

1. Identification

Product identifier	Marcellus Utica Condensate
Other means of identification	None.
Recommended use	Not available.
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/Distributor information	
Company:	Ergon, Inc.
Address:	P.O. Box 1639 Jackson, MS 39215
E-mail:	sds@ergon.com
Emergency Contacts	
Customer Service:	1-800-222-7122
Chemtrec:	1-800-424-9300 After Business Hours (North America Only) 1-703-527-3887 After Business Hours (International)

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 (the unborn child)	Category 2
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Specific target organ toxicity, repeated exposure	Category 1
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 1
	Hazardous to the aquatic environment, long-term hazard	Category 1
OSHA defined hazards	Not classified.	

Label elements



Signal word

Danger

Hazard statement

May cause cancer. Suspected of damaging the unborn child. Causes damage to organs through prolonged or repeated exposure. Very toxic to aquatic life. Extremely flammable liquid and vapor. May cause genetic defects. May cause drowsiness or dizziness. Causes skin irritation. Very toxic to aquatic life with long lasting effects.

Precautionary statement

Prevention

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

Response	Specific treatment see Section 4 of this SDS. IF exposed or concerned: Call a POISON CENTER/doctor. IF ON SKIN: Wash with plenty of water. In case of fire: Use CO2 for extinction. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
Storage	Keep cool. Store locked up. Store in a well-ventilated place. Keep container tightly closed.
Disposal	Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. See section 13 of this SDS for disposal instructions.
Hazard(s) not otherwise classified (HNOC)	This product may contain the following ingredients; xylene, toluene, n-hexane, cyclohexane, naphthalene, benzene and ethyl benzene.
Supplemental information	Not applicable.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
HEPTANE		142-82-5	70 - < 80
HEXANE		110-54-3	0 - 10
PENTANE		109-66-0	0 - 10
2-METHYLBUTANE		78-78-4	1 - < 3
BUTANE		106-97-8	1 - < 3
BENZENE, DIMETHYL		1330-20-7	< 1
ISOBUTANE		75-28-5	< 1
PROPANE		74-98-6	< 1
TOLUENE		108-88-3	< 1
BENZENE		71-43-2	< 0.1
Other components below reportable levels			0 - 40

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a physician if symptoms develop or persist.
Skin contact	Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical attention if irritation develops and persists. Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. If clothing sticks to the skin, do not remove. Wash contact areas with soap and water. If needed, seek medical attention.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately. DO NOT induce vomiting. Get medical attention immediately.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital.
General information	Take off all contaminated clothing immediately. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). Water spray, fog, CO2, dry chemical, or alcohol resistant foam.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical	Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed:
Special protective equipment and precautions for firefighters	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Structural firefighters protective clothing will only provide limited protection.
Fire fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. ALWAYS stay away from tanks engulfed in flame. In the event of fire, cool tanks with water spray. Move containers from fire area if you can do so without risk. Do not release runoff from fire control methods to sewers or waterways.
Specific methods	In the event of fire, cool tanks with water spray. In the event of fire and/or explosion do not breathe fumes.
General fire hazards	Extremely flammable liquid and vapor.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS. Eliminate all sources of ignition.
Methods and materials for containment and cleaning up	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Keep combustibles (wood, paper, oil, etc.) away from spilled material.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. For large spills, dike far ahead of liquid spill for later disposal. Do not release into sewers or waterways. Ventilate area and avoid breathing vapors or mist.

Environmental precautions	Avoid discharge into drains, water courses or onto the ground. If this material is spilled into navigable waters and creates a visible sheen, it is reportable to the National Response Center. Do not allow the spilled product to enter public drainage systems or open watercourses.
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7. Handling and storage

Precautions for safe handling	Vapors may form explosive mixtures with air. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Avoid heat, sparks, open flames and other ignition sources. Do not smoke. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. DO NOT SMOKE IN WORK AREA! Hydrogen sulfide, a very highly toxic gas, may be present with this material. Keep face clear of tank and/or tank car openings. The product is highly flammable and may be ignited even after short contact with an ignition source.
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Conditions for safe storage, including any incompatibilities	Class IA Flammable Liquid.
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Keep away from heat and sources of ignition. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in original tightly closed container. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Refrigeration recommended. Keep in an area equipped with sprinklers. Avoid heat, sparks, open flames and other ignition sources.

