overall exposure. Avoid skin contact with this material. Use appropriate chemical protective gloves, such as Viton®, when handling. Additional protective clothing may be necessary. Good personal hygiene practices such as properly handling contaminated clothing, using wash facilities before entering public areas and restricting eating, drinking and smoking to designated areas are essential for preventing personal chemical contamination.
Respiratory protection	A NIOSH approved air purifying respirator with an appropriate cartridge or canister, such as an organic vapor cartridge, may be used in circumstances where airborne concentrations may exceed exposure limits. Protection provided by air purifying respirators 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 air purifying respirators may not provide adequate protection. See OSHA 29 CFR 1910.134 for more information regarding respiratory protection and Assigned Protection Factors (APFs).

9. Physical & Chemical Properties

Color	Clear red (80/87 Avgas) Clear Blue (100 Low Lead)
Odor	Gasoline
Odor threshold	Not available
Physical state	Liquid
Form	Not applicable
pH	Essentially Neutral
Melting point	Not available
Freezing point	-115 °F (-81.7 °C)
Boiling point	80 °F (26.7 °C)
Flash point	-50 °F (-45.6 °C)
Evaporation rate	Moderately Fast
Flammability limits in air, upper, % by volume	7.1 %
Flammability limits in air, lower, % by volume	1.3 %
Vapor pressure	5.5 - 7 psia at 100 °F (38 °C)
Vapor density	3 - 4
Specific gravity	0.685 - 0.7 at 60/60 °F (15.6/15.6 °C)
Relative density	Not available
Solubility (water)	Insoluble
Partition coefficient (n-octanol/water)	Not available
Auto-ignition temperature	> 700 °F (> 371.1 °C)
Decomposition temperature	Not available
VOC	Not available
Pour point	Not available
Viscosity	Not available
Bulk density	Not available
Density	Not available
Conductivity	≤ 50 pS/m
Surface tension	Not available
Percent volatile	Not available
Molecular weight	Not available
Molecular formula	Mixture

Chemical family	Hydrocarbon Mixture

10. Chemical Stability & Reactivity Information

Chemical stability	Stable
Conditions to avoid	Avoid high temperatures, open flames, sparks and the use of ungrounded electrical equipment.
Incompatible materials	Avoid contact with strong oxidizers. See precautions under Handling & Storage (Section 7).
Hazardous decomposition products	Not anticipated under normal conditions.
Possibility of hazardous reactions	Will not occur.

11. Toxicological Information

Sensitization

US ACGIH Threshold Limit Values: Skin designation

BENZENE (CAS 71-43-2)	Can be absorbed through the skin.
DIBROMOETHANE (CAS 106-93-4)	Can be absorbed through the skin.
N-HEXANE (CAS 110-54-3)	Can be absorbed through the skin.
TETRAETHYL LEAD (CAS 78-00-2)	Can be absorbed through the skin.

Carcinogenicity

ACGIH Carcinogens

BENZENE (CAS 71-43-2)	A1 Confirmed human carcinogen.
DIBROMOETHANE (CAS 106-93-4)	A3 Confirmed animal carcinogen with unknown relevance to humans.
TETRAETHYL LEAD (CAS 78-00-2)	A4 Not classifiable as a human carcinogen.

IARC Monographs. Overall Evaluation of Carcinogenicity

BENZENE (CAS 71-43-2)	1 Carcinogenic to humans.
DIBROMOETHANE (CAS 106-93-4)	2A Probably carcinogenic to humans.
TETRAETHYL LEAD (CAS 78-00-2)	3 Not classifiable as to carcinogenicity to humans.

US NTP Report on Carcinogens: Anticipated carcinogen

DIBROMOETHANE (CAS 106-93-4)	Anticipated carcinogen.
TETRAETHYL LEAD (CAS 78-00-2)	Anticipated carcinogen.

US NTP Report on Carcinogens: Known carcinogen

BENZENE (CAS 71-43-2)	Known carcinogen.

US OSHA Specifically Regulated Substances: Cancer hazard

BENZENE (CAS 71-43-2)	Cancer hazard.

Pre-existing conditions aggravated by exposure

Pre-existing medical conditions which may be aggravated by exposure include disorders of the central nervous system, peripheral nervous system, skin, eyes, respiratory tract, liver, and kidneys.

Toxicological data

N-HEXANE: Long-term or repeated exposure to n-hexane can cause peripheral nerve damage. Initial symptoms are numbness of the fingers and toes. Also, motor weakness can occur in the digits, but may also involve muscles of the arms, thighs and forearms. The onset of these symptoms may be delayed for several months to a year after the beginning of exposure.

