



# SAFETY DATA SHEET

## 1. Identification

**Product identifier:** CLAIRE INDUSTRIAL WHITE GREASE

**Other means of identification**

**SDS number:** RE1000029335

**Recommended restrictions**

**Product use:** Lubricant

**Restrictions on use:** Not known.

**Manufacturer/Importer/Distributor Information**

**Manufacturer**

**Company Name:** CLAIRE MANUFACTURING COMPANY  
**Address:** 1000 Integram Dr  
Pacific, MO 63069  
**Telephone:** 1-630-543-7600  
**Fax:**

**Emergency telephone number:** 1-866-836-8855

## 2. Hazard(s) identification

**Hazard Classification**

**Physical Hazards**

Flammable aerosol Category 1

**Health Hazards**

Aspiration Hazard Category 1

**Environmental Hazards**

Acute hazards to the aquatic environment Category 2

Chronic hazards to the aquatic environment Category 2

**Label Elements**

**Hazard Symbol:**



**Signal Word:**

Danger



<b>Hazard Statement:</b>	Extremely flammable aerosol. May be fatal if swallowed and enters airways. Toxic to aquatic life with long lasting effects.
<b>Precautionary Statements</b>	
<b>Prevention:</b>	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Avoid release to the environment.
<b>Response:</b>	IF SWALLOWED: Immediately call a POISON CENTER/doctor Do NOT induce vomiting. Collect spillage.
<b>Storage:</b>	Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Store locked up.
<b>Disposal:</b>	Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
<b>Hazard(s) not otherwise classified (HNOC):</b>	None.

### 3. Composition/information on ingredients

#### Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Distillates (petroleum), hydrotreated light	64742-47-8	25 - <50%
Propane	74-98-6	10 - <20%
Heptane, branched, cyclic and linear	426260-76-6	2.5 - <5%
Heptane	142-82-5	1 - <5%
Naphtha (petroleum), hydrotreated light	64742-49-0	1 - <5%
Solvent naphtha (petroleum), light aliph.	64742-89-8	1 - <5%
Titanium oxide (TiO <sub>2</sub> )	13463-67-7	1 - <5%

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

### 4. First-aid measures

<b>Ingestion:</b>	Call a physician or poison control center immediately. Rinse mouth. Never give liquid to an unconscious person. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
<b>Inhalation:</b>	Move to fresh air.
<b>Skin Contact:</b>	Wash skin thoroughly with soap and water. If skin irritation occurs: Get medical advice/attention.



**Eye contact:** Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. If eye irritation persists: Get medical advice/attention.

**Most important symptoms/effects, acute and delayed**

**Symptoms:** No data available.

**Hazards:** No data available.

**Indication of immediate medical attention and special treatment needed**

**Treatment:** No data available.

**5. Fire-fighting measures**

**General Fire Hazards:** Use water spray to keep fire-exposed containers cool. Fight fire from a protected location. Move containers from fire area if you can do so without risk.

**Suitable (and unsuitable) extinguishing media**

**Suitable extinguishing media:** Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing media:** Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the chemical:** Vapors may travel considerable distance to a source of ignition and flash back.

**Special protective equipment and precautions for firefighters**

**Special fire fighting procedures:** No data available.

**Special protective equipment for fire-fighters:** Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

**6. Accidental release measures**

**Personal precautions, protective equipment and emergency procedures:** Ventilate closed spaces before entering them. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep upwind.

**Methods and material for containment and cleaning up:** Absorb spill with vermiculite or other inert material, then place in a container for chemical waste.

