

## **SAFETY DATA SHEET**

### 1. Identification

Product identifier **Natural Gasoline** 

Other means of identification

SDS number

Recommended use Gasoline blending component.

Recommended restrictions None known.

Manufacturer / Importer / Supplier / Distributor information

Company name DCP Midstream

Address 370 17 Street Suite 2500 Denver, CO 80202

Telephone (303) 595-3331

E-mail safety@dcpmidstream.com

Contact person Mark Prewitt

**Emergency phone number** CHEMTREC - 24 HOURS: 800-424-9300

### 2. Hazard(s) identification

Physical hazards Flammable liquids Category 1 Health hazards Skin corrosion/irritation Category 2 Germ cell mutagenicity Category 1B Carcinogenicity Category 1A

Reproductive toxicity (fertility) Category 2

Specific target organ toxicity, single Category 3 narcotic effects Specific target organ toxicity, repeated Category 2 liver, kidney

Aspiration hazard Category 1

OSHA hazard(s) Not Classified

Label elements

Hazard symbol



Signal word Danger

Hazard statement Extremely flammable liquid and vapor. May cause drowsiness or dizziness. Suspected of damaging fertility or the unborn child. Causes skin irritation. Toxic to aquatic life with long

lasting effects. May cause genetic defects. May be fatal if swallowed and enters airways.

May cause cancer. May be fatal if swallowed and enters airways. Precautionary statement

Prevention Use only outdoors or in a well-ventilated area. Do not breathe mist or vapor. Wash

thoroughly after handling. Do not eat, drink or smoke when using this product. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed.

Ground/bond container and receiving equipment. Use explosion-proof

electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves/protective clothing/eye protection/face protection. Obtain special instructions before use. Do not handle until all

safety precautions have been read and understood.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with Response

water/shower. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. If swallowed: Immediately call a poison center/doctor/. Do

not induce vomiting. Call a poison center/doctor if you feel unwell.

Storage Protect from sunlight. Store in a well-ventilated place. Keep container tightly closed. Keep

Disposal Dispose of contents/container in accordance with local/regional/national/international

regulations.

Hazard(s) not otherwise

classified (HNOC)

Not classified.

1/10 Natural Gasoline

911749 Version#: 01 Revision date: - 06-13-2017 Issue Date: 11-28-2012 Hazardous to the aquatic environment,

long-term hazard

Category 2

## 3. Composition/information on ingredients

Mixture

**Hazardous components** 

Chemical name	Common name and synonyms	CAS number	%
Natural gasoline		68425-31-0	100
Pentane		109-66-0	1-20
Isopentane		78-78-4	0-18
n-Hexane		110-54-3	2-13
Cyclohexane		110-82-7	1-5
Benzene		71-43-2	0-2

**Composition comments** 

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

## 4. First-aid measures

Inhalation

Immediately remove from further exposure. Get immediate medical assistance. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory

protection.

Give supplemental oxygen, if available. If breathing has stopped, assist ventilation with a

mechanical device or use mouth-to-mouth resuscitation.

Skin contact

Immediately remove contaminated clothing. Wash with soap and water. Continue to rinse for at least 15 minutes. In case of rashes, wounds or other skin disorders: Seek medical

attention and bring along these instructions.

Eye contact

Immediately flush with plenty of water for at least 15 minutes. Get medical attention if

irritation develops or persists.

Ingestion

Immediately rinse mouth and drink plenty of water or milk. Keep person under observation. Do not induce vomiting. If vomiting occurs, keep head low. Seek immediate medical

attention or advice.

Most important symptoms/effects, acute and delayed

Not available

Indication of immediate medical attention and special treatment needed

Treat symptomatically. Be aware that symptoms of chemical pneumonia (shortness of

breath) may occur several hours after exposure.

**General information** 

Get medical attention if any discomfort develops. Refer to the Emergency Response Procedures for Ships Carrying Dangerous Goods (EmS Guide) and the Medical First Aid

Guide for Use in Accidents Involving Dangerous Goods (MFAG) as necessary.

## 5. Fire-fighting measures



NFPA 704 Hazard Class

Health: 1 Flammability: 3 Instability: 0

(0-Minimal, 1-Slight, 2-Moderate, 3-Serious, 4-Severe)

Natural Gasoline 2/10

Suitable extinguishing

media Water spray, foam, dry powder or carbon dioxide.

Unsuitable extinguishing

media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from

the chemical

Not applicable.

Special protective equipment and precautions for firefighters

Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire-fighting equipment/instructions Move containers from fire area if you can do it without risk. Use water spray to cool unopened containers. Cool containers with flooding quantities of water until well after fire is

## 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Stay upwind. Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Avoid inhalation of vapors and spray mist and contact with skin and eyes. Wear suitable protective clothing, gloves and eye/face protection. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Remove sources of ignition. Beware of the explosion danger. Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible.

