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Intermediate Distillates

**EXHIBIT 5** 



# Section 1. Identification

Product name	: Intermediate Distillates
Synonyms	Coker Distillate, Crude Diesel, Crude Kerosene, DHDS Charge, DHDS Rundown, DHDS Stripper Bottoms, DHT Stripper Charge, DHT Unit Charge, Diesel, Distillate, Gofiner Diesel, Gofiner Kerosene, Heavy Cat Naphtha (HCN), Heavy Cycle Oil (HCO), Heavy Diesel, HTU1 Cold Feed, HTU1 intermediate, HTU1 Stripper Bottoms, HTU4 Cold Feed, HTU4 intermediate, HTU4 Stripper Bottoms, HTU5 Cold Feed, HTU5 intermediate, HTU5 Stripper Bottoms, Jet A, Jet Fuel, Kerosene, Light Atmospheric Gas Oil (LAGO), FCCU Light Cycle Oil (LCO), Light Coker Gas Oil (LCGO), Light vacuum gas oil (LVGO), Stove Oil, Straight Run Diesel, U8 Naphtha, Ultralow Sulfur Diesel (ULSD), Unifiner Charge, Unifiner Rundown, Unifiner Stripper Bottoms, Vacuum Diesel, Vacuum Top Gas Oil, Virgin Diesel
Relevant identified uses of	of the substance or mixture and uses advised against
Product use	: Intermediate.
Manufacturer	<ul> <li>HollyFrontier Refining &amp; Marketing LLC 2828 North Harwood Suite 1300 Dallas, Texas 75201 USA Customer Service: (888) 286-8836</li> </ul>
Emergency telephone number	CHEMTREC® (800) 424-9300 CCN 201319
Section 2. Hazar	ds identification
OSHA/HCS status	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CER 1910 1200)

Classification of the substance or mixture FLAMMABLE LIQUIDS - Category 3 SKIN CORROSION/IRRITATION - Category 2 TOXIC TO REPRODUCTION (Unborn child) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -Category 3 ASPIRATION HAZARD - Category 1

GHS label elements Hazard pictograms	
Signal word	: Danger
Hazard statements	<ul> <li>Flammable liquid and vapor.</li> <li>Causes skin irritation.</li> <li>Suspected of damaging the</li> </ul>

Causes skin irritation. Suspected of damaging the unborn child. May be fatal if swallowed and enters airways. May cause drowsiness and dizziness.

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### Precautionary statements

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Intermediate Distillarease	L-03791 Document 29-5 Filed in TXSB on 08/03/21 Homogen of the market	
Prevention	Obtain special instructions before use. Do not handle until all safety precautions been read and understood. Use personal protective equipment as required. We protective gloves. Wear eye or face protection. Keep away from heat, sparks, op flames and hot surfaces No smoking. Use explosion-proof electrical, ventilating lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. only outdoors or in a well-ventilated area. Avoid breathing vapor. Wash hands thoroughly after handling.	have ar ben J, Use
Response	IF exposed or concerned: Get medical attention. IF INHALED: Remove victim to air and keep at rest in a position comfortable for breathing. Call a POISON CENT physician if you feel unwell. IF SWALLOWED: Immediately call a POISON CENT physician. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. If skin irritation occurs medical attention.	o fresh FER or TER or all 1 : Get
Storage	Store in a well-ventilated place. Keep cool.	
Disposal	Dispose of contents and container in accordance with all local, regional, national international regulations.	and
Supplemental label elements	: Avoid contact with skin and clothing. Wash thoroughly after handling.	
Hazards not otherwise classified	<ul> <li>Prolonged or repeated contact may dry skin and cause irritation. May release hyd sulfide a poisonous gas that can accumulate in confined spaces.</li> </ul>	rogen

# Section 3. Composition/information on ingredients

Substance/mixture

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: Mixture.

### CAS number/other identifiers

CAS number	Not available.
Product code	Not available.