**Notification Procedures:** Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so without risk.

**Environmental Precautions:** Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid release to the environment.



## 7. Handling and storage

**Precautions for safe handling:** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use.

**Conditions for safe storage, including any incompatibilities:** Store locked up. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Aerosol Level 2

## 8. Exposure controls/personal protection

### Control Parameters

#### Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
Distillates (petroleum), hydrotreated light	REL	100 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
Distillates (petroleum), hydrotreated light - Non-aerosol. - as total hydrocarbon vapor	TWA	200 mg/m <sup>3</sup>	US. ACGIH Threshold Limit Values (2008)
	TWA	200 mg/m <sup>3</sup>	US. ACGIH Threshold Limit Values (2008)
Propane	REL	1,000 ppm 1,800 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	REL	1,000 ppm 1,800 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA	1,000 ppm 1,800 mg/m <sup>3</sup>	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
Naphtha (petroleum), hydrotreated light	REL	100 ppm 400 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (03 2016)
	REL	100 ppm 400 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	TWA	100 ppm 400 mg/m <sup>3</sup>	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
Solvent naphtha (petroleum), light aliph.	REL	100 ppm 400 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	TWA	100 ppm 400 mg/m <sup>3</sup>	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	REL	100 ppm 400 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (03 2016)
Heptane	TWA	400 ppm 1,600 mg/m <sup>3</sup>	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	REL	85 ppm 350 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	REL	500 ppm 2,000 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	STEL	500 ppm 2,000 mg/m <sup>3</sup>	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	TWA	400 ppm	US. ACGIH Threshold Limit Values (02 2012)
	STEL	500 ppm	US. ACGIH Threshold Limit Values (02 2012)
	Ceiling	440 ppm 1,800 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
Titanium oxide (TiO <sub>2</sub> )	TWA	10 mg/m <sup>3</sup>	US. ACGIH Threshold Limit Values (2008)
Titanium oxide (TiO <sub>2</sub> ) - Total dust.	TWA	10 mg/m <sup>3</sup>	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	REL	15 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Titanium oxide (TiO <sub>2</sub> ) - Respirable fraction.	TWA	5 mg/m <sup>3</sup>	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
	TWA	15 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
Titanium oxide (TiO <sub>2</sub> ) - Total dust.	TWA	15 mg/m <sup>3</sup>	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
	TWA	50 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
Benzene, methyl-	STEL	150 ppm 560 mg/m <sup>3</sup>	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)



	REL	100 ppm	375 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	TWA	100 ppm	375 mg/m <sup>3</sup>	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	Ceiling	300 ppm		US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006)
	TWA	20 ppm		US. ACGIH Threshold Limit Values (2008)
	TWA	200 ppm		US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006)
	MAX. CONC	500 ppm		US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006)
	STEL	150 ppm	560 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
Benzene	REL	0.1 ppm		US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	TWA	1 ppm		US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	Ceiling	25 ppm		US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006)
	TWA	0.5 ppm		US. ACGIH Threshold Limit Values (2008)
	STEL	2.5 ppm		US. ACGIH Threshold Limit Values (2008)
	STEL	5 ppm		US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) (02 2006)
	OSHA_ACT	0.5 ppm		US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) (02 2006)
	TWA	10 ppm		US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006)
	MAX. CONC	50 ppm		US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006)
	STEL	5 ppm		US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	TWA	1 ppm		US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) (02 2006)
	STEL	1 ppm		US. NIOSH: Pocket Guide to Chemical Hazards (2005)
Benzene, (1-methylethyl)-	REL	50 ppm	245 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	TWA	50 ppm		US. ACGIH Threshold Limit Values (2008)
	PEL	50 ppm	245 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA	50 ppm	245 mg/m <sup>3</sup>	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	TWA	1 ppm		US. ACGIH Notice of Intended Changes (NIC) to Threshold Limit Values (03 2018)
Benzene, ethyl-	STEL	125 ppm	545 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	REL	100 ppm	435 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	PEL	100 ppm	435 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	STEL	125 ppm	545 mg/m <sup>3</sup>	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	TWA	100 ppm	435 mg/m <sup>3</sup>	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	TWA	20 ppm		US. ACGIH Threshold Limit Values (12 2010)