8. Exposure controls/personal protection

Occupational exposure limits

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

Components	Type	Value
BENZENE (CAS 71-43-2)	STEL	5 ppm
	TWA	1 ppm

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

Components	Type	Value
BENZENE, DIMETHYL (CAS 1330-20-7)	PEL	435 mg/m ³
		100 ppm
HEPTANE (CAS 142-82-5)	PEL	2000 mg/m ³
		500 ppm
HEXANE (CAS 110-54-3)	PEL	1800 mg/m ³
		500 ppm
PENTANE (CAS 109-66-0)	PEL	2950 mg/m ³
		1000 ppm
PROPANE (CAS 74-98-6)	PEL	1800 mg/m ³
		1000 ppm

US. OSHA Table Z-2 (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

US. ACGIH Threshold Limit Values

Components	Type	Value
2-METHYLBUTANE (CAS 78-78-4)	TWA	1000 ppm
BENZENE (CAS 71-43-2)	STEL	2.5 ppm
	TWA	0.5 ppm
BENZENE, DIMETHYL (CAS 1330-20-7)	STEL	150 ppm
	TWA	100 ppm
BUTANE (CAS 106-97-8)	STEL	1000 ppm
HEPTANE (CAS 142-82-5)	STEL	500 ppm
	TWA	400 ppm
HEXANE (CAS 110-54-3)	TWA	50 ppm
ISOBUTANE (CAS 75-28-5)	STEL	1000 ppm
PENTANE (CAS 109-66-0)	TWA	1000 ppm
TOLUENE (CAS 108-88-3)	TWA	20 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
BENZENE (CAS 71-43-2)	STEL	1 ppm
	TWA	0.1 ppm
BENZENE, DIMETHYL (CAS 1330-20-7)	STEL	655 mg/m ³
	TWA	150 ppm
	TWA	435 mg/m ³

US. NIOSH: Pocket Guide to Chemical Hazards Components

Components	Type	Value
BUTANE (CAS 106-97-8)	TWA	100 ppm
		1900 mg/m3
HEPTANE (CAS 142-82-5)	Ceiling	800 ppm
		1800 mg/m3
HEXANE (CAS 110-54-3)	TWA	440 ppm
		350 mg/m3
ISOBUTANE (CAS 75-28-5)	TWA	85 ppm
		180 mg/m3
PENTANE (CAS 109-66-0)	Ceiling	50 ppm
		1900 mg/m3
PROPANE (CAS 74-98-6)	TWA	800 ppm
		1800 mg/m3
TOLUENE (CAS 108-88-3)	STEL	610 ppm
		560 mg/m3
		150 ppm
	TWA	375 mg/m3
		100 ppm

Biological limit values

ACGIH Biological Exposure Indices Components

Components	Value	Determinant	Specimen	Sampling Time
BENZENE (CAS 71-43-2)	25 µg/g	S-Phenylmercapturic acid	Creatinine in urine	*
BENZENE, DIMETHYL (CAS 1330-20-7)	1.5 g/g	Methylhippuric acids	Creatinine in urine	*
HEXANE (CAS 110-54-3)	0.5 mg/l	2,5-Hexanedione, without hydrolysis	Urine	*
TOLUENE (CAS 108-88-3)	0.3 mg/g	o-Cresol, with hydrolysis	Creatinine in urine	*
	0.03 mg/l	Toluene	Urine	*
	0.02 mg/l	Toluene	Blood	*

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

Exposure guidelines

US - California OELs: Skin designation

BENZENE (CAS 71-43-2) Can be absorbed through the skin.
 HEXANE (CAS 110-54-3) Can be absorbed through the skin.
 TOLUENE (CAS 108-88-3) Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

TOLUENE (CAS 108-88-3) Skin designation applies.

US ACGIH Threshold Limit Values: Skin designation

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

Appropriate engineering controls	Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Chemical goggles and face shield are recommended. Wear safety glasses with side shields (or goggles).
Skin protection	
Hand protection	Wear protective gloves.
Other	Wear suitable protective clothing. Wear fire/flamm resistant/retardant clothing. Plastic or rubber gloves, apron and boots.
Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	When using do not smoke. 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. 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.

