SAFETY DATA SHEET

1. Identification

Product identifier **Produced Salt Water**
Other means of identification
SDS number 9
Recommended use By-Product
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 Not classified
Health hazards Germ cell mutagenicity Category 1B
Carcinogenicity Category 1A

OSHA hazard(s) Not Classified

Label elements
Hazard symbol

Signal word Danger
Hazard statement May cause genetic effects. May cause cancer.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection.

Response Not available.

Storage Store locked up.

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

Hazard(s) not otherwise classified (HNOC) Not classified.

Supplemental Information May contain an upper layer of flammable liquid and vapor hydrocarbons. Vapor accumulation can flash or explode when ignited.

3. Composition/information on ingredients

Mixture
Hazardous components

Chemical name	Common name and synonyms	CAS number	%
Sodium Chloride		7647-14-5	5-10
Benzene		71-43-2	<1
Toluene		108-88-3	<1
Xylene		1330-20-7	<1

Non-Hazardous components

Chemical name	Common name and synonyms	CAS number	%
Water		7732-18-5	90-95

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 Move to fresh air. If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if any discomfort continues.

Skin contact Remove contaminated clothing and shoes. Wash affected area with mild soap and water. Get medical attention if irritation develops and persists.

Eye contact Immediately flush with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists.

Ingestion Rinse mouth thoroughly. Get medical attention if any discomfort continues.

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 Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

NFPA 704 Hazard Class
Health: 0
Flammability: 1
Instability: 0
(0-Minimal, 1-Slight, 2-Moderate, 3-Serious, 4-Severe)

Suitable extinguishing media Extinguish with foam, carbon dioxide, dry powder or water fog.

Unsuitable extinguishing media Not available.

Specific hazards arising from the chemical Vapor accumulation can flash or explode when ignited.

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

Fire-fighting equipment/instructions Keep upwind. Containers close to fire should be removed or cooled with water. Use standard firefighting procedures and consider the hazards of other involved materials.

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 non-combustible 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	Type	Value
Benzene (CAS 71-43-2)	STEL	5 ppm
	TWA	1 ppm

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

Components	Type	Value
Xylene (CAS 1330-20-7)	PEL	435 mg/m3
		100 ppm

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

Components	Type	Value
Benzene (CAS 71-43-2)	Ceiling	25 ppm
	TWA	10 ppm
Toluene (CAS 108-88-3)	Ceiling	300 ppm
	TWA	200 ppm

U.S. ACGIH Threshold Limit Values

Components	Type	Value
Benzene (CAS 109-66-0)	STEL	2.5 ppm
	TWA	0.5 ppm
Toluene (CAS 108-88-3)	TWA	20 ppm
Xylene (CAS 1330-20-7)	STEL	150 ppm
	TWA	100 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Benzene (CAS 109-66-0)	REL	0.1 ppm
	STEL	1 ppm
Toluene (CAS 108-88-3)	REL	375 mg/m3
		100 ppm
	STEL	560 mg/m3
		150 ppm
Xylene (CAS 1330-20-7)	REL	435 mg/m3
		100 ppm
	STEL	655 mg/m3
		150 ppm

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

Components	Value	Determinant
Benzene (CAS 71-43-2)	25 µg/g	S-Phenylmercapturic acid
Toluene (CAS 108-88-3)	0.3 mg/g	o-Cresol, with hydrolysis
Xylene (CAS 1330-20-7)	0.4 mg/l	Methylhippuric acids

* - For sampling details, please see the source document.

Exposure guidelines
US. ACGIH Threshold Limit Values
Benzene (CAS 71-43-2) Can be absorbed through the skin.

US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants
BENZENE (CAS 71-43-2) Can be absorbed through the skin.
TOLUENE; TOLUOL (CAS 108-88-3) Can be absorbed through the skin**.**

US. Minnesota Hazardous Substances List (Minn. Rules 5206.0400).
Toluene (CAS 108-88-3) Skin designation applies.

US. Rhode Island Hazardous Substances Right-to-Know Act (R.I. Gen. Laws Section 28-21-1 et. seq.)
Benzene (CAS 71-43-2) Can be absorbed through the skin.
Toluene (CAS 108-88-3) Can be absorbed through the skin.
Xylene (CAS 1330-20-7) Can be absorbed through the skin.

Individual protection measures, such as personal protective equipment

Eye/face protection If risk of splashing, wear safety goggles or face shield.
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 Normal work clothing (long sleeved shirts and long pants) is recommended.

Respiratory protection	No personal respiratory protective equipment normally required. If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection.
Thermal hazards	When material is heated, wear gloves to protect against thermal burns.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Observe any medical surveillance requirements.

