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Safety Data Sheet

SECTION 1: Identification

1.1. Identification

| | |
|---------------|---|
| Product form | : Substance |
| Trade name | : DFA23 & DFB23 (TMC Reference Fluid DFLUB) |
| Chemical name | : Diesel |
| CAS-No. | : 68476-34-6 |
| Product code | : DFA23 & DFB23 |

1.2. Recommended use and restrictions on use

| | |
|------------------------------|-----------------------------------|
| Use of the substance/mixture | : Research fuel for bench testing |
|------------------------------|-----------------------------------|

1.3. Supplier

Distributed by: Test Monitoring Center
203 Armstrong Dr.
Freeport, PA 16229
USA

1.4. Emergency telephone number

Email address for further information: GHS-sds@astmtmc.org
USA emergency telephone number: 1-800-424-9300 Ext. 3905, International emergency telephone number: +1 202-366-4488
CHEMTREC Customer Number 1004806

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

| | | |
|--|------|---|
| Flammable liquids Category 3 | H226 | Flammable liquid and vapor |
| Skin corrosion/irritation Category 2 | H315 | Causes skin irritation |
| Serious eye damage/eye irritation Category 2 | H319 | Causes serious eye irritation |
| Germ cell mutagenicity Category 1B | H340 | May cause genetic defects |
| Carcinogenicity Category 2 | H351 | Suspected of causing cancer |
| Reproductive toxicity Category 2 | H361 | Suspected of damaging fertility or the unborn child |
| Specific target organ toxicity (single exposure) Category 3 | H336 | May cause drowsiness or dizziness |
| Specific target organ toxicity (single exposure) Category 3 | H335 | May cause respiratory irritation |
| Specific target organ toxicity (repeated exposure) Category 2 | H373 | May cause damage to organs through prolonged or repeated exposure |
| Aspiration hazard Category 1 | H304 | May be fatal if swallowed and enters airways |
| Hazardous to the aquatic environment- Acute Hazard Category 2 | H401 | Toxic to aquatic life |
| Hazardous to the aquatic environment - Chronic Hazard Category 2 | H411 | Toxic to aquatic life with long lasting effects |

Full text of H statements : see section 16



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2.2. GHS Label elements, including precautionary statements

GHS-US labeling

Hazard pictograms (GHS-US)



Signal word (GHS-US)

: Danger

Hazard statements (GHS-US)

: H226 - Flammable liquid and vapor
H304 - May be fatal if swallowed and enters airways
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation
H336 - May cause drowsiness or dizziness
H340 - May cause genetic defects
H351 - Suspected of causing cancer
H361 - Suspected of damaging fertility or the unborn child
H373 - May cause damage to organs through prolonged or repeated exposure
H401 - Toxic to aquatic life
H411 - Toxic to aquatic life with long lasting effects

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/sparks/open flames/hot surfaces. - No smoking.
P233 - Keep container tightly closed.
P240 - Ground/Bond container and receiving equipment
P241 - Use explosion-proof electrical/ventilating/lighting equipment
P242 - Use only non-sparking tools.
P243 - Take precautionary measures against static discharge.
P260 - Do not breathe dust/fume/gas/mist/vapors/spray.
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 - Wash hands, forearms and face thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310 - If swallowed: Immediately call a doctor, a POISON CENTER
P302+P352 - If on skin: Wash with plenty of soap and water
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
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 doctor, a POISON CENTER if you feel unwell
P314 - Get medical advice/attention if you feel unwell.
P321 - 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 alcohol resistant foam, carbon dioxide (CO₂), dry extinguishing powder to extinguish.
P391 - Collect spillage.
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



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2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Chemical name : Diesel
CAS-No. : 68476-34-6

| Name | Product identifier | % |
|--|----------------------|---------|
| Diesel | (CAS-No.) 68476-34-6 | 100 |
| Petroleum Distillates | (CAS-No.) 8002-05-9 | 70 - 80 |
| Petroleum distillates, hydrotreated light | (CAS-No.) 64742-47-8 | 5- 15 |
| Solvent naphtha (petroleum), heavy arom.; Kerosine - unspecified, [A complex combination of hydrocarbons obtained from distillation of aromatic streams. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approximately 165 °C to 290 °C (330 °F to 554 °F).] | (CAS-No.) 64742-94-5 | 5- 15 |
| Distillates, petroleum, hydrotreated middle | (CAS-No.) 64742-46-7 | 0- 10 |
| Solvent naphtha, petroleum, light aromatic | (CAS-No.) 64742-95-6 | 0- 5 |
| xylene | (CAS-No.) 1330-20-7 | 0- 4 |
| naphthalene | (CAS-No.) 91-20-3 | 0- 3 |
| n-hexane | (CAS-No.) 110-54-3 | 0- 2 |
| n-Heptane | (CAS-No.) 142-82-5 | 0- 2 |
| Octane | (CAS-No.) 111-65-9 | 0- 2 |
| Trimethylbenzenes | (CAS-No.) 25551-13-7 | 0- 2 |
| 1,2,4-trimethylbenzene | (CAS-No.) 95-63-6 | 0- 2 |
| 1,3,5-Trimethylbenzene | (CAS-No.) 108-67-8 | 0- 2 |
| Cumene | (CAS-No.) 98-82-8 | 0- 2 |

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

3.2. Mixtures

Not applicable

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. Call a poison center/doctor/physician if you feel unwell.
 First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. If skin irritation occurs: Get medical advice/attention.
 First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
 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 : May cause drowsiness or dizziness.
 Symptoms/effects after inhalation : May cause respiratory irritation.
 Symptoms/effects after skin contact : Irritation.
 Symptoms/effects after eye contact : Eye irritation.
 Symptoms/effects after ingestion : Risk of lung edema.