Ingredient name	%	CAS number
Naphtha	0 - 50	8030-30-6
Distillates (petroleum), hydrotreated light	0 - 50	64742-47-8
toluene	0 - 5	108-88-3
1,2,4-trimethylbenzene	0 - 0.7	95-63-6
nonane	0 - 0.7	111-84-2
n-hexane	0 - 0.5	110-54-3
naphthalene	0 - 0.2	91-20-3
hydrogen sulfide	0.0001	7783-06-4

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

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# Section 4. First aid measures

Description of necess	ary first aid measures
Eye contact	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention. Continue to rinse for at least 15 minutes.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

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Skin contact	Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Continue to rinse for at least 15 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Most important symptom	s/effects, acute and delayed
Potential acute health e	ffects
Eye contact	May cause mild eye irritation.
Inhalation	<ul> <li>Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness.</li> </ul>
Skin contact	: Causes skin irritation. Defatting to the skin.
Ingestion	: Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomach.
Over-exposure signs/sy	mptoms
Eye contact	: pain or irritation; watering; redness
Inhalation	: nausea or vomiting; headache; drowsiness/fatigue; dizziness/vertigo; unconsciousness
Skin contact	irritation; redness; dryness; cracking
Ingestion	: nausea or vomiting
Indication of immediate n	nedical attention and special treatment needed, if necessary
Notes to physician	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Epinephrine and other sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to high concentrations of hydrocarbon solvents.
Specific treatments	No specific treatment.
Protection of medical responders	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
See toxicological informa	tion (Section 11)

# Section 5. Fire-fighting measures

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Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
Specific hazards arising from the chemical	Flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain. May release hydrogen sulfide a poisonous gas that can accumulate in confined spaces.
Hazardous thermal decomposition products	Decomposition products may include the following materials: carbon dioxide carbon monoxide

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Special protective actions for fire-fighters	<ul> <li>Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.</li> </ul>
Special protective equipment for fire-fighters	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

# Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

For non-emergency personnel		No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. May release hydrogen sulfide a poisonous gas that can accumulate in confined spaces.
For emergency responders	:	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions		Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.
Methods and materials for co	nt	ainment and cleaning up
Small spill	50002	Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	:	Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, waterways, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

# Section 7. Handling and storage

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### Precautions for safe handling

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Protective measures	Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not swallow. Avoid breathing vapor or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container. High pressure skin injections are serious medical emergencies. Injury will not appear serious at first. Within a few hours, tissue will become swollen, discolored and extremely painful. May release hydrogen sulfide a poisonous gas that can accumulate in confined spaces.
Advice on general occupational hygiene	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

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# including any incompatibilities

**Conditions for safe storage**, Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and wellventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

