

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Dyed Ultra Low Sulfur Diesel, Ultra Low Sulfur Diesel
Product code : 503094, 503095

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Fuel

1.3. Supplier

Cross Oil Refining & Marketing, Inc.
484 E. 6th Street
Smackover, AR, 71762
US
T 870-864-7500
www.crossoil.com

1.4. Emergency telephone number

Emergency number : CHEMTREC (800) 424-9300

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Flammable liquids, Category 4	H227	Combustible liquid
Acute toxicity (dermal), Category 4	H312	Harmful in contact with skin.
Skin corrosion/irritation, Category 2	H315	Causes skin irritation.
Serious eye damage/eye irritation, Category 2A	H319	Causes serious eye irritation.
Carcinogenicity, Category 2	H351	Suspected of causing cancer.
Specific target organ toxicity – Single exposure, Category 3, Narcosis	H336	May cause drowsiness or dizziness.
Aspiration hazard, Category 1	H304	May be fatal if swallowed and enters airways.
Full text of H-statements: see section 16		

2.2. GHS Label elements, including precautionary statements

GHS US labelling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Danger
Hazard statements (GHS US) : H227 - Combustible liquid
H304 - May be fatal if swallowed and enters airways.
H312 - Harmful in contact with skin.
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H336 - May cause drowsiness or dizziness.
H351 - Suspected of causing cancer.

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Precautionary statements (GHS US) : P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 - Wash hands, forearms and face thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310 - If swallowed: Immediately call a poison center or doctor.
P302+P352 - If on skin: Wash with plenty of water.
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P312 - Call a poison center or doctor if you feel unwell.
P321 - Specific treatment (see supplemental first aid instruction on this label).
P322 - Specific treatment (see supplemental first aid instruction on this label)
P331 - Do NOT induce vomiting.
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P370+P378 - In case of fire: Use media other than water to extinguish.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P403+P235 - Store in a well-ventilated place. Keep cool.
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
Diesel	CAS-No.: 68476-34-6	85 – 100	Flam. Liq. 4, H227 Acute Tox. 4 (Dermal), H312 Carc. 2, H351
Ethylhexyl nitrate	CAS-No.: 27247-96-7	< 0.1	Flam. Liq. 4, H227 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332
Aromatic Hydrocarbons	CAS-No.: 64742-95-6	< 0.1	Flam. Liq. 2, H225 Carc. 1B, H350 Asp. Tox. 1, H304

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Name	Product identifier	%	GHS US classification
1,2,4 Tri-Methyl Benzene	CAS-No.: 95-63-6	< 0.1	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
Mesitylene	CAS-No.: 108-67-8	< 0.1	Flam. Liq. 3, H226 STOT SE 3, H335
1,2,3-Trimethylbenzene	CAS-No.: 526-73-8	< 0.1	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
Xylene	CAS-No.: 1330-20-7	< 0.1	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315
Cumene	CAS-No.: 98-82-8	< 0.1	Flam. Liq. 3, H226 Carc. 2, H351 STOT SE 3, H335 Asp. Tox. 1, H304

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general	: Call a physician immediately.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Do not induce vomiting. Call a physician immediately.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after ingestion	: Risk of lung oedema.
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4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
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5.2. Specific hazards arising from the chemical

Fire hazard	: Combustible liquid.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : No open flames, no sparks, and no smoking. Only qualified personnel equipped with suitable protective equipment may intervene.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Do not get in eyes, on skin, or on clothing.

Hygiene measures : Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool. Store locked up.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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No additional information available

Diesel (68476-34-6)