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.

5.2. Specific hazards arising from the chemical

Fire hazard : Flammable liquid and vapor.
 Reactivity : Flammable liquid and vapor.



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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.

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. Do not breathe dust/fume/gas/mist/vapors/spray.

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

For containment : Collect spillage.

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. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. 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 breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes.

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

Technical measures : Ground/bond container and receiving equipment.

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| Diesel (68476-34-6) | | |
|-----------------------------------|--|--|
| ACGIH | Local name | Diesel fuel as total |
| ACGIH | ACGIH TWA (mg/m ³) | 100 mg/m ³ (inhalable fraction and vapor) |
| ACGIH | Regulatory reference | ACGIH 2018 |
| Petroleum Distillates (8002-05-9) | | |
| OSHA | OSHA PEL (TWA) (ppm) | 500 ppm |
| IDLH | US IDLH (ppm) | 1100 ppm (10% LEL) |
| NIOSH | NIOSH REL (TWA) (mg/m ³) | 350 mg/m ³ |
| NIOSH | NIOSH REL (ceiling) (mg/m ³) | 1800 mg/m ³ |



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| Petroleum distillates, hydrotreated light (64742-47-8) | | |
|--|--|---|
| OSHA | OSHA PEL (TWA) (ppm) | 500 ppm |
| Distillates, petroleum, hydrotreated middle (64742-46-7) | | |
| OSHA | OSHA PEL (TWA) (ppm) | 500 ppm |
| n-hexane (110-54-3) | | |
| ACGIH | Local name | n-Hexane |
| ACGIH | ACGIH TWA (ppm) | 50 ppm |
| ACGIH | Remark (ACGIH) | CNS impair; peripheral neuropathy; eye irr; Skin; BEI |
| ACGIH | Regulatory reference | ACGIH 2018 |
| OSHA | OSHA PEL (TWA) (mg/m ³) | 1800 mg/m ³ |
| OSHA | OSHA PEL (TWA) (ppm) | 500 ppm |
| OSHA | Regulatory reference (US-OSHA) | OSHA |
| IDLH | US IDLH (ppm) | 1100 ppm (10% LEL) |
| NIOSH | NIOSH REL (TWA) (mg/m ³) | 180 mg/m ³ |
| NIOSH | NIOSH REL (TWA) (ppm) | 50 ppm |
| n-Heptane (142-82-5) | | |
| ACGIH | Local name | Heptane, all isomers |
| ACGIH | ACGIH TWA (ppm) | 400 ppm |
| ACGIH | ACGIH STEL (ppm) | 500 ppm |
| ACGIH | Regulatory reference | ACGIH 2018 |
| OSHA | OSHA PEL (TWA) (mg/m ³) | 2000 mg/m ³ |
| OSHA | OSHA PEL (TWA) (ppm) | 500 ppm |
| OSHA | Regulatory reference (US-OSHA) | OSHA |
| IDLH | US IDLH (ppm) | 750 ppm |
| NIOSH | NIOSH REL (TWA) (mg/m ³) | 350 mg/m ³ |
| NIOSH | NIOSH REL (TWA) (ppm) | 85 ppm |
| NIOSH | NIOSH REL (ceiling) (mg/m ³) | 1800 mg/m ³ |
| NIOSH | NIOSH REL (ceiling) (ppm) | 440 ppm |
| Octane (111-65-9) | | |
| ACGIH | Local name | Octane |
| ACGIH | ACGIH TWA (ppm) | 300 ppm |
| ACGIH | Remark (ACGIH) | URT irr |
| ACGIH | Regulatory reference | ACGIH 2018 |
| OSHA | OSHA PEL (TWA) (mg/m ³) | 2350 mg/m ³ |
| OSHA | OSHA PEL (TWA) (ppm) | 500 ppm |
| OSHA | Regulatory reference (US-OSHA) | OSHA |
| IDLH | US IDLH (ppm) | 1000 ppm (10% LEL) |
| NIOSH | NIOSH REL (TWA) (mg/m ³) | 350 mg/m ³ |
| NIOSH | NIOSH REL (TWA) (ppm) | 75 ppm |
| NIOSH | NIOSH REL (ceiling) (mg/m ³) | 1800 mg/m ³ |
| NIOSH | NIOSH REL (ceiling) (ppm) | 385 ppm |
| Solvent naphtha (petroleum), heavy arom.; Kerosine - unspecified, [A complex combination of hydrocarbons obtained from distillation of aromatic streams. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approximately 165 °C to 290 °C (330 °F to 554 °F).] (64742-94-5) | | |
| OSHA | OSHA PEL (TWA) (ppm) | 500 ppm |