9. Physical and chemical properties

Appearance	Liquid.
Physical state	Liquid.
Form	Liquid.
Color	Colourless to light yellow.
Odor	Hydrocarbon-like.
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	< 68.0 °F (< 20.0 °C)
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	1.1 % estimated
Flammability limit - upper (%)	8.5 % estimated
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	> 9 psi Reid Vapor Pressure
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	insoluble
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.

Other information

Density	670.00 - 728.00 kg/m ³
Flammability class	Flammable IA
Kinematic viscosity	0.821 cSt
Kinematic viscosity temperature	70 °F (21.11 °C)

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	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials. Avoid heat. Keep away from sources of ignition - No smoking.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Upon decomposition, this product emits oxides of sulfur, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

11. Toxicological information

Information on likely routes of exposure

Inhalation	No adverse effects due to inhalation are expected.
Skin contact	Causes skin irritation.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity Harmful if swallowed. Expected to be a low hazard for usual industrial or commercial handling by trained personnel. Causes skin and eye irritation.

Components	Species	Test Results
2-METHYLBUTANE (CAS 78-78-4)		
Acute		
Inhalation		
LC50	Mouse	450 mg/l, 2 Hours
BENZENE, DIMETHYL (CAS 1330-20-7)		
Acute		
Dermal		
LD50	Rabbit	> 43 g/kg
Inhalation		
LC50	Rat	6350 mg/l, 4 Hours
HEPTANE (CAS 142-82-5)		
Acute		
Inhalation		
LC50	Rat	103 mg/l, 4 Hours
PENTANE (CAS 109-66-0)		
Acute		
Inhalation		
LC50	Rat	364 mg/l, 4 Hours

Components	Species	Test Results
TOLUENE (CAS 108-88-3)		
Acute		
Dermal		
LD50	Rabbit	12120 mg/kg

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation	Defats the skin. Direct contact may irritate.
Serious eye damage/eye irritation	Corrosive to skin and eyes. Risk of serious damage to eyes.
Respiratory or skin sensitization	
Respiratory sensitization	May cause sensitization by inhalation.
Skin sensitization	May irritate eyes and skin. Prolonged contact may cause redness, irritation and cracking.
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.
BENZENE, DIMETHYL (CAS 1330-20-7)	3 Not classifiable as to carcinogenicity to humans.
TOLUENE (CAS 108-88-3)	3 Not classifiable as to carcinogenicity to humans.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)	
BENZENE (CAS 71-43-2)	Cancer
US. National Toxicology Program (NTP) Report on Carcinogens	
BENZENE (CAS 71-43-2)	Known To Be Human Carcinogen.
Reproductive toxicity	Suspected of damaging fertility or the unborn child.
Specific target organ toxicity - single exposure	May cause drowsiness or dizziness.
Specific target organ toxicity - repeated exposure	Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard	Not available.

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	
Marcellus Utica Condensate			
Aquatic			
Crustacea	EC50	Daphnia	1206.9717 mg/l, 48 hours estimated
Fish	LC50	Fish	834.809 mg/l, 96 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)	7.2 - 11.7 mg/l, 96 hours
BENZENE, DIMETHYL (CAS 1330-20-7)			
Aquatic			
Fish	LC50	Bluegill (Lepomis macrochirus)	7.711 - 9.591 mg/l, 96 hours
HEPTANE (CAS 142-82-5)			
Aquatic			
Fish	LC50	Mozambique tilapia (Tilapia mossambica)	375 mg/l, 96 hours

Components	Species	Test Results
HEXANE (CAS 110-54-3)		
Aquatic		
Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>) 2.101 - 2.981 mg/l, 96 hours
TOLUENE (CAS 108-88-3)		
Aquatic		
Crustacea	EC50	Water flea (<i>Daphnia magna</i>) 5.46 - 9.83 mg/l, 48 hours
Fish	LC50	Coho salmon, silver salmon (<i>Oncorhynchus kisutch</i>) 8.11 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Partition coefficient n-octanol / water (log Kow)

2-METHYLBUTANE	2.3
BENZENE	2.13
BENZENE, DIMETHYL	3.12 - 3.2
BUTANE	2.89
HEPTANE	4.66
HEXANE	3.9
ISOBUTANE	2.76
PENTANE	3.39
PROPANE	2.36
TOLUENE	2.73

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations. Disposal recommendations are based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code D001: Waste Flammable material with a flash point <140 F
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

UN number	UN1267
UN proper shipping name	Petroleum crude oil
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Label(s)	3
Packing group	II
Special precautions for user	Not available.