USA - ACGIH - Occupational Exposure Limits

Local name	Diesel No. 2, as total hydrocarbons
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Diesel (68476-34-6)	
ACGIH OEL TWA	100 mg/m ³
Remark (ACGIH)	TLV® Basis: Dermatitis. Notations: Skin; A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)
Regulatory reference	ACGIH 2022
Ethylhexyl nitrate (27247-96-7)	
No additional information available	
Aromatic Hydrocarbons (64742-95-6)	
No additional information available	
1,2,4 Tri-Methyl Benzene (95-63-6)	
USA - ACGIH - Occupational Exposure Limits	
Local name	1,2,4-Trimethyl benzene
ACGIH OEL TWA [ppm]	10 ppm
Remark (ACGIH)	TLV® Basis: CNS impair; hematologic eff. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH 2022
Mesitylene (108-67-8)	
USA - ACGIH - Occupational Exposure Limits	
Local name	1,3,5-Trimethyl benzene
ACGIH OEL TWA [ppm]	10 ppm 10 ppm
Remark (ACGIH)	TLV® Basis: CNS impair; hematologic eff
Regulatory reference	ACGIH 2022
1,2,3-Trimethylbenzene (526-73-8)	
USA - ACGIH - Occupational Exposure Limits	
Local name	1,2,3-Trimethyl benzene
ACGIH OEL TWA [ppm]	10 ppm 10 ppm
Remark (ACGIH)	TLV® Basis: CNS impair; hematologic eff
Regulatory reference	ACGIH 2022
Xylene (1330-20-7)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Xylene, mixed isomers (Dimethylbenzene)
ACGIH OEL TWA [ppm]	20 ppm
Remark (ACGIH)	TLV® Basis: URT & eye irr; hematologic eff; ototoxicity (for mixtures containing p-xylene); CNS impair. Notations: OTO (for mixtures containing p-xylene); A4 (Not classifiable as a Human Carcinogen); BEI
Regulatory reference	ACGIH 2022

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Xylene (1330-20-7)	
USA - ACGIH - Biological Exposure Indices	
Local name	XYLENES (Technical or commercial grade)
BEI	1.5 g/g creatinine Parameter: Methylhippuric acids - Medium: urine - Sampling time: End of shift
Regulatory reference	ACGIH 2022
USA - OSHA - Occupational Exposure Limits	
Local name	Xylenes (o-, m-, p-isomers)
OSHA PEL TWA [1]	435 mg/m ³
OSHA PEL TWA [2]	100 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
Cumene (98-82-8)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Cumene
ACGIH OEL TWA [ppm]	5 ppm
Remark (ACGIH)	TLV® Basis: URT adenoma; neurological eff. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)
Regulatory reference	ACGIH 2022
USA - OSHA - Occupational Exposure Limits	
Local name	Cumene
OSHA PEL TWA [1]	245 mg/m ³
OSHA PEL TWA [2]	50 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
8.2. Appropriate engineering controls	
Appropriate engineering controls	: Ensure good ventilation of the work station.
Environmental exposure controls	: Avoid release to the environment.
8.3. Individual protection measures/Personal protective equipment	
Hand protection:	
Protective gloves	
Eye protection:	
Safety glasses	
Skin and body protection:	
Wear suitable protective clothing	
Respiratory protection:	
[In case of inadequate ventilation] wear respiratory protection.	

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Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Yellow to red liquid.
Colour	: Yellow to red
Odour	: Hydrocarbon.
Odour threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: 191 – 260 °C
Flash point	: 150 – 180 °F
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: Flash point at or above 100°F/38°C and less than 200°F/93°C Not applicable.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 7.26 lb/gal
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: 1.7 – 3 mm ² /s @ 40°C
Viscosity, dynamic	: No data available
Explosive limits	: Lower explosion limit: 0.7 vol % Upper explosion limit: 5 vol %
Explosive properties	: No data available
Oxidising properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

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10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Harmful in contact with skin.
Acute toxicity (inhalation) : Not classified

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ATE US (dermal)	1100 mg/kg bodyweight
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Diesel (68476-34-6)

LD50 oral rat	> 5000 mg/kg Source: ECHA
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LD50 dermal rabbit	> 1800 mg/kg Source: ECHA
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LC50 Inhalation - Rat (Dust/Mist)	> 3.6 mg/l Source: ECHA
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ATE US (dermal)	1100 mg/kg bodyweight
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Ethylhexyl nitrate (27247-96-7)