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| Solvent naphtha, petroleum, light aromatic (64742-95-6) | | |
|--|--------------------------------------|-------------------------------------|
| OSHA | OSHA PEL (TWA) (ppm) | 500 ppm |
| xylene (1330-20-7) | | |
| ACGIH | Local name | Xylene |
| ACGIH | ACGIH TWA (ppm) | 100 ppm |
| ACGIH | ACGIH STEL (ppm) | 150 ppm |
| ACGIH | Remark (ACGIH) | URT & eye irr; CNS impair |
| ACGIH | Regulatory reference | ACGIH 2018 |
| OSHA | OSHA PEL (TWA) (mg/m ³) | 435 mg/m ³ |
| OSHA | OSHA PEL (TWA) (ppm) | 100 ppm |
| OSHA | Regulatory reference (US-OSHA) | OSHA |
| Trimethylbenzenes (25551-13-7) | | |
| ACGIH | Local name | Trimethyl benzene (mixed isomers) |
| ACGIH | ACGIH TWA (ppm) | 25 ppm |
| ACGIH | Remark (ACGIH) | CNS impair; asthma; hematologic eff |
| ACGIH | Regulatory reference | ACGIH 2018 |
| 1,2,4-trimethylbenzene (95-63-6) | | |
| ACGIH | ACGIH TWA (ppm) | 25 ppm |
| NIOSH | NIOSH REL (TWA) (mg/m ³) | 125 mg/m ³ |
| NIOSH | NIOSH REL (TWA) (ppm) | 25 ppm |
| 1,3,5-Trimethylbenzene (108-67-8) | | |
| ACGIH | ACGIH TWA (ppm) | 25 ppm |
| NIOSH | NIOSH REL (TWA) (mg/m ³) | 125 mg/m ³ |
| NIOSH | NIOSH REL (TWA) (ppm) | 25 ppm |
| Cumene (98-82-8) | | |
| ACGIH | Local name | Cumene |
| ACGIH | ACGIH TWA (ppm) | 50 ppm |
| ACGIH | Remark (ACGIH) | Eye, skin, & URT irr; CNS impair |
| ACGIH | Regulatory reference | ACGIH 2018 |
| OSHA | OSHA PEL (TWA) (mg/m ³) | 245 mg/m ³ |
| OSHA | OSHA PEL (TWA) (ppm) | 50 ppm |
| OSHA | Limit value category (OSHA) | prevent or reduce skin absorption |
| OSHA | Regulatory reference (US-OSHA) | OSHA |
| IDLH | US IDLH (ppm) | 900 ppm (10% LEL) |
| NIOSH | NIOSH REL (TWA) (mg/m ³) | 245 mg/m ³ |
| NIOSH | NIOSH REL (TWA) (ppm) | 50 ppm |
| NIOSH | US-NIOSH chemical category | Potential for dermal absorption |
| naphthalene (91-20-3) | | |
| ACGIH | Local name | Naphthalene |
| ACGIH | ACGIH TWA (ppm) | 10 ppm |



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| naphthalene (91-20-3) | | |
|-----------------------|---------------------------------------|---|
| ACGIH | Remark (ACGIH) | Hematologic eff; URT & eye irr; Skin; A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans: The agent is carcinogenic in experimental animals at a relatively high dose, by route(s) of administration, at site(s), of histologic type(s), or by mechanism(s) that may not be relevant to worker exposure. Available epidemiologic studies do not confirm an increased risk of cancer in exposed humans. Available evidence does not suggest that the agent is likely to cause cancer in humans except under uncommon or unlikely routes or levels of exposure) |
| ACGIH | Regulatory reference | ACGIH 2018 |
| OSHA | OSHA PEL (TWA) (mg/m ³) | 50 mg/m ³ |
| OSHA | OSHA PEL (TWA) (ppm) | 10 ppm |
| OSHA | Regulatory reference (US-OSHA) | OSHA |
| IDLH | US IDLH (ppm) | 250 ppm |
| NIOSH | NIOSH REL (TWA) (mg/m ³) | 50 mg/m ³ |
| NIOSH | NIOSH REL (TWA) (ppm) | 10 ppm |
| NIOSH | NIOSH REL (STEL) (mg/m ³) | 75 mg/m ³ |
| NIOSH | NIOSH REL (STEL) (ppm) | 15 ppm |

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:

Wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
 Appearance : Liquid.
 Color : Pale yellow to brown if undyed, red or purple if dyed
 Odor : mild
 Odor threshold : No data available
 pH : No data available
 Melting point : Not applicable
 Freezing point : No data available
 Boiling point : 140 - 350 °C
 Flash point : > 60 °C closed cup
 Relative evaporation rate (butyl acetate=1) : No data available
 Flammability (solid, gas) : Not applicable.
 Vapor pressure : No data available



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| | |
|---------------------------------|---------------------|
| Relative vapor density at 20 °C | : No data available |
| Relative density | : 32 - 51 °API |
| Solubility | : No data available |
| Log Pow | : No data available |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |
| Explosion limits | : No data available |
| Explosive properties | : No data available |
| Oxidizing properties | : No data available |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable liquid and vapor.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

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 : Inhalation:dust,mist: Not classified.

| Diesel (68476-34-6) | |
|--|------------------------|
| LD50 oral rat | > 5000 mg/kg |
| LD50 dermal rabbit | > 2000 mg/kg |
| LC50 inhalation rat (mg/l) | 1 - 5 mg/l/4h |
| ATE US (vapors) | 1 mg/l/4h |
| ATE US (dust, mist) | 1 mg/l/4h |
| Petroleum Distillates (8002-05-9) | |
| LD50 oral rat | > 5000 mg/kg |
| LD50 dermal rabbit | > 2000 mg/kg |
| Petroleum distillates, hydrotreated light (64742-47-8) | |
| LD50 oral rat | > 5000 mg/kg |
| LD50 dermal rabbit | > 2000 mg/kg |
| LC50 inhalation rat (mg/l) | > 5.2 mg/l/4h |
| Distillates, petroleum, hydrotreated middle (64742-46-7) | |
| LD50 oral rat | 7400 mg/kg |
| LD50 dermal rabbit | > 2000 mg/kg |
| LC50 inhalation rat (mg/l) | 4.6 mg/l/4h |
| ATE US (oral) | 7400 mg/kg body weight |
| ATE US (vapors) | 4.6 mg/l/4h |
| ATE US (dust, mist) | 4.6 mg/l/4h |