Special provisions 144, 357, IB2, T4, TP1, TP8
Packaging exceptions 150
Packaging non bulk 202
Packaging bulk 242

IATA

UN number UN1950
UN proper shipping name Aerosols, flammable
Transport hazard class(es)
Class 2.1
Subsidiary risk -
Packing group Not available.
Environmental hazards No.
ERG Code 10L
Special precautions for user Not available.
Other information

Passenger and cargo aircraft Allowed with restrictions.
Cargo aircraft only Allowed with restrictions.

IMDG

UN number UN1950
UN proper shipping name Aerosols, flammable, MARINE POLLUTANT
Transport hazard class(es)
Class 2.1
Subsidiary risk -
Packing group Not available.
Environmental hazards
Marine pollutant Yes
EmS F-D, S-U
Special precautions for user Not available.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not available.

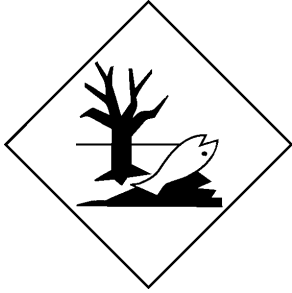
DOT



IATA; IMDG



Marine pollutant



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.

CERCLA Hazardous Substance List (40 CFR 302.4)

2-METHYLBUTANE (CAS 78-78-4)	Listed.
BENZENE (CAS 71-43-2)	Listed.
BENZENE, DIMETHYL (CAS 1330-20-7)	Listed.
BUTANE (CAS 106-97-8)	Listed.
HEPTANE (CAS 142-82-5)	Listed.
HEXANE (CAS 110-54-3)	Listed.
ISOBUTANE (CAS 75-28-5)	Listed.
PENTANE (CAS 109-66-0)	Listed.
PROPANE (CAS 74-98-6)	Listed.
TOLUENE (CAS 108-88-3)	Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

BENZENE (CAS 71-43-2)	Cancer Central nervous system Blood Aspiration Skin Eye respiratory tract irritation Flammability
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Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

Classified hazard categories

Flammable (gases, aerosols, liquids, or solids)
Skin corrosion or irritation
Germ cell mutagenicity
Carcinogenicity
Reproductive toxicity
Specific target organ toxicity (single or repeated exposure)
Aspiration hazard

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
BENZENE	71-43-2	< 0.1
BENZENE, DIMETHYL	1330-20-7	< 1
HEXANE	110-54-3	0 - 10
TOLUENE	108-88-3	< 1

Other federal regulations

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

BENZENE (CAS 71-43-2)
BENZENE, DIMETHYL (CAS 1330-20-7)

HEXANE (CAS 110-54-3)
TOLUENE (CAS 108-88-3)

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

2-METHYLBUTANE (CAS 78-78-4)
BUTANE (CAS 106-97-8)
ISOBUTANE (CAS 75-28-5)
PENTANE (CAS 109-66-0)
PROPANE (CAS 74-98-6)

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

US state regulations

California Proposition 65



WARNING: California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

BENZENE (CAS 71-43-2) Listed: February 27, 1987

California Proposition 65 - CRT: Listed date/Developmental toxin

BENZENE (CAS 71-43-2) Listed: December 26, 1997

TOLUENE (CAS 108-88-3) Listed: January 1, 1991

California Proposition 65 - CRT: Listed date/Male reproductive toxin

BENZENE (CAS 71-43-2) Listed: December 26, 1997

HEXANE (CAS 110-54-3) Listed: December 15, 2017

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

2-METHYLBUTANE (CAS 78-78-4)
BENZENE (CAS 71-43-2)
BENZENE, DIMETHYL (CAS 1330-20-7)
BUTANE (CAS 106-97-8)
HEXANE (CAS 110-54-3)
ISOBUTANE (CAS 75-28-5)
PENTANE (CAS 109-66-0)
TOLUENE (CAS 108-88-3)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 07-27-2015

Revision date 04-09-2019

Version # 02

NFPA ratings Health: 2
Flammability: 4
Instability: 0

Disclaimer Information for this material safety data sheet was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the mandatory requirements of OSHA. The information in the sheet was written based on the best knowledge and experience currently available.

Revision information This document has undergone significant changes and should be reviewed in its entirety