# Section 8. Exposure controls/personal protection

#### **Control parameters**

#### Occupational exposure limits

Ingredient name	Exposure limits		
Naphtha	OSHA PEL (United States, 2/2013). TWA: 400 mg/m <sup>3</sup> 8 hours. TWA: 100 ppm 8 hours. OSHA PEL 1989 (United States, 3/1989). TWA: 100 ppm 8 hours.		NIOSH REL (United States, 10/2013). TWA: 400 mg/m <sup>3</sup> 10 hours. TWA: 100 ppm 10 hours.
Distillates (petroleum), hydrotreated light	OSHA PEL 1989 (United States, 3/1989). TWA: 400 mg/m <sup>3</sup> 8 hours. TWA: 100 ppm 8 hours. TWA: 375 mg/m <sup>3</sup> 8 hours. STEL: 150 ppm 15 minutes. STEL: 560 mg/m <sup>3</sup> 15 minutes. OSHA PEL Z2 (United States, 2/2013).	ACGIH TLV (United States, 3/2012). Absorbed through skin. TWA: 200 mg/m <sup>3</sup> , (as total hydrocarbon vapor) 8 hours. ACGIH TLV (United States, 6/2013). TWA: 20 ppm 8 hours.	NIOSH REL (United States, 10/2013). TWA: 100 ppm 10 hours. TWA: 375 mg/m <sup>3</sup> 10 hours. STEL: 150 ppm 15 minutes. STEL: 560 mg/m <sup>3</sup> 15 minutes.
1,2,4-trimethylbenzene	TWA: 200 ppm 8 hours. CEIL: 300 ppm AMP: 500 ppm 10 minutes. OSHA PEL 1989 (United States,	ACGIH TLV (United States,	NIOSH REL (United States,
nonane	TWA: 25 ppm 8 hours. TWA: 125 mg/m <sup>3</sup> 8 hours. OSHA PEL 1989 (United States, 3/1989).	TWA: 25 ppm 8 hours. TWA: 123 mg/m <sup>3</sup> 8 hours. ACGIH TLV (United States, 6/2013).	TWA: 25 ppm 10 hours. TWA: 125 mg/m <sup>3</sup> 10 hours. NIOSH REL (United States, 10/2013).
n-hexane	TWA: 200 ppm 8 hours. TWA: 1050 mg/m <sup>3</sup> 8 hours. OSHA PEL 1989 (United States, 3/1989). TWA: 50 ppm 8 hours. TWA: 180 mg/m <sup>3</sup> 8 hours. OSHA PEL (United States, 2/2013).	TWA: 200 ppm 8 hours. TWA: 1050 mg/m <sup>3</sup> 8 hours. ACGIH TLV (United States, 6/2013). Absorbed through skin. TWA: 50 ppm 8 hours.	TWA: 200 ppm 10 hours. TWA: 1050 mg/m <sup>3</sup> 10 hours. NIOSH REL (United States, 10/2013). TWA: 50 ppm 10 hours. TWA: 180 mg/m <sup>3</sup> 10 hours.
naphthalene	TWA: 500 ppm 8 hours. TWA: 1800 mg/m <sup>3</sup> 8 hours. OSHA PEL 1989 (United States, 3/1989). STEL: 15 ppm 15 minutes. STEL: 75 mg/m <sup>3</sup> 15 minutes. TWA: 10 ppm 8 hours. OSHA PEL (United States, 2/2013). TWA: 10 ppm 8 hours.	ACGIH TLV (United States, 6/2013). Absorbed through skin. TWA: 10 ppm 8 hours. TWA: 52 mg/m <sup>3</sup> 8 hours. STEL: 15 ppm 15 minutes. STEL: 79 mg/m <sup>3</sup> 15 minutes.	NIOSH REL (United States, 10/2013). TWA: 10 ppm 10 hours. TWA: 50 mg/m <sup>3</sup> 10 hours. STEL: 15 ppm 15 minutes. STEL: 75 mg/m <sup>3</sup> 15 minutes.
hydrogen sulfide	TWA: 50 mg/m <sup>3</sup> 8 hours. OSHA PEL 1989 (United States, 3/1989). TWA: 10 ppm 8 hours. TWA: 14 mg/m <sup>3</sup> 8 hours. STEL: 15 ppm 15 minutes. STEL: 21 mg/m <sup>3</sup> 15 minutes. OSHA PEL Z2 (United States, 2/2013). CEIL: 20 ppm AMP: 50 ppm 10 minutes.	ACGIH TLV (United States, 6/2013). TWA: 1 ppm 8 hours. STEL: 5 ppm 15 minutes.	NIOSH REL (United States, 10/2013). CEIL: 10 ppm 10 minutes. CEIL: 15 mg/m <sup>3</sup> 10 minutes.

Appropriate engineering controls	Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment. May release hydrogen sulfide a poisonous gas that can accumulate in confined spaces.
Environmental exposure	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some

they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
Skin protection	
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body protection	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti- static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
Other skin protection	<ul> <li>Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.</li> </ul>
Respiratory protection	: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

# Section 9. Physical and chemical properties

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<u>Appearance</u>		
Physical state	👔 Liquid.	
Color	Amber.	
Odor	Diesel	
Odor threshold	Not available.	
рН	Not available.	
Melting point	15°C (<59°F)	
Boiling point	85 to 266°C (185 to 511°F)	
Flash point	39 to 101°C (102 to 214°F)	
Evaporation rate	Not available.	
Flammability (solid, gas)	🗧 Not available.	