### Biological Limit Values

Chemical Identity	Exposure Limit Values	Source
Benzene, methyl- (toluene: Sampling time: End of shift.)	0.03 mg/l (Urine)	ACGIH BEL (03 2013)
Benzene, methyl- (o-Cresol, with hydrolysis: Sampling time: End of shift.)	0.3 mg/g (Creatinine in urine)	ACGIH BEL (03 2013)
Benzene, methyl- (toluene: Sampling time: Prior to last shift of work week.)	0.02 mg/l (Blood)	ACGIH BEL (03 2013)
Benzene (S-Phenylmercapturic acid: Sampling time: End of shift.)	25 µg/g (Creatinine in urine)	ACGIH BEL (03 2013)
Benzene (t,t-Muconic acid: Sampling time: End of shift.)	500 µg/g (Creatinine in urine)	ACGIH BEL (03 2013)
Benzene, ethyl- (Sum of mandelic acid and phenylglyoxylic acid: Sampling time: End of shift.)	0.15 g/g (Creatinine in urine)	ACGIH BEL (02 2014)

**Appropriate Engineering Controls**

No data available.

**Individual protection measures, such as personal protective equipment**



<b>General information:</b>	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. Supplementary local exhaust ventilation, closed systems, or respiratory and eye protection may be needed in special circumstances, such as poorly ventilated spaces, heating, evaporation of liquids from large surfaces, spraying of mists, mechanical generation of dusts, drying of solids, etc.
<b>Eye/face protection:</b>	Wear safety glasses with side shields (or goggles).
<b>Skin Protection</b>	
<b>Hand Protection:</b>	No data available.
<b>Other:</b>	Wear suitable protective clothing.
<b>Respiratory Protection:</b>	In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.
<b>Hygiene measures:</b>	Observe good industrial hygiene practices. When using do not smoke.

## 9. Physical and chemical properties

### Appearance

<b>Physical state:</b>	liquid
<b>Form:</b>	Aerosols
<b>Color:</b>	White
<b>Odor:</b>	No data available.
<b>Odor threshold:</b>	No data available.
<b>pH:</b>	No data available.
<b>Melting point/freezing point:</b>	No data available.
<b>Initial boiling point and boiling range:</b>	No data available.
<b>Flash Point:</b>	-104.4 °C
<b>Evaporation rate:</b>	No data available.
<b>Flammability (solid, gas):</b>	No data available.
<b>Upper/lower limit on flammability or explosive limits</b>	
<b>Flammability limit - upper (%):</b>	No data available.
<b>Flammability limit - lower (%):</b>	No data available.
<b>Explosive limit - upper (%):</b>	No data available.
<b>Explosive limit - lower (%):</b>	No data available.
<b>Vapor pressure:</b>	4,826.3 - 6,205.3 hPa (20 °C)
<b>Vapor density:</b>	No data available.
<b>Density:</b>	No data available.
<b>Relative density:</b>	No data available.
<b>Solubility(ies)</b>	
<b>Solubility in water:</b>	No data available.
<b>Solubility (other):</b>	No data available.
<b>Partition coefficient (n-octanol/water):</b>	No data available.
<b>Auto-ignition temperature:</b>	No data available.
<b>Decomposition temperature:</b>	No data available.
<b>Viscosity:</b>	No data available.



## 10. Stability and reactivity

<b>Reactivity:</b>	No data available.
<b>Chemical Stability:</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions:</b>	No data available.
<b>Conditions to avoid:</b>	Avoid heat or contamination.
<b>Incompatible Materials:</b>	No data available.
<b>Hazardous Decomposition Products:</b>	No data available.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation:</b>	No data available.
<b>Skin Contact:</b>	No data available.
<b>Eye contact:</b>	No data available.
<b>Ingestion:</b>	No data available.

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Inhalation:</b>	No data available.
<b>Skin Contact:</b>	No data available.
<b>Eye contact:</b>	No data available.
<b>Ingestion:</b>	No data available.