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| n-hexane (110-54-3) | |
|--|---|
| LD50 oral rat | 25 g/kg |
| LD50 dermal rabbit | 3000 mg/kg |
| LC50 inhalation rat (ppm) | 48000 ppm/4h |
| ATE US (oral) | 25000 mg/kg body weight |
| ATE US (dermal) | 3000 mg/kg body weight |
| ATE US (gases) | 48000 ppmV/4h |
| n-Heptane (142-82-5) | |
| LD50 oral rat | > 5000 mg/kg |
| LD50 dermal rabbit | 3000 mg/kg |
| LC50 inhalation rat (mg/l) | 103 g/m ³ (Exposure time: 4 h) |
| ATE US (dermal) | 3000 mg/kg body weight |
| ATE US (vapors) | 103 mg/l/4h |
| ATE US (dust, mist) | 103 mg/l/4h |
| Octane (111-65-9) | |
| LC50 inhalation rat (mg/l) | > 23.36 mg/l/4h |
| Solvent naphtha (petroleum), heavy arom.; Kerosine - unspecified, [A complex combination of hydrocarbons obtained from distillation of aromatic streams. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approximately 165 °C to 290 °C (330 °F to 554 °F).] (64742-94-5) | |
| LD50 oral rat | > 5000 mg/kg |
| LD50 dermal rabbit | > 3160 mg/kg |
| LC50 inhalation rat (mg/l) | > 5.2 mg/l (Exposure time: 4 h) |
| Solvent naphtha, petroleum, light aromatic (64742-95-6) | |
| LD50 oral rat | 8400 mg/kg |
| LD50 dermal rabbit | > 2000 mg/kg |
| LC50 inhalation rat (ppm) | 3400 ppm/4h |
| ATE US (oral) | 8400 mg/kg body weight |
| ATE US (gases) | 3400 ppmV/4h |
| xylene (1330-20-7) | |
| LD50 oral rat | 3500 mg/kg |
| LD50 dermal rabbit | > 4350 mg/kg |
| LC50 inhalation rat (mg/l) | 29.08 mg/l/4h |
| ATE US (oral) | 3500 mg/kg body weight |
| ATE US (dermal) | 1100 mg/kg body weight |
| ATE US (vapors) | 29.08 mg/l/4h |
| ATE US (dust, mist) | 1.5 mg/l/4h |
| Trimethylbenzenes (25551-13-7) | |
| LD50 oral rat | 8970 mg/kg |
| ATE US (oral) | 8970 mg/kg body weight |
| 1,2,4-trimethylbenzene (95-63-6) | |
| LD50 oral rat | 3280 mg/kg |
| LD50 dermal rat | 3440 mg/kg (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male/female, Read-across) |
| LD50 dermal rabbit | > 3160 mg/kg |
| LC50 inhalation rat (mg/l) | 18 g/m ³ (Exposure time: 4 h) |
| ATE US (oral) | 3280 mg/kg body weight |
| ATE US (dermal) | 3440 mg/kg body weight |
| ATE US (gases) | 4500 ppmV/4h |
| ATE US (vapors) | 18 mg/l/4h |
| ATE US (dust, mist) | 1.5 mg/l/4h |
| 1,3,5-Trimethylbenzene (108-67-8) | |
| LC50 inhalation rat (mg/l) | 24 g/m ³ (Exposure time: 4 h) |
| ATE US (vapors) | 24 mg/l/4h |
| ATE US (dust, mist) | 24 mg/l/4h |



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| Cumene (98-82-8) | |
|------------------------------|---|
| LD50 oral rat | 2910 mg/kg body weight |
| LD50 dermal rabbit | 12300 µl/kg |
| LC50 inhalation rat (mg/l) | 40 mg/l (Other, 4 h, Rat, Literature study) |
| ATE US (oral) | 2910 mg/kg body weight |
| ATE US (vapors) | 40 mg/l/4h |
| ATE US (dust, mist) | 40 mg/l/4h |
| naphthalene (91-20-3) | |
| LD50 dermal rat | > 2500 mg/kg (Rat) |
| LD50 dermal rabbit | > 2000 mg/kg body weight |
| LC50 inhalation rat (mg/l) | > 0.34 mg/l (Exposure time: 1 h) |
| ATE US (oral) | 533 mg/kg body weight |

Skin corrosion/irritation : Causes skin irritation.
 Serious eye damage/irritation : Causes serious eye irritation.
 Respiratory or skin sensitization : Not classified
 Germ cell mutagenicity : May cause genetic defects.
 Carcinogenicity : Suspected of causing cancer.

| Petroleum Distillates (8002-05-9) | |
|--|----------------------|
| IARC group | 3 - Not classifiable |

| xylene (1330-20-7) | |
|---------------------------|----------------------|
| IARC group | 3 - Not classifiable |

| Cumene (98-82-8) | |
|--|--|
| IARC group | 2B - Possibly carcinogenic to humans |
| National Toxicology Program (NTP) Status | Evidence of Carcinogenicity, Reasonably anticipated to be Human Carcinogen |
| In OSHA Hazard Communication Carcinogen list | Yes |
| naphthalene (91-20-3) | |
| National Toxicology Program (NTP) Status | Evidence of Carcinogenicity, Reasonably anticipated to be Human Carcinogen |
| In OSHA Hazard Communication Carcinogen list | Yes |

Reproductive toxicity : Suspected of damaging fertility or the unborn child.
 Specific target organ toxicity – single exposure : May cause drowsiness or dizziness. May cause respiratory irritation.

Specific target organ toxicity – repeated exposure : May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : May be fatal if swallowed and enters airways.
 Symptoms/effects : May cause drowsiness or dizziness.
 Symptoms/effects after inhalation : May cause respiratory irritation.
 Symptoms/effects after skin contact : Irritation.
 Symptoms/effects after eye contact : Eye irritation.
 Symptoms/effects after ingestion : Risk of lung edema.