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Lower and upper explosive : Not available.	
Vapor pressure         : 6.9 to 89.6 kPa (51.711 to 672.24 mm Hg) 1 - 13 psi	
Vapor density Not available.	
Specific gravity 0.55 to 1	
Solubility Insoluble in the following materials: cold water and hot water.	
Partition coefficient: n- Not available. octanol/water	
Auto-ignition temperature : Not available.	
Decomposition temperature : Not available.	
Viscosity : Kinematic (40°C (104°F)): 0.017 to 0.096 cm <sup>2</sup> /s (1.7 to 9.6 cSt)	
Molecular weight : Not applicable.	

# Section 10. Stability and reactivity

Reactivity	ŝ	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability		The product is stable.
Possibility of hazardous reactions		Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid		Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Incompatible materials		Reactive or incompatible with the following materials: oxidizing materials
Hazardous decomposition products		Under normal conditions of storage and use, hazardous decomposition products should not be produced.

# Section 11. Toxicological information

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### Information on toxicological effects

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure	
Naphtha	LC50 Inhalation Vapor LD50 Dermal	Rat Rabbit	>5.2 mg/l >2000 mg/kg	4 hours -	
Distillates (petroleum), hydrotreated light	LD50 Oral LC50 Inhalation Dusts and mists	Rat Rat	>5000 mg/kg >5.28 mg/l	- 4 hours	
	LD50 Dermal LD50 Oral	Rabbit Rat	>2000 mg/kg >5000 mg/kg	-	
Conclusion/Summary	: Based on CONCAWE assessment of low boiling point naphthas (Gasolines).				

: Based on CONCAWE assessment of low boiling point naphthas (Gasolines). Based on CONCAWE assessment of kerosenes.

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Naphtha	Eyes - Mild irritant Skin - Moderate irritant	Rabbit Rabbit	-	100 microliters 500 microliters	-

#### Conclusion/Summary

Intermediate Distillatesase 21-03	379	L Docur	nent 29-5	5 Filed in TXSB on 08/03/21 Hop agener of the a Marketing LLC
Skin		Based or moderate Based or irritating t	CONCAW severe irri CONCAW o skin.	/E assessment of low boiling point naphthas (Gasolines) . Slight to tating to skin. /E assessment of kerosenes. Non-irritating to moderate/severe
Eyes	0.000	Based on irritating t Based on	CONCAW o the eyes. CONCAW	'E assessment of low boiling point naphthas (Gasolines). Non- 'E assessment of kerosenes. Slightly irritating to the eyes.
Sensitization				
Conclusion/Summary				
Skin	:	Based on sensitizin Based on	CONCAW g. CONCAW	E assessment of low boiling point naphthas (Gasolines). Not E assessment of kerosenes. Not sensitizing.
Respiratory	:	No data a	vailable.	
Carcinogenicity				
Product/ingredient name		OSHA	IARC	NTP

Product/ingredient name	OSHA	IARC	NTP
toluene	-	3	
naphthalene		2B	Reasonably anticipated to be a human carcinogen.

### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Naphtha	Category 3	Not applicable.	Narcotic effects
Distillates (petroleum), hydrotreated light	Category 3	Not applicable.	Narcotic effects

### Specific target organ toxicity (repeated exposure)

Not available.

#### Aspiration hazard

Name	Result
Naphtha	ASPIRATION HAZARD - Category 1
Distillates (petroleum), hydrotreated light	ASPIRATION HAZARD - Category 1

#### Information on the likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation.

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Delayed and immediate effects and also chronic effects from short and long term exposure

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Short term exposure		
Potential immediate effects	:	Not available.
Potential delayed effects	1	Not available.
Long term exposure		
Potential immediate effects	1	Not available.
Potential delayed effects	:	Not available.
Potential chronic health eff	ect	<u>s</u>
Conclusion/Summary	:	Based on CONCAWE assessment of low boiling point naphthas (Gasolines). Inhalation: No systemic toxicity. Dermal: No systemic toxicity. Based on CONCAWE assessment of kerosenes . Inhalation: No systemic toxicity. Dermal: No systemic toxicity.
General	1	Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
Carcinogenicity	;	No known significant effects or critical hazards.
Mutagenicity	:	No known significant effects or critical hazards.
Teratogenicity		Suspected of damaging the unborn child.
Developmental effects		No known significant effects or critical hazards.