Small Spills: Absorb spillage with non-combustible, absorbent material. Ensure that waste and contaminated materials are collected and removed from the work area as soon as possible in a suitably labeled container.

Large Spills: Remove with vacuum trucks or pump to storage/salvage vessels. Use a noncombustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Wash area with soap and water.

**Environmental precautions** 

Prevent spreading over a wide area (e.g. by containment or oil barriers). Do not contaminate water. Contact local authorities in case of spillage to drain/aquatic environment.

# 7. Handling and storage

Precautions for safe handling

Provide adequate ventilation. Avoid inhalation of vapors/mist and contact with skin and eyes. The product is extremely flammable, and explosive vapor/air mixtures may be formed even at normal room temperatures. Ground container and transfer equipment to eliminate static electric sparks. Vapors are heavier than air and may travel along the floor and in the bottom of containers. Use non-sparking hand tools and explosion-proof electrical equipment. Wear appropriate personal protective equipment. Immediately change contaminated clothes. Do not eat, drink or smoke when using the product. Observe good industrial hygiene practices. Use only bottom loading of tankers, in compliance with European legislation. Do not use compressed air for filling, discharging, or handling operations. Empty containers may contain flammable product residues.

Conditions for safe storage, including any incompatibilities

Store in a well-ventilated place. Follow rules for flammable liquids. Keep away from heat, spark, open flames and other sources of ignition. Store in a cool, dry place. Store in tightly closed original container. Keep away from food, drink and animal feeding stuffs. Store away from incompatible materials.

## 8. Exposure controls/personal protection

Occupational exposure limits

#### U.S. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Components	Туре	Value
Benzene (CAS 71-43-2)	STEL	5 ppm

3/10 Natural Gasoline

1 ppm

## U.S. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Туре	Value
Cyclohexane (CAS 110-82-7)	PEL	1050 mg/m3
		300 ppm
n-Hexane (CAS 110-54-3)	PEL	1800 mg/m3
		500 ppm
Pentane (CAS 109-66-0)	PEL	2950 mg/m3
		1000 ppm

## U.S. OSHA Table Z-2 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Туре	Value	
Benzene (CAS 71-43-2)	Ceiling	25 ppm	
	TWA	10 ppm	

### **U.S. ACGIH Threshold Limit Values**

Components	Туре	Value
Benzene (CAS 71-43-2)	STEL	2.5 ppm
	TWA	0.5 ppm
Cyclohexane (CAS 110-82-7)	TWA	100 ppm
Isopentane (CAS 78-78-4)	TWA	600 ppm
n-Hexane (CAS 110-54-6)	TWA	50 ppm
Pentane	TWA	600 ppm

### **US. NIOSH: Pocket Guide to Chemical Hazards**

Components	Туре	Value
Benzene (CAS 71-43-2)	REL	0.1 ppm
	STEL	1 ppm
Cyclohexane (CAS 110-82-7)	REL	1050 mg/m3
		300 ppm
Pentane (CAS 109-66-0)	Ceiling	1800 mg/m3
		610 ppm
	REL	350 mg/m3
		120 ppm

#### **Biological Limit Values** US. ACGIH. BEIs. Biological Exposure Indices

Components	Value	Determinant	
Benzene (CAS 71-43-2)	25 μg/g	S-Phenylmercapturic acid	
n-Hexane (CAS 110-54-3)	0.4 mg/l	2,5-Hexanedion, Without hydrolysis	

<sup>\* -</sup> For sampling details, please see the source document.

Natural Gasoline

4/ 10 

**Exposure guidelines** 

US. ACGIH Threshold Limit Values

Benzene (CAS 71-43-2) Can be absorbed through the skin. n-Hexane (CAS 110-54-3) Can be absorbed through the skin.

US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants

BENZENE (CAS 71-43-2)
N-HEXANE (CAS 110-54-3)
Can be absorbed through the skin.
Can be absorbed through the skin.

US. Rhode Island Hazardous Substances Right-to-Know Act (R.I. Gen. Laws Section 28-21-1 et. seq.)

Wear goggles/face shield.

Benzene (CAS 71-43-2) Can be absorbed through the skin.

Individual protection measures, such as personal protective equipment

Eye/face protection

Skin protection Hand protection

Wear protective gloves. Nitrile gloves are recommended, but be aware that the liquid may

penetrate the gloves. Frequent change is advisable. Suitable gloves can be recommended

by the glove supplier.

Other

Protection suit must be worn.