LD50 oral rat	> 9600 mg/kg (Rat, Male / female, Experimental value, (maximum achievable concentration), Oral (repeated exposure), 14 day(s))
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ATE US (dermal)	1100 mg/kg bodyweight
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ATE US (gases)	4500 ppmv/4h
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ATE US (vapours)	11 mg/l/4h
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ATE US (dust,mist)	1.5 mg/l/4h
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Aromatic Hydrocarbons (64742-95-6)

LD50 oral rat	8400 mg/kg Source: RTECS
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LD50 dermal rat	> 2000 mg/kg Source: ECHA
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LC50 Inhalation - Rat (Vapours)	5.16 mg/l Source: ECHA
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ATE US (oral)	8400 mg/kg bodyweight
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ATE US (vapours)	5.16 mg/l/4h
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1,2,4 Tri-Methyl Benzene (95-63-6)

LD50 oral rat	6000 mg/kg bodyweight
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LD50 dermal rat	3440 mg/kg
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LD50 dermal rabbit	> 3160 mg/kg Source: International Uniform Chemical Information Database
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LC50 Inhalation - Rat	> 10.2 mg/l air
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1,2,4 Tri-Methyl Benzene (95-63-6)	
LC50 Inhalation - Rat (Vapours)	18 mg/l Source: Corporate Solution From Thomson Micromedex
ATE US (oral)	6000 mg/kg bodyweight
ATE US (dermal)	3440 mg/kg bodyweight
ATE US (gases)	4500 ppmv/4h
ATE US (vapours)	18 mg/l/4h
ATE US (dust,mist)	1.5 mg/l/4h
Mesitylene (108-67-8)	
LD50 oral rat	6000 mg/kg bodyweight (Equivalent or similar to EU Method B.1, Rat, Male, Read-across, Oral, 14 day(s))
LD50 dermal rat	> 2000 mg/kg bw/day (24 h, Rat, Male / female, Read-across, Dermal)
LC50 Inhalation - Rat	> 10.2 mg/l air (4 h, Rat, Male / female, Read-across, Inhalation, 14 day(s))
LC50 Inhalation - Rat (Dust/Mist)	24 mg/l Source: RTECS
ATE US (oral)	6000 mg/kg bodyweight
ATE US (dust,mist)	24 mg/l/4h
Xylene (1330-20-7)	
LD50 oral rat	3523 mg/kg Source: ECHA
LD50 dermal rabbit	12126 mg/kg bodyweight Animal: rabbit, Animal sex: male, Remarks on results: other:
LC50 Inhalation - Rat [ppm]	5922 ppm
ATE US (oral)	3523 mg/kg bodyweight
ATE US (dermal)	12126 mg/kg bodyweight
ATE US (gases)	5922 ppmv/4h
ATE US (vapours)	11 mg/l/4h
ATE US (dust,mist)	1.5 mg/l/4h
Cumene (98-82-8)	
LD50 oral rat	2700 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 014 day(s))
LD50 dermal rabbit	> 3160 mg/kg bodyweight (24 h, Rabbit, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	39 mg/l (4 h, Rat, Male, Experimental value, Inhalation (vapours), 14 day(s))
ATE US (oral)	2700 mg/kg bodyweight
ATE US (vapours)	39 mg/l/4h
ATE US (dust,mist)	39 mg/l/4h
Skin corrosion/irritation	: Causes skin irritation.
Ethylhexyl nitrate (27247-96-7)	
pH	No data available in the literature
Serious eye damage/irritation	: Causes serious eye irritation.
Ethylhexyl nitrate (27247-96-7)	
pH	No data available in the literature

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Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Suspected of causing cancer.

Xylene (1330-20-7)	
IARC group	3 - Not classifiable

Cumene (98-82-8)	
IARC group	2B - Possibly carcinogenic to humans
National Toxicity Program (NTP) Status	Reasonably anticipated to be Human Carcinogen

Reproductive toxicity : Not classified
STOT-single exposure : May cause drowsiness or dizziness.

1,2,4 Tri-Methyl Benzene (95-63-6)	
STOT-single exposure	May cause respiratory irritation.

Mesitylene (108-67-8)	
STOT-single exposure	May cause respiratory irritation.