### Information on toxicological effects

#### Acute toxicity (list all possible routes of exposure)

##### Oral

**Product:** Not classified for acute toxicity based on available data.

##### Specified substance(s):

Distillates (petroleum), hydrotreated light LD 50 (Rat): > 5,000 mg/kg

Heptane, branched, cyclic and linear LD 50: > 2,000 mg/kg

Heptane LD 50 (Rat): > 5,000 mg/kg

Naphtha (petroleum), hydrotreated light LD 50 (Rat): > 5,000 mg/kg



Solvent naphtha (petroleum), light aliph. LD 50 (Rat): > 5,000 mg/kg

Titanium oxide (TiO<sub>2</sub>) LD 50 (Rat): > 5,000 mg/kg

#### Dermal

**Product:** Not classified for acute toxicity based on available data.

**Specified substance(s):**

Distillates (petroleum), hydrotreated light LD 50 (Rabbit): > 2,000 mg/kg

Heptane, branched, cyclic and linear LD 50: > 2,000 mg/kg

Heptane LD 50 (Rabbit): > 2,000 mg/kg

Naphtha (petroleum), hydrotreated light LD 50 (Rabbit): > 3,750 mg/kg

Solvent naphtha (petroleum), light aliph. LD 50 (Rabbit): > 2,000 mg/kg

Titanium oxide (TiO<sub>2</sub>) LD 50: > 2,000 mg/kg

#### Inhalation

**Product:** Not classified for acute toxicity based on available data.

**Specified substance(s):**

Distillates (petroleum), hydrotreated light LC 50: > 5 mg/l  
LC 50: > 20 mg/l

Propane LC 50: > 100 mg/l  
LC 50: > 100 mg/l

Heptane, branched, cyclic and linear LC 50: > 20 mg/l  
LC 50: > 5 mg/l

Heptane LC 50 (Rat): > 29.29 mg/l

Naphtha (petroleum), hydrotreated light LOAEL (Human): 2,400 mg/m<sup>3</sup>  
LC 50 (Rat): > 7,630 mg/m<sup>3</sup>  
LC 50: > 5 mg/l

Solvent naphtha (petroleum), light aliph. LC 50: 5.6 mg/l  
LC 50: > 20 mg/l  
LOAEL (Human): 4,320 mg/m<sup>3</sup>  
LC 50 (Rat): > 7,630 mg/m<sup>3</sup>





Titanium oxide (TiO<sub>2</sub>) LC 50 (Rat): > 6.82 mg/l

**Repeated dose toxicity**

**Product:** No data available.

**Specified substance(s):**

Distillates (petroleum), hydrotreated light	NOAEL (Rat(Female, Male), Inhalation): >= 24 mg/m <sup>3</sup> Inhalation Experimental result, Key study NOAEL (Rat(Female), Oral, 70 - 147 d): 750 mg/kg Oral Experimental result, Key study
Propane	NOAEL (Rat(Female, Male), Inhalation, >= 28 d): 4,000 ppm(m) Inhalation Experimental result, Key study LOAEL (Rat(Female, Male), Inhalation, >= 28 d): 12,000 ppm(m) Inhalation Experimental result, Key study
Heptane	NOAEL (Rat(Male), Inhalation): 12,470 mg/m <sup>3</sup> Inhalation Experimental result, Key study
Naphtha (petroleum), hydrotreated light	LOAEL (Rat(Female, Male), Oral, 13 Weeks): 1,250 mg/kg Oral Read-across based on grouping of substances (category approach), Key study NOAEL (Rat(Female, Male), Dermal, 28 d): > 375 mg/kg Dermal Experimental result, Supporting study NOAEL (Rat(Female, Male), Inhalation): 10,000 mg/m <sup>3</sup> Inhalation Experimental result, Key study
Solvent naphtha (petroleum), light aliph.	NOAEL (Mouse, Rat(Female, Male), Inhalation, 107 - 113 Weeks): 1,402 mg/m <sup>3</sup> Inhalation Experimental result, Key study NOAEL (Rat(Female, Male), Dermal, 5 - 28 d): 3,750 mg/kg Dermal Experimental result, Key study NOAEL (Rat(Female, Male), Dermal, 28 d): > 375 mg/kg Dermal Experimental result, Supporting study
Titanium oxide (TiO <sub>2</sub> )	NOAEL (Rat(Male), Oral, 29 d): 24,000 mg/kg Oral Experimental result, Key study NOAEL (Rat(Female, Male), Inhalation): 50 mg/m <sup>3</sup> Inhalation Experimental result, Key study