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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general

: Toxic to aquatic life with long lasting effects. Toxic to aquatic life.



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| | |
|--|--|
| Diesel (68476-34-6) | |
| LC50 fish 1 | 35 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through]) |
| EC50 Daphnia 1 | 6.4 mg/l 48 hr |
| Petroleum Distillates (8002-05-9) | |
| LC50 fish 1 | 3 mg/l (Exposure time: 96 h - Species: Oncorhynchus Mykiss |
| EC50 Daphnia 1 | < 0.26 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static]) |
| Petroleum distillates, hydrotreated light (64742-47-8) | |
| LC50 fish 1 | 45 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through]) |
| LC50 fish 2 | 2.2 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static]) |
| Distillates, petroleum, hydrotreated middle (64742-46-7) | |
| LC50 fish 1 | 35 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through]) |
| LC50 fish 2 | > 10000 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static]) |
| n-Heptane (142-82-5) | |
| LC50 fish 1 | 375 mg/l (Exposure time: 96 h - Species: Cichlid fish) |
| EC50 Daphnia 1 | > 10 mg/l 24hr |
| LC50 fish 2 | 0.1 mg/l (Exposure time: 96 h - Species: Mysidopsis Bahia) |
| Octane (111-65-9) | |
| EC50 Daphnia 1 | 0.38 mg/l (Exposure time: 48 h - Species: water flea) |
| Solvent naphtha (petroleum), heavy arom.; Kerosine - unspecified, [A complex combination of hydrocarbons obtained from distillation of aromatic streams. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approximately 165 °C to 290 °C (330 °F to 554 °F).] (64742-94-5) | |
| LC50 fish 1 | 19 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static]) |
| EC50 Daphnia 1 | 0.95 mg/l (Exposure time: 48 h - Species: Daphnia magna) |
| LC50 fish 2 | 2.34 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss) |
| Solvent naphtha, petroleum, light aromatic (64742-95-6) | |
| LC50 fish 1 | 9.22 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss) |
| EC50 Daphnia 1 | 6.14 mg/l (Exposure time: 48 h - Species: Daphnia magna) |
| xylene (1330-20-7) | |
| LC50 fish 1 | 13.4 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through]) |
| EC50 Daphnia 1 | 3.82 mg/l (Exposure time: 48 h - Species: water flea) |
| LC50 fish 2 | 2.661 - 4.093 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static]) |
| EC50 Daphnia 2 | 0.6 mg/l (Exposure time: 48 h - Species: Gammarus lacustris) |
| Trimethylbenzenes (25551-13-7) | |
| LC50 fish 1 | 7.72 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through]) |
| 1,2,4-trimethylbenzene (95-63-6) | |
| LC50 fish 1 | 7.19 - 8.28 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through]) |
| 1,3,5-Trimethylbenzene (108-67-8) | |
| LC50 fish 1 | 3.48 mg/l (Exposure time: 96 h - Species: Pimephales promelas) |
| Cumene (98-82-8) | |
| LC50 fish 1 | 6.04 - 6.61 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through]) |
| EC50 Daphnia 1 | 0.6 mg/l (Exposure time: 48 h - Species: Daphnia magna) |
| LC50 fish 2 | 4.8 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through]) |
| EC50 Daphnia 2 | 7.9 - 14.1 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static]) |
| naphthalene (91-20-3) | |
| LC50 fish 1 | 5.74 - 6.44 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through]) |
| EC50 Daphnia 1 | 2.16 mg/l (Exposure time: 48 h - Species: Daphnia magna) |
| EC50 Daphnia 2 | 1.96 mg/l (Exposure time: 48 h - Species: Daphnia magna [Flow through]) |

12.2. Persistence and degradability

| | |
|-------------------------------|--|
| n-hexane (110-54-3) | |
| Persistence and degradability | Biodegradable in the soil. Readily biodegradable in water. |
| ThOD | 3.52 g O:dg substance |



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| | |
|--|--|
| 1,2,4-trimethylbenzene (95-63-6) | |
| Persistence and degradability | Biodegradable in the soil. Not readily biodegradable in water. |
| Chemical oxygen demand (COD) | 0.44 g O ₂ /g substance |
| 1,3,5-Trimethylbenzene (108-67-8) | |
| Persistence and degradability | May cause long-term adverse effects in the environment. |
| Cumene (98-82-8) | |
| Persistence and degradability | Biodegradable in the soil. Inherently biodegradable. 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 |
| BOD (% of ThOD) | 0.4 |
| naphthalene (91-20-3) | |
| Persistence and degradability | Not established. |
| Biochemical oxygen demand (BOD) | 0 g O ₂ /g substance |
| Chemical oxygen demand (COD) | 0.22 g O ₂ /g substance |
| ThOD | 2.99 g O ₂ /g substance |