1,2,3-Trimethylbenzene (526-73-8)	
STOT-single exposure	May cause respiratory irritation.

Cumene (98-82-8)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Not classified

Ethylhexyl nitrate (27247-96-7)	
NOAEL (dermal, rat/rabbit, 90 days)	500 mg/kg bodyweight Animal: rabbit, Guideline: EPA OPP 82-2 (Repeated Dose Dermal Toxicity -21/28 Days)

1,2,4 Tri-Methyl Benzene (95-63-6)	
NOAEL (oral, rat, 90 days)	600 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEC (inhalation, rat, vapour, 90 days)	1.8 mg/l air Animal: rat, Guideline: OECD Guideline 452 (Chronic Toxicity Studies)

Mesitylene (108-67-8)	
NOAEL (oral, rat, 90 days)	600 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEC (inhalation, rat, vapour, 90 days)	1.8 mg/l air Animal: rat, Guideline: OECD Guideline 452 (Chronic Toxicity Studies)

Xylene (1330-20-7)	
LOAEL (oral, rat, 90 days)	150 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: EPA OPP 82-1 (90-Day Oral Toxicity)

Aspiration hazard : May be fatal if swallowed and enters airways.
Viscosity, kinematic : 1.7 – 3 mm²/s @ 40°C

Diesel (68476-34-6)	
Viscosity, kinematic	≥ 1.5 mm ² /s Temp.: '40°C' Parameter: 'mm ² /s'

Ethylhexyl nitrate (27247-96-7)	
Viscosity, kinematic	1.3 mm ² /s (20 °C)

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Aromatic Hydrocarbons (64742-95-6)	
Viscosity, kinematic	< 1 mm ² /s Temp.: 'other:' Parameter: 'kinematic viscosity (in mm ² /s)'
1,2,4 Tri-Methyl Benzene (95-63-6)	
Viscosity, kinematic	0.843 mm ² /s
Mesitylene (108-67-8)	
Viscosity, kinematic	0.843 mm ² /s (20 °C)
Cumene (98-82-8)	
Viscosity, kinematic	0.74 mm ² /s (38 °C)
Hydrocarbon	Yes

Symptoms/effects after ingestion : Risk of lung oedema.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Ethylhexyl nitrate (27247-96-7)	
LC50 - Fish [1]	2 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	> 12.6 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
EC50 72h - Algae [1]	3.22 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	1.57 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [1]	1.111 mg/l Source: ECOSAR
ErC50 algae	3.22 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Nominal concentration)

Aromatic Hydrocarbons (64742-95-6)	
LC50 - Fish [1]	9.22 mg/l Source: IUCLID
EC50 - Crustacea [1]	6.14 mg/l Source: IUCLID
EC50 72h - Algae [1]	19 mg/l Source: IUCLID

1,2,4 Tri-Methyl Benzene (95-63-6)	
LC50 - Fish [1]	7.72 mg/l
EC50 - Crustacea [1]	6.14 mg/l Source: International Uniform Chemical Information Database
EC50 96h - Algae [1]	2.356 mg/l

Mesitylene (108-67-8)	
LC50 - Fish [1]	12.52 mg/l (96 h, Carassius auratus, Flow-through system, Fresh water, Experimental value, Nominal concentration)
EC50 - Crustacea [1]	6.01 mg/l Source: ECOTOX