**Skin Corrosion/Irritation**

**Product:** No data available.

**Specified substance(s):**

Distillates (petroleum), hydrotreated light	in vivo (Rabbit): Not irritant Experimental result, Key study
Heptane	in vivo (Rabbit): Irritating Read-across based on grouping of substances (category approach), Key study
Solvent naphtha (petroleum), light aliph.	Assessment Non-Irritating in vivo (Rabbit): Irritating Experimental result, Key study
Titanium oxide (TiO <sub>2</sub> )	in vivo (Rabbit): Not irritant Experimental result, Key study

**Serious Eye Damage/Eye Irritation**

**Product:** No data available.

**Specified substance(s):**

Distillates (petroleum), hydrotreated light	Rabbit, 24 - 72 hrs: Not irritating
Heptane	Rabbit, 24 - 72 hrs: Not irritating



Naphtha (petroleum),  
hydrotreated light      Rabbit, 24 - 72 hrs: Not irritating

Solvent naphtha  
(petroleum), light aliph.      Rabbit: Not irritating

Titanium oxide (TiO<sub>2</sub>)      Rabbit, 24 - 72 hrs: Not irritating

**Respiratory or Skin Sensitization**

**Product:**      No data available.

**Specified substance(s):**

Distillates (petroleum),  
hydrotreated light      Skin sensitization:, in vivo (Guinea pig): Non sensitising

Heptane      Skin sensitization:, in vivo (Guinea pig): Non sensitising

Naphtha (petroleum),  
hydrotreated light      Skin sensitization:, in vivo (Guinea pig): Non sensitising

Solvent naphtha  
(petroleum), light aliph.      Skin sensitization:, in vivo (Guinea pig): Non sensitising

Titanium oxide (TiO<sub>2</sub>)      Skin sensitization:, in vivo/in vitro (Guinea pig): Non sensitising

**Carcinogenicity**

**Product:**      No data available.

**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

No carcinogenic components identified

**US. National Toxicology Program (NTP) Report on Carcinogens:**

No carcinogenic components identified

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

No carcinogenic components identified

**Germ Cell Mutagenicity**

**In vitro**

**Product:**      No data available.

**In vivo**

**Product:**      No data available.

**Reproductive toxicity**

**Product:**      No data available.

**Specific Target Organ Toxicity - Single Exposure**

**Product:**      No data available.

**Specified substance(s):**

Heptane      Narcotic effect. - Category 3 with narcotic effects.

**Specific Target Organ Toxicity - Repeated Exposure**

**Product:**      No data available.

**Aspiration Hazard**

**Product:**      No data available.

**Specified substance(s):**

Distillates (petroleum),  
hydrotreated light      May be fatal if swallowed and enters airways.



Heptane, branched, cyclic and linear	May be fatal if swallowed and enters airways.
Heptane	May be fatal if swallowed and enters airways.
Naphtha (petroleum), hydrotreated light	May be fatal if swallowed and enters airways.
Solvent naphtha (petroleum), light aliph.	May be fatal if swallowed and enters airways.