9. Physical and chemical properties

Appearance	Clear. Opaque. Liquid.
Physical state	Liquid.
Form	Liquid
Color	Clear. Opaque
Odor	Salty. Slight Hydrocarbon.
Odor threshold	Not available.
pH	4.9- 8.5
Melting point/freezing point	< 32 °F (< 0 °C)
Initial boiling point and boiling range	212 °F (100 °C)
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit – lower (%)	4 %
Flammability limit – upper (%)	46 %
Vapor pressure	Not available.
Vapor density	1.2
Relative density	>1 (Water=1)
Relative density temperature	68 °F (20 °C)
Solubility(ies)	Soluble in water
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
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 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 cause discomfort if swallowed.
Inhalation	In high concentrations, vapors and spray mists are narcotic and may cause headache, fatigue, dizziness and nausea.
Skin contact	Prolonged skin contact may cause temporary irritation.
Eye contact	Direct contact may irritate.
Symptoms related to the physical, chemical and toxicological characteristics	Dry skin. Irritation. Drowsiness and dizziness.

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
Benzene (CAS 71-43-2)		
Acute		
Oral		
LD50	Rat	930 mg/kg
Sodium chloride (CAS 7647-14-5)		
Acute		
Oral		
LD50	Rat	3000 mg/kg
Toluene (CAS 108-88-3)		
Acute		
Dermal		
LD50	Rabbit	364 mg/l, 4 Hours
Inhalation		
LC50	Rat	49000 mg/m³, 4 Hours
Oral		
LC50	Rat	636 mg/kg

Xylene (CAS 1330-20-7)

Acute		
Oral		
LD50	Rat	4300 mg/kg

Skin corrosion/irritation Not available.

Serious eye damage/eye Irritation Not available.

Respiratory sensitization Not classified.

Skin sensitization Not a skin sensitizer.

Germ cell mutagenicity May cause genetic defects.

Carcinogenicity May cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

Benzene (CAS 71-43-2)	1 Carcinogenic to humans.
Toluene (CAS 108-88-3)	3 Not classifiable as to carcinogenicity to humans.
Xylene (CAS 1330-20-7)	3 Not classifiable as to carcinogenicity 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 Not available.

Specific target organ toxicity - single exposure Not available.

Specific target organ toxicity - repeated exposure Not available.

Aspiration hazard Not available.

Chronic effects Contains benzene. Human epidemiology studies indicate that prolonged and/or repeated overexposure to benzene may cause damage to the blood-producing system and serious blood disorders, including leukemia. Animal tests suggest that prolonged and/or repeated overexposure to benzene may damage the embryo/fetus. The relevance of these animal studies to humans has not been fully established.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Product		Species	Test Results
Produced Salt Water (CAS Mixture)			
Aquatic			
Fish	EC50	Daphnia	303.0866 mg/l, 48 hours, estimated

Components		Species	Test Results
Benzene (CAS 71-43-2)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	8.76 - 15.6 mg/l, 48 Hours
Fish	LC50	Rainbow trout, Donaldson trout (Oncorhynchus mykiss)	5 mg/l, 96 Hours
Sodium chloride (CAS 7647-14-5)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	340.7 - 469.2 mg/l, 48 hours
Toluene (CAS 108-88-3)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	5.46 - 9.83 mg/l, 48 hours
Fish	LC50	Coho salmon, silver salmon (Oncorhynchus kisutch)	5.5 mg/l, 96 hours
Xylene (CAS 1330-20-7)			
Aquatic			
Fish	LC50	Rainbow trout, Donaldson trout (Oncorhynchus mykiss)	8 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
Toluene	2.73
Xylene	3.2

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

13. Disposal considerations

Disposal instructions Dispose in accordance with all applicable regulations. Do not discharge into drains, water courses or onto the ground.
Local disposal regulations Dispose of in accordance with local regulations.
Hazardous waste code Waste codes should be assigned by the user based on the application for which the product was used.
Waste from residues / unused products Dispose in accordance with all applicable regulations.

Contaminated packaging Since emptied containers retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT
Not regulated as a hazardous material by DOT.
IATA
Not regulated as a dangerous good.
IMDG
Not regulated as a dangerous good.
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
Toluene (CAS 108-88-3)	LISTED
Xylene (CAS 1330-20-7)	LISTED

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No
Delayed Hazard - Yes
Fire Hazard - No
Pressure Hazard - No
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)
Toluene (CAS 108-88-3)
Xylene (CAS 1330-20-7)

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

Not regulated.

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

Toluene (CAS 108-88-3) 6594

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 chemical(s) 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)
Toluene (CAS 108-88-3)
Xylene (CAS 1330-20-7)

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

Benzene (CAS 71-43-2) 500 LBS
Toluene (CAS 108-88-3) 500 LBS
Xylene (CAS 1330-20-7) 500 LBS

US. Pennsylvania RTK - Hazardous Substances

Benzene (CAS 71-43-2)
Toluene (CAS 108-88-3)
Xylene (CAS 1330-20-7)

US. Rhode Island RTK

Benzene (CAS 71-43-2)
Toluene (CAS 108-88-3)
Xylene (CAS 1330-20-7)

US. California Proposition 65

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

Benzene (CAS 71-43-2)
Toluene (CAS 108-88-3)

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

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

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 Documentation of the Threshold Limit Values and Biological Exposure Indices
IARC Monographs. Overall Evaluation of Carcinogenicity
National Toxicology Program (NTP) Report on Carcinogens

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.