Colorless.

exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Respirator type: Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer

for specific information.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

General hygiene

Color

**considerations** When using, do not eat, drink or smoke. Wash hands after handling. Launder contaminated

clothing before reuse. Private clothes and working clothes should be kept separately.

Observe any medical surveillance requirements. Handle in accordance with good industrial

hygiene and safety practice.

### 9. Physical and chemical properties

Appearance Colorless liquid.

Physical state Liquid.

Form Liquid

Odor Odorless.

Odor threshold Not available.

pH Not available.

Melting point/freezing point Not available.

Initial boiling point and boiling

range 84.2 (29 °C)

Flash point -70.6 °F (-57 °C)

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits Flammability limit – lower (%) 1.4%

Flammability limit – upper (%) 7.6 %

Vapor pressure Not available.

Natural Gasoline 5/10

Vapor density Not available.

Relative density 0.75 (Water=1)

Relative density temperature

Solubility(ies)

68 °F (20 °C)

Slightly soluble in water

Partition coefficient

(n-octanol/water)

Not available.

Auto-ignition temperature 536 °F (280 °C)

 Decomposition temperature
 Not available.

 Viscosity
 Not available.

## 10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and

transport.

**Chemical stability** Stable under normal temperature conditions.

Possibility of hazardous

Reactions

Hazardous polymerization does not occur.

Conditions to avoid Heat, flames and sparks. Elevated temperatures and incompatible materials.

**Incompatible materials** Strong acids. Strong oxidizing agents.

Hazardous decomposition

**Products** 

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or

vapors.

## 11. Toxicological information

Information on likely routes of exposure

**Ingestion** May be fatal if swallowed and enters airways.

**Inhalation** May cause drowsiness or dizziness.

**Skin contact** Causes skin irritation.

**Eye contact** May cause eye irritation.

Symptoms related to the

physical, chemical and

toxicological characteristics Headaches, dizziness, fatigue, nausea and vomiting. Prolonged skin contact may cause

redness, irritation and dry skin.

Information on toxicological effects

**Acute toxicity** 

Breathing of high concentrations may cause dizziness, light-headedness, headache,

nausea and loss of coordination. Continued inhalation may result in unconsciousness.

Components Species Test Results

Cyclohexane (CAS 110-82-7)

Acute

Oral

Natural Gasoline 6/10

LD50 Rat 12705 mg/kg

Isopentane (CAS 78-78-4)

Acute

Inhalation

LC50 Mouse 450 mg/l, 2 Hours

Pentane (CAS 109-66-0)

Acute

Inhalation

LC50 Rat 364 mg/l, 4 Hours

Skin corrosion/irritation Causes skin irritation. Pre-existing skin conditions including dermatitis might be aggravated

by exposure to this product.

Serious eye damage/eye

Irritation May cause eye irritation on direct contact.

Respiratory sensitization Not classified.

Skin sensitization Not a skin sensitizer.

Germ cell mutagenicity May cause genetic defects.

Carcinogenicity No data available.

IARC Monographs. Overall Evaluation of Carcinogenicity

Benzene (CAS 71-43-2) 1 Carcinogenic to humans.

Natural Gasolne (CAS 68425-31-0) 2B Possibly carcinogenic to humans.

NTP Report on Carcinogens

Benzene (CAS 71-43-2) Known To Be Human Carcinogen.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

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

Reproductive toxicity May cause adverse reproductive effects - such as birth defects, miscarriages, or infertility.

Specific target organ toxicity -

single exposure May cause drowsiness.

Specific target organ toxicity -

repeated exposure Causes damage to the following organs through prolonged or repeated exposure: Liver

Kidneys.

**Aspiration hazard** Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a

serious chemical pneumonia.

Prolonged or repeated contact with skin may cause redness, itching, irritation, **Chronic effects** 

eczema/chapping and oil acne. May cause central nervous system depression. May cause

damage to the liver and kidneys.

12. Ecological information

**Ecotoxicity** Toxic to aquatic organisms, may cause long term adverse effects to the environment.

Components **Test Results Species** 

Cyclohexane (CAS 110-82-7)

Aquatic

7/10 Natural Gasoline

LC50 Fish Fathead minnow (Pimephales promelas) 3.961 - 5.181 mg/l, 96 hours

Pentane (CAS 109-66-0)

Aquatic

Crustacea LC50 Daphnia 2.3 mg/l, 48 Hours Fish LC50 Fish 3.1 mg/l, 96 Hours

Persistence and degradability

The degradability of the product has not been stated. The product meets the definition of the International Oil Pollution Compensation (IPOC) Fund as being a "non-persistent" oil. Bioaccumulative potential.