**Other effects:** No data available.

## 12. Ecological information

### Ecotoxicity:

#### Acute hazards to the aquatic environment:

##### Fish

**Product:** No data available.

##### Specified substance(s):

Propane	LC 50 (Various, 96 h): 147.54 mg/l QSAR QSAR, Key study
Heptane	LC 50 (Mozambique tilapia (Tilapia mossambica), 96 h): 375 mg/l Mortality
Naphtha (petroleum), hydrotreated light	LC 50 (96 h): 8.41 mg/l Experimental result, Key study
Solvent naphtha (petroleum), light aliph.	LL 50 (Pimephales promelas, 96 h): 8.2 mg/l Experimental result, Key study
Titanium oxide (TiO <sub>2</sub> )	LC 50 (Oncorhynchus mykiss, 96 h): > 100 mg/l Experimental result, Weight of Evidence study

##### Aquatic Invertebrates

**Product:** No data available.

##### Specified substance(s):

Heptane	EC 50 (Daphnia magna, 48 h): 1.5 mg/l Experimental result, Key study
Naphtha (petroleum), hydrotreated light	EC 50 (Daphnia magna, 48 h): 4.5 mg/l Experimental result, Key study
Solvent naphtha (petroleum), light aliph.	EC 50 (Daphnia magna, 48 h): 4.5 mg/l Experimental result, Key study NOAEL (Daphnia magna, 48 h): 0.5 mg/l Experimental result, Key study
Titanium oxide (TiO <sub>2</sub> )	LC 50 (Daphnia magna, 48 h): > 100 mg/l Experimental result, Weight of Evidence study

#### Chronic hazards to the aquatic environment:

##### Fish

**Product:** No data available.

##### Specified substance(s):

Distillates (petroleum), hydrotreated light	NOAEL (Oncorhynchus mykiss): 0.098 mg/l QSAR QSAR, Key study
Heptane	NOAEL (Oncorhynchus mykiss): 1.284 mg/l QSAR QSAR, Key study



Naphtha (petroleum),  
hydrotreated light EC 50 (Daphnia magna): 10 mg/l Other, Key study  
NOAEL (Daphnia magna): 2.6 mg/l Other, Key study

Solvent naphtha  
(petroleum), light aliph. NOAEL (Daphnia magna): 2.6 mg/l Other, Key study

#### **Aquatic Invertebrates**

**Product:** No data available.

**Specified substance(s):**  
Heptane, branched,  
cyclic and linear NOEC : < 1 mg/l estimation

Heptane NOAEL (Daphnia magna): 0.17 mg/l Read-across based on grouping of  
substances (category approach), Key study  
EC 50 (Daphnia magna): 0.23 mg/l Read-across based on grouping of  
substances (category approach), Key study

Naphtha (petroleum),  
hydrotreated light EC 50 (Daphnia magna): 10 mg/l Experimental result, Key study  
NOAEL (Daphnia magna): 2.6 mg/l Experimental result, Key study

Solvent naphtha  
(petroleum), light aliph. EC 50 (Daphnia magna): > 40 mg/l Experimental result, Key study

Titanium oxide (TiO<sub>2</sub>) NOAEL (Daphnia magna): 100 mg/l Experimental result, Supporting study

#### **Toxicity to Aquatic Plants**

**Product:** No data available.

#### **Persistence and Degradability**

##### **Biodegradation**

**Product:** No data available.

**Specified substance(s):**  
Distillates (petroleum),  
hydrotreated light 61 % Detected in water. Experimental result, Supporting study

Propane 100 % (385.5 h) Detected in water. Experimental result, Key study  
50 % (3.19 d) Detected in water. QSAR, Weight of Evidence study

Heptane 70 % Detected in water. Experimental result, Key study

Naphtha (petroleum),  
hydrotreated light 90.35 % (28 d) Detected in water. Experimental result, Supporting study

Solvent naphtha  
(petroleum), light aliph. 90.35 % (28 d) Detected in water. Experimental result, Supporting study  
77.05 % Detected in water. Experimental result, Supporting study