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Mesitylene (108-67-8)	
ErC50 algae	53 mg/l (DIN 38412-9, 48 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Nominal concentration)
NOEC (chronic)	0.4 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	0.277 mg/l Test organisms (species): other: Duration: '30 d'
1,2,3-Trimethylbenzene (526-73-8)	
LC50 - Fish [1]	2.792 mg/l Source: Ecological Structure Activity Relationships
EC50 96h - Algae [1]	2.29 mg/l Source: Ecological Structure Activity Relationships
Xylene (1330-20-7)	
LC50 - Fish [1]	2.6 mg/l Source: ECHA
EC50 - Crustacea [1]	> 3.4 mg/l Test organisms (species): Ceriodaphnia dubia
LOEC (chronic)	3.16 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	> 1.3 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) Duration: '56 d'
Cumene (98-82-8)	
LC50 - Fish [1]	4.8 mg/l (EPA OTS 797.1400, 96 h, Oncorhynchus mykiss, Flow-through system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	2.14 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
LC50 - Fish [2]	4.8 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 72h - Algae [1]	2.01 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 72h - Algae [2]	1.29 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
ErC50 algae	2.01 mg/l (EU Method C.3, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)
NOEC (chronic)	0.35 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	0.38 mg/l Test organisms (species): other: Duration: '28 d'
12.2. Persistence and degradability	
Ethylhexyl nitrate (27247-96-7)	
Persistence and degradability	Not readily biodegradable in water.
1,2,4 Tri-Methyl Benzene (95-63-6)	
Persistence and degradability	Not readily biodegradable in water.
Chemical oxygen demand (COD)	0.44 g O ₂ /g substance
Mesitylene (108-67-8)	
Persistence and degradability	Biodegradable in the soil. Biodegradable in water.
Biochemical oxygen demand (BOD)	0.0957 g O ₂ /g substance
Chemical oxygen demand (COD)	0.319 g O ₂ /g substance
ThOD	3.19 g O ₂ /g substance

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1,2,3-Trimethylbenzene (526-73-8)	
Persistence and degradability	Non degradable in the soil. Not readily biodegradable in water.
Cumene (98-82-8)	
Persistence and degradability	Not readily biodegradable in water.
Biochemical oxygen demand (BOD)	1.28 g O ₂ /g substance
Chemical oxygen demand (COD)	2.42 g O ₂ /g substance
ThOD	3.2 g O ₂ /g substance
12.3. Bioaccumulative potential	
Diesel (68476-34-6)	
Partition coefficient n-octanol/water (Log Pow)	> 3.3 Source: ICSC
Ethylhexyl nitrate (27247-96-7)	
BCF - Fish [1]	1332 l/kg (OECD 305: Bioconcentration: Flow-Through Fish Test, Pisces, QSAR)
Partition coefficient n-octanol/water (Log Pow)	5.24 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 40 °C)
Bioaccumulative potential	High potential for bioaccumulation (Log Kow > 5).
Aromatic Hydrocarbons (64742-95-6)	
Partition coefficient n-octanol/water (Log Pow)	2.1 – 6
1,2,4 Tri-Methyl Benzene (95-63-6)	
BCF - Fish [1]	243
Partition coefficient n-octanol/water (Log Pow)	3.63
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
Mesitylene (108-67-8)	
BCF - Fish [1]	161 (Pimephales promelas, QSAR)
Partition coefficient n-octanol/water (Log Pow)	3.42 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
1,2,3-Trimethylbenzene (526-73-8)	
BCF - Fish [1]	133 – 259 (Cyprinus carpio, Literature study)
Partition coefficient n-octanol/water (Log Pow)	3.66 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
Xylene (1330-20-7)	
Partition coefficient n-octanol/water (Log Pow)	3.15 Source: HSDB
Cumene (98-82-8)	
BCF - Other aquatic organisms [1]	94.69 l/kg (BCFBAF v3.00, Calculated value)
Partition coefficient n-octanol/water (Log Pow)	3.55 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 23 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

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12.4. Mobility in soil

Ethylhexyl nitrate (27247-96-7)	
Surface tension	No data available in the literature
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.75 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value)
Ecology - soil	Low potential for mobility in soil.
1,2,4 Tri-Methyl Benzene (95-63-6)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.04
Ecology - soil	Low potential for mobility in soil. May be harmful to plant growth, blooming and fruit formation.
Mesitylene (108-67-8)	
Surface tension	27550 mN/m (25 °C, 100 vol %)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.87 (log Koc, Calculated value)
Ecology - soil	Low potential for adsorption in soil. May be harmful to plant growth, blooming and fruit formation.
1,2,3-Trimethylbenzene (526-73-8)	
Mobility in soil	630 Source: National Library of Medicine/Hazardous Substances Data Bank
Ecology - soil	Adsorbs into the soil.
Cumene (98-82-8)	
Surface tension	28.2 mN/m (20 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.946 (log Koc, Calculated value)
Ecology - soil	Low potential for adsorption in soil.