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Fertility effects

: No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Route	ATE value
Oral	25440 mg/kg

# Section 12. Ecological information

### **Toxicity**

Product/ingredient name	Result	Species	Exposure
Naphtha	Acute EC50 1 to 10 mg/l Acute IC50 1 to 10 mg/l Acute LC50 1 to 10 mg/l	Daphnia Algae Fish	48 hours 96 hours 96 hours
Conclusion/Summary	Based on CONCAWE assess	pent of low boiling point nanhth	as (Gasolines)

#### Persistence and degradability

Product/ingredient name	Test	Result		Dose		Inoculum
toluene	301C Ready Biodegradability - Modified MITI Test (I)	100 % - 14	days	-		¥
Conclusion/Summary	<ul> <li>Based on CONCAWE assessment of low boiling point naphthas (Gasolines).</li> <li>Based on CONCAWE assessment of kerosenes.</li> </ul>					
Product/ingredient name	Aquatic half-life		Photolysis		Biodeg	radability

r roudebingreatent name	Aquatic nan-inc	Thotolysis	Diodegradability
Naphtha	-	-	Inherent
Distillates (petroleum),		-	Inherent
hydrotreated light			

#### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
Naphtha Distillates (petroleum), hydrotreated light	>4 >4	10 to 2500 -	high high

#### Mobility in soil

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Soil/water partition : Not available. coefficient (Koc)

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**Other adverse effects** : No known significant effects or critical hazards.

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# Section 13. Disposal considerations

Disposal methods	The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when headling optimized container that have not been
	safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues.

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Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

### United States - RCRA Toxic hazardous waste "U" List

Ingredient	CAS #	Status	Reference number
Toluene; Benzene, methyl-	108-88-3	Listed	U220

# Section 14. Transport information

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	DOT Classification	TDG Classification	Mexico Classification	ADR/RID	IMDG	ΙΑΤΑ
UN number	UN1268	UN1268	UN1268	UN1268	UN1268	UN1268
UN proper shipping name	Petroleum distillates, n.o. s Marine pollutant (Distillates (petroleum), hydrotreated light) RQ (toluene)	PETROLEUM DISTILLATES, N.O.S.	DESTILADOS DE PETROLEO, N. E.P.	PETROLEUM DISTILLATES, N.O.S.	PETROLEUM DISTILLATES, N.O.S Marine pollutant (Naphtha)	Petroleum distillates, n.o. s.
Transport hazard class(es)		3	3	3	3	3
Packing group	Ш	111	117	10	10	111
Environmental hazards	No.	No.	No.	No.	Yes.	No.
Additional information	This product may be re- classified as "Combustible Liquid," unless transported by vessel or aircraft. Non- bulk packages (less than or equal to 119 gal) of combustible liquids, that are marine pollutants, are not regulated as hazardous materials in package sizes less than the product reportable quantity,	Explosive Limit and Limited Quantity Index 5 Passenger Carrying Road or Rail Index 60	<u>Special</u> <u>provisions</u> 223	The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg. <u>Hazard</u> identification <u>number</u> 30 <u>Limited</u> <u>quantity</u> 5 L <u>Special</u> <u>provisions</u> 363 <u>Tunnel code</u>	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. <u>Emergency</u> <u>schedules</u> ( <u>EmS</u> ) F-E, S-E <u>Special</u> <u>provisions</u> 223, 363, 955	The environmentally hazardous substance mark may appear if required by other transportation regulations. <b>Passenger</b> <b>and Cargo</b> . <b>Aircraft</b> Quantity limitation: 60 L Packaging instructions: 355 <b>Cargo Aircraft</b> <b>Only</b> Quantity limitation: 220 L Packaging instructions: 366