##### **BOD/COD Ratio**

**Product:** No data available.

#### **Bioaccumulative potential**

##### **Bioconcentration Factor (BCF)**

**Product:** No data available.



**Specified substance(s):**

Heptane	Bioconcentration Factor (BCF): 552 Aquatic sediment Estimated by calculation, Key study
Naphtha (petroleum), hydrotreated light	Bioconcentration Factor (BCF): 10 - 2,500 Aquatic sediment Estimated by calculation, Key study
Solvent naphtha (petroleum), light aliph.	Bioconcentration Factor (BCF): 10 - 2,500 Aquatic sediment Estimated by calculation, Key study
Titanium oxide (TiO <sub>2</sub> )	Oncorhynchus mykiss, Bioconcentration Factor (BCF): 34 - 352 Aquatic sediment Experimental result, Key study

**Partition Coefficient n-octanol / water (log Kow)**

**Product:** No data available.

**Specified substance(s):**

Naphtha (petroleum), hydrotreated light	Log Kow: > 2.4 - < 5.7 23 °C Yes Experimental result, Key study
	Log Kow: 2.2 - 5.2 23 °C Yes Experimental result, Key study
	Log Kow: 2.2 - 6.1 23 °C Yes Experimental result, Key study

**Mobility in soil:** No data available.

**Known or predicted distribution to environmental compartments**

Distillates (petroleum), hydrotreated light	No data available.
Propane	No data available.
Heptane, branched, cyclic and linear	No data available.
Heptane	No data available.
Naphtha (petroleum), hydrotreated light	No data available.
Solvent naphtha (petroleum), light aliph.	No data available.
Titanium oxide (TiO <sub>2</sub> )	No data available.

**Other adverse effects:** Toxic to aquatic life with long lasting effects.

**13. Disposal considerations**

**Disposal instructions:** Discharge, treatment, or disposal may be subject to national, state, or local laws.

**Contaminated Packaging:** No data available.

**14. Transport information**

**DOT**

UN Number:	UN 1950
UN Proper Shipping Name:	Aerosols, flammable
Transport Hazard Class(es)	
Class:	2.1
Label(s):	–
Packing Group:	II
Marine Pollutant:	No
Environmental Hazards:	No
Marine Pollutant	No

Special precautions for user: Not regulated.



**IMDG**

UN Number:	UN 1950
UN Proper Shipping Name:	Aerosols, flammable
Transport Hazard Class(es)	
Class:	2
Label(s):	–
EmS No.:	F-D, S-U
Packing Group:	–
Environmental Hazards:	Yes
Marine Pollutant	No
Special precautions for user:	Not regulated.

**IATA**

UN Number:	UN 1950
Proper Shipping Name:	Aerosols, flammable
Transport Hazard Class(es):	
Class:	2.1
Label(s):	–
Packing Group:	–
Environmental Hazards:	Yes
Marine Pollutant	No
Special precautions for user:	Not regulated.
Cargo aircraft only:	Allowed.

**15. Regulatory information**

**US Federal Regulations**

Restrictions on use: Not known.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)  
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

<u>Chemical Identity</u>	<u>OSHA hazard(s)</u>
Benzene	Flammability
	Cancer
	Aspiration
	Eye
	Blood
	Skin
	respiratory tract irritation
	Central nervous system

**CERCLA Hazardous Substance List (40 CFR 302.4):**

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Propane	lbs. 100
Heptane	lbs. 100
Benzene, methyl-	lbs. 1000
Benzene	lbs. 10
Benzene, (1-methylethyl)-	lbs. 5000
Benzene, ethyl-	lbs. 1000



**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**

- Fire Hazard
- Immediate (Acute) Health Hazards
- Flammable aerosol
- Aspiration Hazard

**SARA 302 Extremely Hazardous Substance**

<u>Chemical Identity</u>	<u>Reportable quantity</u>	<u>Threshold Planning Quantity</u>
Distillates (petroleum), hydrotreated light		