12.3. Bioaccumulative potential

| | |
|--|--|
| Petroleum distillates, hydrotreated light (64742-47-8) | |
| BCF fish 1 | 61 - 159 |
| n-hexane (110-54-3) | |
| BCF fish 1 | 501.187 (Other, Pimephales promelas, QSAR) |
| Log Pow | 4 (Experimental value, Equivalent or similar to OECD 107, 20 °C) |
| Bioaccumulative potential | Potential for bioaccumulation (500 ≤ BCF ≤ 5000). |
| n-Heptane (142-82-5) | |
| Log Pow | 4.66 |
| Octane (111-65-9) | |
| Log Pow | 5.18 |
| Solvent naphtha (petroleum), heavy arom.; Kerosine - unspecified, [A complex combination of hydrocarbons obtained from distillation of aromatic streams. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approximately 165 °C to 290 °C (330 °F to 554 °F).] (64742-94-5) | |
| BCF fish 1 | 61 - 159 |
| Log Pow | 2.9 - 6.1 |
| xylene (1330-20-7) | |
| BCF fish 1 | 0.6 - 15 |
| Log Pow | 2.77 - 3.15 |
| 1,2,4-trimethylbenzene (95-63-6) | |
| BCF fish 1 | 31 - 275 (Other, 8 week(s), Cyprinus carpio, Weight of evidence) |
| Log Pow | 3.63 |
| Bioaccumulative potential | Low potential for bioaccumulation (BCF < 500). |
| 1,3,5-Trimethylbenzene (108-67-8) | |
| Bioaccumulative potential | Not established. |
| Cumene (98-82-8) | |
| BCF fish 1 | 35.5 |
| BCF other aquatic organisms 1 | 94.69 (BCFBAF v3.00, Calculated value) |
| Log Pow | 3.7 |
| Bioaccumulative potential | Low potential for bioaccumulation (BCF < 500). |



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| naphthalene (91-20-3) | |
|---------------------------|------------------|
| BCF fish 1 | 30 - 430 |
| Log Pow | 3.6 |
| Bioaccumulative potential | Not established. |

12.4. Mobility in soil

| n-hexane (110-54-3) | |
|---------------------|-------------------------------------|
| Surface tension | 0.018 N/m (25 °C, 1 g/l) |
| Log Koc | 3.34 (log Koc, QSAR) |
| Ecology - soil | Low potential for mobility in soil. |

| 1,2,4-trimethylbenzene (95-63-6) | |
|----------------------------------|---|
| Surface tension | 0.029 N/m |
| Log Koc | 3.04 (log Koc, Calculated value) |
| Ecology - soil | Low potential for mobility in soil. May be harmful to plant growth, blooming and fruit formation. |

| Cumene (98-82-8) | |
|------------------|---------------------------------------|
| Log Koc | 2.946 (log Koc, Calculated value) |
| Ecology - soil | Low potential for adsorption in soil. |

| naphthalene (91-20-3) | |
|-----------------------|------------------------|
| Surface tension | 0.03 N/m (100 °C) |
| Ecology - soil | Adsorbs into the soil. |

12.5. Other adverse effects

| n-hexane (110-54-3) | |
|--|-----|
| 1990 Hazardous Air Pollutant (Clean Air Act) | Yes |

| xylene (1330-20-7) | |
|--|-----|
| 1990 Hazardous Air Pollutant (Clean Air Act) | Yes |

| Cumene (98-82-8) | |
|--|-----|
| 1990 Hazardous Air Pollutant (Clean Air Act) | Yes |

| naphthalene (91-20-3) | |
|--|-----|
| 1990 Hazardous Air Pollutant (Clean Air Act) | Yes |

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Additional information : Flammable vapors may accumulate in the container.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN 1993 Flammable liquid, n.o.s. (Diesel Fuel), 3, III
UN-No.(DOT) : 1993
Proper Shipping Name (DOT) : Flammable liquid, n.o.s.
Diesel Fuel
Class (DOT) : 3 - Flammable Liquids
Packing group (DOT) : III - Minor Danger
Dangerous for the environment : Yes



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Marine pollutant : Yes



DOT Packaging Non Bulk (49 CFR 173.xxx) : 203

DOT Packaging Bulk (49 CFR 173.xxx) : 241

DOT Symbols : D - Proper shipping name for domestic use only, or to and from Canada, G - Identifies PSN requiring a technical name

DOT Special Provisions (49 CFR 172.102) : 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).

T1 - 1.5 178.274(d)(2) Normal 178.275(d)(2)

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.

DOT Packaging Exceptions (49 CFR 173.xxx) : 150

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 60 L

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 220 L

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

Emergency Response Guide (ERG) Number : 128

Other information : Transportation Notes: Material is not regulated by the U.S. DOT for ground transportation within the U.S. if shipped in non-bulk packaging (<119 gallons).

Transport by sea

Transport document description (IMDG) : UN 1993 FLAMMABLE LIQUID, N.O.S. (Diesel Fuel), 3, III

UN-No. (IMDG) : 1993

Proper Shipping Name (IMDG) : FLAMMABLE LIQUID, N.O.S.

Class (IMDG) : 3 - Flammable liquids

Packing group (IMDG) : III - substances presenting low danger

Marine pollutant : Yes



Air transport

Transport document description (IATA) : UN 1993 Flammable liquid, n.o.s. (Diesel Fuel), 3, III

UN-No. (IATA) : 1993

Proper Shipping Name (IATA) : Flammable liquid, n.o.s.

Class (IATA) : 3 - Flammable Liquids

Packing group (IATA) : III - Minor Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

Diesel (68476-34-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Petroleum Distillates (8002-05-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory



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| | |
|---|---------|
| Petroleum distillates, hydrotreated light (64742-47-8) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | |
| Distillates, petroleum, hydrotreated middle (64742-46-7) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | |
| n-hexane (110-54-3) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313 | |
| CERCLA RQ | 5000 lb |
| n-Heptane (142-82-5) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | |
| Octane (111-65-9) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | |
| Solvent naphtha (petroleum), heavy arom.; Kerosine - unspecified, [A complex combination of hydrocarbons obtained from distillation of aromatic streams. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approximately 165 °C to 290 °C (330 °F to 554 °F).] (64742-94-5) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | |
| Solvent naphtha, petroleum, light aromatic (64742-95-6) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | |
| xylene (1330-20-7) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313 | |
| CERCLA RQ | 100 lb |
| Trimethylbenzenes (25551-13-7) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | |
| 1,2,4-trimethylbenzene (95-63-6) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313 | |
| 1,3,5-Trimethylbenzene (108-67-8) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | |
| Cumene (98-82-8) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313 | |
| CERCLA RQ | 5000 lb |
| naphthalene (91-20-3) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313 | |
| CERCLA RQ | 100 lb |