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information




In accordance with DOT / TDG / IMDG / IATA

DOT	TDG	IMDG	IATA
14.1. UN number			
Not applicable	UN1993	1993	1993
14.2. Proper Shipping Name			
Diesel fuel	FLAMMABLE LIQUID, N.O.S.	FLAMMABLE LIQUID, N.O.S.	Flammable liquid, n.o.s.

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DOT	TDG	IMDG	IATA
Transport document description			
NA1993 Diesel fuel, 3, III	UN1993 FLAMMABLE LIQUID, N.O.S., 3, III	UN 1993 FLAMMABLE LIQUID, N.O.S., 3, III	UN 1993 Flammable liquid, n.o.s., 3, III
14.3. Transport hazard class(es)			
3	3	3	3
Not applicable			
14.4. Packing group			
III	III	III	III
14.5. Environmental hazards			
Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No
No supplementary information available			

14.6. Special precautions for user

DOT

- UN-No.(DOT) : NA1993
- DOT Special Provisions (49 CFR 172.102) :
- 144 - If transported as a residue in an underground storage tank (UST), as defined in 40 CFR 280.12, that has been cleaned and purged or rendered inert according to the American Petroleum Institute (API) Standard 1604 (IBR, see 171.7 of this subchapter), then the tank and this material are not subject to any other requirements of this subchapter. However, sediments remaining in the tank that meet the definition for a hazardous material are subject to the applicable regulations of this subchapter.
 - B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this subchapter are applicable.
 - IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).
 - T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3)
 - TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / (1 + a (tr - tf))$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.
 - TP29 - A portable tank having a minimum test pressure of 1.5 bar (150.0 kPa) may be used provided the calculated test pressure is 1.5 bar or less based on the MAWP of the hazardous materials, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.
- DOT Packaging Exceptions (49 CFR 173.xxx) : 150
- DOT Packaging Non Bulk (49 CFR 173.xxx) : 203
- DOT Packaging Bulk (49 CFR 173.xxx) : 242
- DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 60 L
- DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 220 L

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DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

TDG

UN-No. (TDG) : UN1993

TDG Special Provisions : 16 - (1) The technical name of at least one of the most dangerous substances that predominantly contributes to the hazard or hazards posed by the dangerous goods must be shown, in parentheses, on the shipping document following the shipping name in accordance with clause 3.5(1)(c)(ii)(A) of Part 3 (Documentation). The technical name must also be shown, in parentheses, on a small means of containment or on a tag following the shipping name in accordance with subsections 4.11(2) and (3) of Part 4 (Dangerous Goods Safety Marks).
(2) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a shipping document or on a small means of containment when Canadian law for domestic transport or an international convention for international transport prohibits the disclosure of the technical name:
(a) UN1544, ALKALOID SALTS, SOLID, N.O.S. or ALKALOIDS, SOLID, N.O.S.;
(b) UN1851, MEDICINE, LIQUID, TOXIC, N.O.S.;
(c) UN3140, ALKALOID SALTS, LIQUID, N.O.S. or ALKALOIDS, LIQUID, N.O.S.;
(d) UN3248, MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S; or
(e) UN3249, MEDICINE, SOLID, TOXIC, N.O.S.
(3) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a small means of containment:
(a) UN2814, INFECTIOUS SUBSTANCE, AFFECTING HUMANS; or
(b) UN2900, INFECTIOUS SUBSTANCE, AFFECTING ANIMALS, 150 - An approved ERAP is required for the dangerous goods referred to in paragraph 7.2(1)(f) of Part 7 (Emergency Response Assistance Plan). SOR-2019-101