**SARA 304 Emergency Release Notification**

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Distillates (petroleum), hydrotreated light	
Propane	lbs. 100
Heptane	lbs. 100
Benzene, methyl-	lbs. 1000
Benzene	lbs. 10
Benzene, (1-methylethyl)-	lbs. 5000
Benzene, ethyl-	lbs. 1000

**SARA 311/312 Hazardous Chemical**

<u>Chemical Identity</u>	<u>Threshold Planning Quantity</u>
Distillates (petroleum), hydrotreated light	10000 lbs
Propane	10000 lbs
Heptane, branched, cyclic and linear	10000 lbs
Heptane	10000 lbs
Naphtha (petroleum), hydrotreated light	10000 lbs
Solvent naphtha (petroleum), light aliph.	10000 lbs
Titanium oxide (TiO2)	10000 lbs
Benzene, methyl-	10000 lbs
Benzene	10000 lbs
Benzene, (1-methylethyl)-	10000 lbs
Benzene, ethyl-	10000 lbs

**SARA 313 (TRI Reporting)**

None present or none present in regulated quantities.

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

**Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)**

**US State Regulations**

**US. California Proposition 65**

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

Titanium oxide (TiO2)	Carcinogenic. 09 2011
Benzene, methyl-	Developmental toxin. 03 2008
Benzene	Developmental toxin. 03 2008
Benzene	Carcinogenic. 05 2011
Benzene	Male reproductive toxin. 03 2008



Benzene, (1-methylethyl)- Carcinogenic. 05 2011  
Benzene, ethyl- Carcinogenic. 05 2011

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

**Chemical Identity**

Distillates (petroleum), hydrotreated light  
Propane  
Naphtha (petroleum), hydrotreated light  
Solvent naphtha (petroleum), light aliph.  
Heptane  
Titanium oxide (TiO<sub>2</sub>)

**US. Massachusetts RTK - Substance List**

**Chemical Identity**

Benzene

**US. Pennsylvania RTK - Hazardous Substances**

**Chemical Identity**

Distillates (petroleum), hydrotreated light  
Propane  
Naphtha (petroleum), hydrotreated light  
Solvent naphtha (petroleum), light aliph.  
Heptane  
Titanium oxide (TiO<sub>2</sub>)

**US. Rhode Island RTK**

No ingredient regulated by RI Right-to-Know Law present.

**International regulations**

**Montreal protocol**

Distillates (petroleum),  
hydrotreated light

**Stockholm convention**

Distillates (petroleum),  
hydrotreated light

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**Rotterdam convention**

Distillates (petroleum),  
hydrotreated light

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**Kyoto protocol**





**Inventory Status:**

Australia AICS:	Not in compliance with the inventory.
Canada DSL Inventory List:	On or in compliance with the inventory
EINECS, ELINCS or NLP:	Not in compliance with the inventory.
Japan (ENCS) List:	Not in compliance with the inventory.
China Inv. Existing Chemical Substances:	Not in compliance with the inventory.
Korea Existing Chemicals Inv. (KECI):	Not in compliance with the inventory.
Canada NDSL Inventory:	Not in compliance with the inventory.
Philippines PICCS:	On or in compliance with the inventory
US TSCA Inventory:	On or in compliance with the inventory
New Zealand Inventory of Chemicals:	Not in compliance with the inventory.
Japan ISHL Listing:	Not in compliance with the inventory.
Japan Pharmacopoeia Listing:	Not in compliance with the inventory.
Mexico INSQ:	Not in compliance with the inventory.
Ontario Inventory:	Not in compliance with the inventory.
Taiwan Chemical Substance Inventory:	On or in compliance with the inventory

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

<b>Issue Date:</b>	11/20/2019
<b>Revision Information:</b>	No data available.
<b>Version #:</b>	1.0
<b>Further Information:</b>	No data available.
<b>Disclaimer:</b>	This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.