BENZENE: Studies of Workers Overexposed to Benzene: Studies of workers exposed to benzene show clear evidence that overexposure can cause cancer of the blood forming organs (acute myelogenous leukemia) and aplastic anemia, an often fatal disease. Some studies suggest overexposure to benzene may also be associated with other blood disorders including myelodysplastic syndrome. Some studies of workers exposed to benzene have shown an association with increased rates of chromosome aberrations in circulating lymphocytes. One study of women workers exposed to benzene suggested a weak association with irregular menstruation. However, other studies of workers exposed to benzene have not demonstrated clear evidence of an effect on fertility or reproductive outcome in humans. Benzene can cross the placenta and affect the developing fetus. Cases of aplastic anemia have been reported in the offspring of persons severely overexposed to benzene. Studies in Laboratory Animals: Studies in laboratory animals indicate that prolonged, repeated exposure to high levels of benzene vapor can cause bone marrow suppression and cancer in multiple organ systems. Studies in laboratory animals show evidence of adverse effects on male reproductive organs following high levels of exposure but no significant effects on reproduction have been observed. Embryotoxicity has been reported in studies of laboratory animals but effects were limited to reduced fetal weight and skeletal variations. Benzene has been classified as a proven human carcinogen by OSHA and a Group 1 (Carcinogenic to Humans) material by IARC.

NAPHTHAS: In a large epidemiological study on over 15,000 employees at several petroleum refineries and amongst residents located near these refineries, no increased risk of kidney cancer was observed in association with gasoline exposures (a similar material). In a similar study, no increased risk of kidney cancer was observed among petroleum refinery workers, but there was a slight trend in the incidence of kidney cancers among service station employees, especially after a 30-year latency period.

ISOPARAFFINS: Studies in laboratory animals have shown that long-term exposure to similar materials (isoparaffins) can cause kidney damage and kidney cancer in male laboratory rats. However, indepth research indicates that these findings are unique to the male rat, and that these effects are not relevant to humans.

TETRAETHYL LEAD: Tetraethyl lead is rapidly absorbed via inhalation, oral and dermal routes of exposure. In acute over-exposure, the primary target organ of tetraethyl lead is the nervous system. Acute exposures may cause pronounced neurological symptoms including ataxia, visual difficulties, weakness, hypotension, tremors, disorientation, and in some cases delusions and maniacal behavior. Other adverse effects observed from acute poisoning and/or repeated or prolonged over-exposure include degeneration of the myocardium, encephalopathy, polyneuropathy, damage to the liver and kidney, and anemia. An increased incidence of fetal death was observed in pregnant rodents exposed to tetraethyl lead. Reduced immune function has also been observed in laboratory animals exposed to tetraethyl lead.

Altered mental state, drowsiness, peripheral motor neuropathy, irreversible brain damage (so-called Petrol Sniffers Encephalopathy), delirium, seizures, and sudden death have been reported from repeated overexposure to some hydrocarbon solvents, naphthas, and gasoline.

Exposure to this material may cause adverse effects or damage to the following organs or organ systems: eyes, skin, central nervous system, peripheral nervous system, heart, testes, liver, kidneys, respiratory tract, blood, and bone marrow.

12. Ecological Information

Ecotoxicity	Toxic to aquatic organisms.
Persistence and degradability	Readily biodegradable in the environment.
Bioaccumulation / Accumulation	Not likely to bioaccumulate in aquatic organisms.
Mobility in environmental media	May partition into air, soil and water.

13. Disposal Considerations

Disposal instructions

This material, as supplied, when discarded or disposed of, is a listed hazardous waste according to Federal Regulations 40 CFR 261.33(f) due to its lead content, and a characteristic hazardous waste due to its ignitability as defined in Subpart C of 40 CFR 261. Additionally, pursuant to 40 CFR 261.33(d) and (e), any residue remaining in a container that has held this material and any residue or contaminated soil, water or other debris resulting from the cleanup of a spill of this material is also a listed hazardous waste. Under RCRA, it is the responsibility of the user of the material to determine, at the time of disposal, whether the material meets RCRA criteria for hazardous waste.

The transportation, storage, treatment and disposal of RCRA waste material must be conducted in compliance with 40 CFR 262, 263, 264, 268 and 270. Check state and local regulations for any additional requirements as these may be more restrictive than federal laws and regulations. Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate. Disposal of this material must be conducted in compliance with all federal, state and local regulations.

In Canada, wastes should be disposed of according to federal, state, provincial and local regulations.

For additional handling information and protection of employees, see Section 7 (Handling and Storage) and Section 8 (Exposure Controls/Personal Protection).