Explosive Limit and Limited Quantity Index : 5 L

Excepted quantities (TDG) : E1

Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index : 60 L

IMDG

Special provisions (IMDG) : 223, 274, 955

Limited quantities (IMDG) : 5 L

Excepted quantities (IMDG) : E1

Packing instructions (IMDG) : LP01, P001

IBC packing instructions (IMDG) : IBC03

Tank instructions (IMDG) : T4

Tank special provisions (IMDG) : TP1, TP29

EmS-No. (Fire) : F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS

EmS-No. (Spillage) : S-E - SPILLAGE SCHEDULE Echo - FLAMMABLE LIQUIDS, FLOATING ON WATER

Stowage category (IMDG) : A

IATA

PCA Excepted quantities (IATA) : E1

PCA Limited quantities (IATA) : Y344

PCA limited quantity max net quantity (IATA) : 10L

PCA packing instructions (IATA) : 355

PCA max net quantity (IATA) : 60L

CAO packing instructions (IATA) : 366

CAO max net quantity (IATA) : 220L

Special provisions (IATA) : A3

ERG code (IATA) : 3L

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

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SECTION 15: Regulatory information

15.1. US Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
Diesel	68476-34-6	Present	Active	
Ethylhexyl nitrate	27247-96-7	Present	Active	
Aromatic Hydrocarbons	64742-95-6	Present	Active	
1,2,4 Tri-Methyl Benzene	95-63-6	Present	Active	
Mesitylene	108-67-8	Present	Active	
1,2,3-Trimethylbenzene	526-73-8	Present	Active	
Xylene	1330-20-7	Present	Active	
Cumene	98-82-8	Present	Active	

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

Xylene (1330-20-7)

Listed on EPA Hazardous Air Pollutant (HAPS)

CERCLA RQ	100 lb
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Cumene (98-82-8)

Listed on EPA Hazardous Air Pollutant (HAPS)

CERCLA RQ	5000 lb
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15.2. International regulations

CANADA

Diesel (68476-34-6)

Listed on the Canadian DSL (Domestic Substances List)

Ethylhexyl nitrate (27247-96-7)

Listed on the Canadian DSL (Domestic Substances List)

Aromatic Hydrocarbons (64742-95-6)

Listed on the Canadian DSL (Domestic Substances List)

1,2,4 Tri-Methyl Benzene (95-63-6)

Listed on the Canadian DSL (Domestic Substances List)

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Mesitylene (108-67-8)

Listed on the Canadian DSL (Domestic Substances List)

1,2,3-Trimethylbenzene (526-73-8)

Listed on the Canadian DSL (Domestic Substances List)

Xylene (1330-20-7)

Listed on the Canadian DSL (Domestic Substances List)

Cumene (98-82-8)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

Diesel (68476-34-6)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Aromatic Hydrocarbons (64742-95-6)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

1,2,4 Tri-Methyl Benzene (95-63-6)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Mesitylene (108-67-8)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Xylene (1330-20-7)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Cumene (98-82-8)

Listed on IARC (International Agency for Research on Cancer)
Listed as carcinogen on NTP (National Toxicology Program)
Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. US State regulations



WARNING:

This product can expose you to Cumene, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Component	State or local regulations
1,2,4 Tri-Methyl Benzene(95-63-6)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New York City - Right to Know Hazardous Substances List; U.S. - Pennsylvania - RTK (Right to Know) List

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Component	State or local regulations
Mesitylene(108-67-8)	U.S. - New York City - Right to Know Hazardous Substances List
Xylene(1330-20-7)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New York City - Right to Know Hazardous Substances List; U.S. - Pennsylvania - RTK (Right to Know) List
Cumene(98-82-8)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New York City - Right to Know Hazardous Substances List; U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

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Revision date : 09/12/2022

Full text of H-statements	
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H227	Combustible liquid
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H340	May cause genetic defects.
H350	May cause cancer.
H351	Suspected of causing cancer.

NFPA health hazard

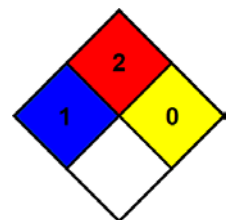
: 1 - Materials that, under emergency conditions, can cause significant irritation.

NFPA fire hazard

: 2 - Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur.

NFPA reactivity

: 0 - Material that in themselves are normally stable, even under fire conditions.



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