15.2. International regulations

CANADA

| | |
|---|--|
| Diesel (68476-34-6) | |
| Listed on the Canadian DSL (Domestic Substances List) | |
| Petroleum Distillates (8002-05-9) | |
| Listed on the Canadian DSL (Domestic Substances List) | |
| Petroleum distillates, hydrotreated light (64742-47-8) | |
| Listed on the Canadian DSL (Domestic Substances List) | |
| Distillates, petroleum, hydrotreated middle (64742-46-7) | |
| Listed on the Canadian DSL (Domestic Substances List) | |
| n-hexane (110-54-3) | |
| Listed on the Canadian DSL (Domestic Substances List) | |
| n-Heptane (142-82-5) | |
| Listed on the Canadian DSL (Domestic Substances List) | |



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| | |
|---|-----|
| Octane (111-65-9) | |
| Listed on the Canadian DSL (Domestic Substances List) | |
| Solvent naphtha (petroleum), heavy arom.; Kerosine - unspecified, [A complex combination of hydrocarbons obtained from distillation of aromatic streams. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approximately 165 °C to 290 °C (330 °F to 554 °F).] (64742-94-5) | |
| Listed on the Canadian DSL (Domestic Substances List) | |
| Solvent naphtha, petroleum, light aromatic (64742-95-6) | |
| Listed on the Canadian DSL (Domestic Substances List) | |
| xylene (1330-20-7) | |
| Listed on the Canadian DSL (Domestic Substances List) | |
| Trimethylbenzenes (25551-13-7) | |
| Listed on the Canadian DSL (Domestic Substances List) | |
| 1,2,4-trimethylbenzene (95-63-6) | |
| Listed on the Canadian DSL (Domestic Substances List) | |
| 1,3,5-Trimethylbenzene (108-67-8) | |
| Listed on the Canadian DSL (Domestic Substances List) | |
| Cumene (98-82-8) | |
| Listed on the Canadian DSL (Domestic Substances List) | |
| naphthalene (91-20-3) | |
| Listed on the Canadian DSL (Domestic Substances List) | |
| Toxic Substance (CEPA – Schedule I) | Yes |

EU-Regulations

| | |
|---|--|
| Diesel (68476-34-6) | |
| Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) | |
| Petroleum Distillates (8002-05-9) | |
| Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) | |
| Petroleum distillates, hydrotreated light (64742-47-8) | |
| Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) | |
| Distillates, petroleum, hydrotreated middle (64742-46-7) | |
| Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) | |
| n-hexane (110-54-3) | |
| Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) | |
| n-Heptane (142-82-5) | |
| Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) | |
| Octane (111-65-9) | |
| Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) | |
| Solvent naphtha (petroleum), heavy arom.; Kerosine - unspecified, [A complex combination of hydrocarbons obtained from distillation of aromatic streams. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approximately 165 °C to 290 °C (330 °F to 554 °F).] (64742-94-5) | |
| Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) | |
| Solvent naphtha, petroleum, light aromatic (64742-95-6) | |
| Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) | |
| xylene (1330-20-7) | |
| Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) | |
| Trimethylbenzenes (25551-13-7) | |
| Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) | |
| 1,2,4-trimethylbenzene (95-63-6) | |
| Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) | |
| 1,3,5-Trimethylbenzene (108-67-8) | |
| Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) | |



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Cumene (98-82-8)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

naphthalene (91-20-3)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

Diesel (68476-34-6)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on CICR (Turkish Inventory and Control of Chemicals)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

Petroleum Distillates (8002-05-9)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

Petroleum distillates, hydrotreated light (64742-47-8)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on CICR (Turkish Inventory and Control of Chemicals)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

Distillates, petroleum, hydrotreated middle (64742-46-7)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on CICR (Turkish Inventory and Control of Chemicals)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

n-hexane (110-54-3)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Japanese Pollutant Release and Transfer Register Law (PRTR Law)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on CICR (Turkish Inventory and Control of Chemicals)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

n-Heptane (142-82-5)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on CICR (Turkish Inventory and Control of Chemicals)
Listed on the TCSI (Taiwan Chemical Substance Inventory)



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Octane (111-65-9)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on CICR (Turkish Inventory and Control of Chemicals)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

Solvent naphtha (petroleum), heavy arom.; Kerosine - unspecified, [A complex combination of hydrocarbons obtained from distillation of aromatic streams. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approximately 165 °C to 290 °C (330 °F to 554 °F).] (64742-94-5)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on CICR (Turkish Inventory and Control of Chemicals)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

Solvent naphtha, petroleum, light aromatic (64742-95-6)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on CICR (Turkish Inventory and Control of Chemicals)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

xylene (1330-20-7)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Japanese Poisonous and Deleterious Substances Control Law
Japanese Pollutant Release and Transfer Register Law (PRTR Law)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on CICR (Turkish Inventory and Control of Chemicals)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

Trimethylbenzenes (25551-13-7)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on CICR (Turkish Inventory and Control of Chemicals)
Listed on the TCSI (Taiwan Chemical Substance Inventory)



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1,2,4-trimethylbenzene (95-63-6)