	Intermediate Distillatease 21-03791	Document 29-5	Filed in TXSB	3 on 08/03/21	Hand Gentlet Holig	🔞 & Marketing LLC
	unless transported by vessel.		([	D/E)		Limited Quantities - Passenger Aircraft
	The marine pollutant mark is not required when transported on					Quantity limitation: 10 L Packaging instructions: Y344
	inland waterways in sizes of ≤5 L or ≤5 kg or by road, rail, or inland air in non-bulk sizes.					<u>Special</u> <u>provisions</u> A3
	Reportable guantity 40000 lbs / 18160 kg [6190.1 gal / 23432.3 L] Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.					
	Yes. <u>Packaging</u> <u>instruction</u> Passenger <u>aircraft</u> Quantity limitation: 60 L <u>Cargo aircraft</u> Quantity limitation: 220 L <u>Special</u> <u>provisions</u> 144, B1, IB3, T4, TP1, TP29					
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Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

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# Section 15. Regulatory information

U.S. Federal regulations	TSCA 4(a) final test rules: nonane
	TSCA 8(a) PAIR: nonane; naphthalene
	United States inventory (TSCA 8b): All components are listed or exempted.
	Clean Water Act (CWA) 307: toluene; naphthalene
	Clean Water Act (CWA) 311: toluene; naphthalene; hydrogen sulfide

Clean Air Act Section 112		Listed
(b) Hazardous Air		
Pollutants (HAPs)		
DEA List II Chemicals	ļ,	Listed

(Essential Chemicals)

### SARA 302/304

Composition/information on ingredients

			SARA 302 TPQ		SARA 304 RQ	
Name	%	EHS	(lbs)	(gallons)	(lbs)	(gallons)
hydrogen sulfide	0.0001	Yes.	500	-	100	-

### SARA 304 RQ

100000000 lbs / 45400000 kg [15475369.2 gal / 58580645.2 L]

### SARA 311/312

Classification

Fire hazard

Immediate (acute) health hazard Delayed (chronic) health hazard

### Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Naphtha Distillates (petroleum), hydrotreated light toluene 1,2,4-trimethylbenzene	0 - 50 0 - 50 0 - 5 0 - 0.7	Yes. Yes. Yes. Yes.	No. No. No. No.	No. No. No. No.	Yes. Yes. Yes. Yes.	Yes. No. Yes. Yes.
nonane n-hexane naphthalene hydrogen sulfide	0 - 0.7 0 - 0.5 0 - 0.2 0.0001	Yes. Yes. Yes. Yes.	No. No. Yes.	No. No. No.	Yes. Yes. Yes. Yes.	No. Yes. Yes. No.

#### SARA 313

	Product name	CAS number	%
Form R - Reporting	toluene	108-88-3	0 - 5
requirements	naphthalene	91-20-3	0 - 0.2
Supplier notification	toluene	108-88-3	0 - 5
	naphthalene	91-20-3	0 - 0.2

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

#### State regulations

Massachusetts	:	The following components are listed: NAPHTHA VM&P TOLUENE
New York	:	The following components are listed: Toluene; Naphthalene
New Jersey	£	The following components are listed: NAPHTHA; BENZIN; TOLUENE; BENZENE, METHYL-; NAPHTHALENE; MOTH FLAKES
Pennsylvania	1	The following components are listed: NAPHTHA; BENZENE, METHYL-; NAPHTHALENE

#### California Prop. 65

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**WARNING:** This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Naphtha toluene	Yes. No.	No. Yes.	No. No.	No. 7000 µg/day (ingestion) 13000 µg/day (inhalation)
naphthalene	Yes.	No.	Yes.	No.

Canada inventory : A

All components are listed or exempted.

International regulations

International lists	Australia inventory (AICS): All components are listed or exempted.
	China inventory (IECSC): All components are listed or exempted.
	Japan inventory: Not determined.
	Korea inventory: All components are listed or exempted.
	Malaysia Inventory (EHS Register): Not determined.
	New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.
	Philippines inventory (PICCS): All components are listed or exempted.
	Taiwan inventory (CSNN): Not determined.

# Section 16. Other information

National Fire Protection Association (U.S.A.)

Health 2 0 Instability/Reactivity Special

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Date of issue/Date of revision	: 7/25/2014.
Date of previous issue	: No previous validation.
Version	: 1
Key to abbreviations	<ul> <li>ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient UN = United Nations</li> </ul>

Indicates information that has changed from previously issued version.

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#### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named manufacturer, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.