#### Partition coefficient n-octanol / water (log Kow)

Benzene 2.13 Isopentane 2.3 Pentane 3.39 Cyclohexane 3.44 n-Hexane 3.9

Mobility in soil Not available. Other adverse effects Not established.

### 13. Disposal considerations

**Disposal instructions** Product is suitable for burning in an enclosed, controlled burner for fuel value or disposal by

supervised incineration.

Local disposal regulations Dispose of in accordance with local regulations. D001: Waste Flammable material with a flash point <140 °F

Hazardous waste code

Waste from residues / unused

**Products** 

Dispose of in accordance with local regulations

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after

container is emptied.

# 14. Transport information

DOT

**UN number** UN1203

**UN proper shipping name** Gasoline

Transport hazard class(es) 3

Subsidiary class(es) -

Packing group ||

Special precautions for user Not available.

Labels required 3

Special provisions 144, 177, B1, B33, IB2, T4, TP1

Packaging exceptions 150 Packaging non bulk 202

Packaging bulk 242

IATA

**UN number** UN1203

**UN proper shipping name** Gasoline

Transport hazard class(es) 3

Subsidiary class(es) -

Packaging group II

Labels required 3

**ERG Code** Not available.

**Special precautions for user** Not available.

**IMDG** 

**UN number** UN1203

**UN proper shipping name** Gasoline

Transport hazard class(es) 3

Subsidiary class(es) -

Packaging group II

8/ 10 Natural Gasoline Issue Date: 11-28-2012

Labels required 3 EmS Not available.

Special precautions for user Not available.

Transport in bulk according to Annex II of MARPOL 73/78 and

the IBC Code

No information available.

## 15. Regulatory information

**US** federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Benzene (CAS 71-43-2) 29 CFR 1910.1028

CERCLA Hazardous Substance List (40 CFR 302.4)

Benzene (CAS 71-43-2) LISTED Cyclohexane (CAS 110-82-7) LISTED Isopentane (CAS 78-78-4) LISTED n-Hexane (CAS 110-54-3) LISTED Pentane (CAS 109-66-0) LISTED

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes

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

**SARA 302 Extremely** 

hazardous substance No

SARA 311/312 Hazardous

Chemical Yes

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Benzene (CAS 71-43-2) n-Hexane (CAS 110-54-3)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Isopentane (CAS 78-78-4) Pentane (CAS 109-66-0)

Safe Drinking Water Act (SDWA)

Not regulated.

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and **Chemical Code Number** 

Not regulated.

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Toluene (CAS 108-88-3) 35 %WV

**DEA Exempt Chemical Mixtures Code Number** 

Toluene (CAS 108-88-3) 594

Food and Drug

Administration (FDA) Not regulated.

US state regulations WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

US. Massachusetts RTK - Substance List

Benzene (CAS 71-43-2) Cyclohexane (CAS 110-82-7) Isopentane (CAS 78-78-4) n-Hexane (CAS 110-54-3) Pentane (CAS 109-66-0)

US. New Jersey Worker and Community Right-to-Know Act

Benzene (CAS 71-43-2) 500 LBS Cyclohexane (CAS 110-82-7) 500 LBS

9/10 Natural Gasoline Issue Date: 11-28-2012

Isopentane (CAS 78-78-4) 500 LBS n-Hexane (CAS 110-54-3) 500 LBS Pentane (CAS 109-66-0) 500 LBS

### US. Pennsylvania RTK - Hazardous Substances

Benzene (CAS 71-43-2) Cyclohexane (CAS 110-82-7) Isopentane (CAS 78-78-4) Natural gasoline (CAS 68425-31-0) n-Hexane (CAS 110-54-3) Pentane (CAS 109-66-0)

#### **US. Rhode Island RTK**

Benzene (CAS 71-43-2) Cyclohexane (CAS 110-82-7) n-Hexane (CAS 110-54-3) Pentane (CAS 109-66-0)

#### **US. California Proposition 65**

## US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Benzene (CAS 71-43-2)

 Country(s) or region
 Inventory name
 On inventory (yes/no)\*

 Canada
 Domestic Substances List (DSL)
 Yes

 Canada
 Non-Domestic Substances List (NDSL)
 No

 United States & Puerto Rico
 Toxic Substances Control Act
 (TSCA) Inventory
 Yes

### 16. Other information, including date of preparation or last version

Issue date 11-28-2012
Revision date – 2-6-2013
Version # 01
Further information Not available.
References ACGIH
EPA: Acquire database

NLM: Hazardous Substances Data Base

US. IARC Monographs on Occupational Exposures to Chemical Agents

**Disclaimer** This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.

Natural Gasoline 10/10

<sup>\*</sup>A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)