Listed on the AICS (Australian Inventory of Chemical Substances)
 Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
 Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
 Listed on the Japanese ISHL (Industrial Safety and Health Law)
 Listed on the Korean ECL (Existing Chemicals List)
 Listed on NZIoC (New Zealand Inventory of Chemicals)
 Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
 Japanese Pollutant Release and Transfer Register Law (PRTR Law)
 Listed on INSQ (Mexican National Inventory of Chemical Substances)
 Listed on CICR (Turkish Inventory and Control of Chemicals)
 Listed on the TCSI (Taiwan Chemical Substance Inventory)

1,3,5-Trimethylbenzene (108-67-8)

Listed on the AICS (Australian Inventory of Chemical Substances)
 Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
 Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
 Listed on the Japanese ISHL (Industrial Safety and Health Law)
 Listed on the Korean ECL (Existing Chemicals List)
 Listed on NZIoC (New Zealand Inventory of Chemicals)
 Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
 Japanese Pollutant Release and Transfer Register Law (PRTR Law)
 Listed on INSQ (Mexican National Inventory of Chemical Substances)
 Listed on CICR (Turkish Inventory and Control of Chemicals)
 Listed on the TCSI (Taiwan Chemical Substance Inventory)

Cumene (98-82-8)

Listed on the AICS (Australian Inventory of Chemical Substances)
 Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
 Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
 Listed on the Japanese ISHL (Industrial Safety and Health Law)
 Listed on the Korean ECL (Existing Chemicals List)
 Listed on NZIoC (New Zealand Inventory of Chemicals)
 Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
 Japanese Pollutant Release and Transfer Register Law (PRTR Law)
 Listed on INSQ (Mexican National Inventory of Chemical Substances)
 Listed on CICR (Turkish Inventory and Control of Chemicals)
 Listed on the TCSI (Taiwan Chemical Substance Inventory)

naphthalene (91-20-3)

Listed on the AICS (Australian Inventory of Chemical Substances)
 Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
 Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
 Listed on the Japanese ISHL (Industrial Safety and Health Law)
 Listed on the Korean ECL (Existing Chemicals List)
 Listed on NZIoC (New Zealand Inventory of Chemicals)
 Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
 Japanese Pollutant Release and Transfer Register Law (PRTR Law)
 Listed on INSQ (Mexican National Inventory of Chemical Substances)
 Listed on CICR (Turkish Inventory and Control of Chemicals)
 Listed on the TCSI (Taiwan Chemical Substance Inventory)

15.3. US State regulations

⚠ WARNING This product can expose you to Cumene, which is known to the State of California to cause cancer, and n-hexane, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

| n-hexane (110-54-3) | | | | | |
|---|---|---|---|----------------------------------|-------------------------------------|
| U.S. - California - Proposition 65 - Carcinogens List | U.S. - California - Proposition 65 - Developmental Toxicity | U.S. - California - Proposition 65 - Reproductive Toxicity - Female | U.S. - California - Proposition 65 - Reproductive Toxicity - Male | No significant risk level (NSRL) | Maximum allowable dose level (MADL) |
| No | No | No | Yes | | |



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| Cumene (98-82-8) | | | | | |
|--|---|---|---|----------------------------------|-------------------------------------|
| U.S. - California - Proposition 65 - Carcinogens List | U.S. - California - Proposition 65 - Developmental Toxicity | U.S. - California - Proposition 65 - Reproductive Toxicity - Female | U.S. - California - Proposition 65 - Reproductive Toxicity - Male | No significant risk level (NSRL) | Maximum allowable dose level (MADL) |
| Yes | No | No | No | | |
| naphthalene (91-20-3) | | | | | |
| U.S. - California - Proposition 65 - Carcinogens List | U.S. - California - Proposition 65 - Developmental Toxicity | U.S. - California - Proposition 65 - Reproductive Toxicity - Female | U.S. - California - Proposition 65 - Reproductive Toxicity - Male | No significant risk level (NSRL) | Maximum allowable dose level (MADL) |
| Yes | No | No | No | 5.8 µg/day | |
| Petroleum Distillates (8002-05-9) | | | | | |
| U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List | | | | | |
| n-hexane (110-54-3) | | | | | |
| U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List | | | | | |
| n-Heptane (142-82-5) | | | | | |
| U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List | | | | | |
| Octane (111-65-9) | | | | | |
| U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List | | | | | |
| xylene (1330-20-7) | | | | | |
| U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List U.S. - Pennsylvania - RTK (Right to Know) List | | | | | |
| Trimethylbenzenes (25551-13-7) | | | | | |
| U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List | | | | | |
| 1,2,4-trimethylbenzene (95-63-6) | | | | | |
| U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List U.S. - Pennsylvania - RTK (Right to Know) List | | | | | |
| 1,3,5-Trimethylbenzene (108-67-8) | | | | | |
| U.S. - Massachusetts - 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. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List U.S. - Pennsylvania - RTK (Right to Know) List | | | | | |



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naphthalene (91-20-3)

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Last review date: 06/26/2023

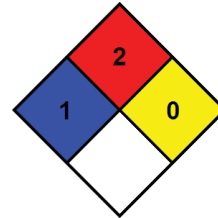
Full text of H-phrases:

| | |
|------|---|
| H226 | Flammable liquid and vapor |
| H304 | May be fatal if swallowed and enters airways |
| H315 | Causes skin irritation |
| H319 | Causes serious eye irritation |
| H335 | May cause respiratory irritation |
| H336 | May cause drowsiness or dizziness |
| H340 | May cause genetic defects |
| H351 | Suspected of causing cancer |
| H361 | Suspected of damaging fertility or the unborn child |
| H373 | May cause damage to organs through prolonged or repeated exposure |
| H401 | Toxic to aquatic life |
| H411 | Toxic to aquatic life with long lasting effects |

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.



SDS US (GHS HazCom 2012)

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