14. Transport Information

DOT

Basic shipping requirements:

UN number	UN1203
Proper shipping name	Gasoline
Hazard class	3
Packing group	II
Labels required	Flammable Liquid
Placards required	Flammable Liquid, UN1203
Additional information:	
ERG number	128

DOT

General

BILL OF LADING - BULK (U. S. DOT): UN1203, Gasoline, 3, PG II
BILL OF LADING - NON-BULK (U. S. DOT): UN1203, Gasoline, 3, PG II

The above description may not cover shipping in all cases, please consult 49 CFR 100-185 for specific shipping information.

See Bill of Lading for proper shipping description.

15. Regulatory Information

US federal regulations

All ingredients are on the TSCA inventory, or are not required to be listed on the TSCA inventory.

Consult OSHAs Lead Standard 29 CFR 1910.1025 for provisions on training, monitoring, medical surveillance, etc.

Consult OSHA's Benzene standard 29 CFR 1910.1028 for provisions on air monitoring, employee training, medical monitoring, etc.

A release of this material, as supplied, may be exempt from reporting under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA - 40 CFR 302) by the petroleum exclusion. Releases may be reportable to the National Response Center (800-424-8802) under the Clean Water Act, 33 U.S.C. 1321(b)(3) and (5).

This material contains toxic chemical(s) in excess of the applicable de minimis concentration that are subject to the annual toxic chemical release reporting requirements of the Superfund Amendments and Reauthorization Act (SARA) Section 313 (40 CFR 372). This information must be included in all MSDSs that are copied and distributed for this material.

This material contains one or more substances listed as hazardous air pollutants under Section 112 of the Clean Air Act. This material contains up to 100% volatile organic compounds (VOCs) per 40 CFR Part 51.100. This material contains up to 2% hazardous air pollutants (HAPs) per Section 112 Clean Air Act Amendments of 1990.

Check local, regional or state/provincial regulations for any additional requirements as these may be more restrictive than federal laws and regulations. Failure to report may result in substantial civil and criminal penalties.

US EPCRA (SARA Title III) Section 302 - Extremely Hazardous Substance: Threshold Planning Quantity

TETRAETHYL LEAD (CAS 78-00-2)	100 LBS

US EPCRA (SARA Title III) Section 304 - Extremely Hazardous Spill: Reportable quantity

TETRAETHYL LEAD (CAS 78-00-2)	10 LBS

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration

BENZENE (CAS 71-43-2)	0.1 %
DIBROMOETHANE (CAS 106-93-4)	0.1 %
N-HEXANE (CAS 110-54-3)	1.0 %

CERCLA (Superfund) reportable quantity

N-HEXANE: 5000.0
TETRAETHYL LEAD: 10.0
DIBROMOETHANE: 1.0
BENZENE: 10.0

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

State regulations

WARNING: This material contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

Canadian regulations

All ingredients are on the Canadian Domestic Substance List (DSL), or are not required to be listed on the DSL.

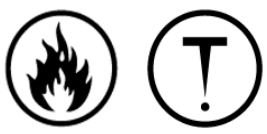
This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

Controlled under WHMIS (Canada).

WHMIS classification

B2 - Flammable/Combustible
D2B - Other Toxic Effects-TOXIC

WHMIS labeling



16. Other Information

NFPA ratings	Health: 2 Flammability: 4 Instability: 0
HMIS® ratings	Health: 2* Flammability: 4 Physical hazard: 0 * Indicates chronic health hazard
Disclaimer	NOTICE: The information presented herein is based on data considered to be accurate as of the date of preparation of this Material Safety Data Sheet. Adequate training and instruction should be given by you to your employees and affected personnel. Appropriate warnings and safe handling procedures should be provided by you to handlers and users. Additionally, the user should review this information, satisfy itself as to its suitability and completeness, and pass on the information to its employees or customers in accordance with the applicable federal, state, provincial or local hazard communication requirements. This MSDS may not be used as a commercial specification sheet of manufacturer or seller, and no warranty or representation, expressed or implied, is made as to the accuracy or comprehensiveness of the foregoing data and safety information, nor is any authorization given or implied to practice any patented invention without a license. In addition, vendor neither assumes nor retains any responsibility for any damage or injury resulting from abnormal use, from any failure to adhere to appropriate practices, or from any hazards inherent in the nature of the material. Moreover, unless an employee or a customer accesses or receives a MSDS directly from the company, there is no assurance that a document obtained from alternate sources is the most currently available MSDS.
Issue date	01-25-2011
This data sheet contains changes from the previous version in section(s):	This document has undergone significant changes and should be reviewed in its entirety.
Completed by	Flint Hills Resources, LP - Operations EH&S