



# Safety Data Sheet

HiTEC® 515 Performance Additive

SDS no. H515

Date of issue/Date of revision 2/28/2020

## Section 1. Identification

GHS product identifier : HiTEC® 515 Performance Additive

### In case of emergency - Chemical

0800-70-77-022 (Brazil)  
01-800-681-9531 (Mexico)  
+1-703-527-3887 (International)  
+1-703-741-5979 (Spanish language)  
+1-800-424-9300 (US & Canada)

### Manufacturer / Supplier

Afton Chemical Corporation  
500 Spring St.  
Richmond, VA 23219  
USA

Afton Chemical Canada Corporation  
5045 South Service Road  
Suite 101  
Burlington, ON L7L 5Y7  
905-631-5470

Non-Emergency Telephone: +1-804-788-5800

## Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 3  
SKIN IRRITATION - Category 2  
EYE IRRITATION - Category 2A  
SKIN SENSITIZATION - Category 1  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3

### GHS label elements

Hazard pictograms



Signal word

: Warning

Hazard statements

: Flammable liquid and vapor.  
Causes serious eye irritation.  
Causes skin irritation.  
May cause an allergic skin reaction.  
May cause drowsiness or dizziness.

Precautionary statements

## Section 2. Hazards identification

- Prevention** : Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. 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. Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.
- Response** : IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention. In case of fire, use water spray (fog), foam, dry chemical or CO<sub>2</sub>.
- Storage** : Store locked up. Store in a well-ventilated place. Keep cool.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Supplemental label elements** : Avoid contact with skin and clothing. Wash thoroughly after handling.
- Additional hazards** : Prolonged or repeated contact may dry skin and cause irritation.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

Ingredient name	CAS number	Conc. (% w/w)	US GHS Classification
Distillates (petroleum), hydrotreated light	64742-47-8	≥35 - ≤45	FLAMMABLE LIQUIDS - Category 3 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 1 Not classified.
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7	≥10 - ≤15	
bis(dipentylphenyl) hydrogen phosphate	64051-38-3	≥3 - <5	FLAMMABLE LIQUIDS - Category 3 SKIN CORROSION - Category 1C SERIOUS EYE DAMAGE - Category 1 SKIN SENSITIZATION - Category 1B

Any concentration shown as a range is to protect confidentiality or is due to batch variation. If specific chemical identify is withheld, it is to protect confidentiality.

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

## Section 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : If inhaled, remove to fresh air. 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,

## Section 4. First aid measures

tie, belt or waistband. If not breathing, give artificial respiration. If breathing is difficult, administer oxygen.

- Skin contact** : Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse. Continue to rinse for at least 15 minutes.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. 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 symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
- Skin contact** : Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
- Ingestion** : Can cause central nervous system (CNS) depression.

#### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Inhalation** : Adverse symptoms may include the following:  
nausea or vomiting  
headache  
drowsiness/fatigue  
dizziness/vertigo  
unconsciousness
- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness  
dryness  
cracking
- Ingestion** : No specific data.

### Indication of immediate medical 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.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : 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. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : In case of fire, use water spray (fog), foam, dry chemical or CO<sub>2</sub>.
- 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.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
phosphorus oxides

- Special protective actions for fire-fighters** : 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.

- 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.
- For emergency responders** : If specialized 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 containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry 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, water courses, 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

### Precautions for safe handling

#### Protective measures

- : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. 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.

#### 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.

#### Conditions for safe storage, including any incompatibilities

- : 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 well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. 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

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

### Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
Distillates (petroleum), hydrotreated light	<b>ACGIH TLV (United States, 3/2019). Absorbed through skin.</b> TWA: 200 mg/m <sup>3</sup> , (as total hydrocarbon vapor) 8 hours.
Distillates (petroleum), hydrotreated heavy paraffinic	<b>ACGIH TLV (United States, 3/2019).</b> TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Inhalable fraction <b>OSHA PEL (United States, 5/2018).</b> TWA: 5 mg/m <sup>3</sup> 8 hours.

#### 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.

#### Environmental exposure controls

- : Emissions from ventilation or work process equipment should be checked to ensure 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

## Section 8. Exposure controls/personal protection

- 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. Contaminated work clothing should not be allowed out of the workplace. 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** : 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.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties

### Appearance

- Physical state** : Liquid.
- Color** : Amber. to Brown. [Dark]
- Odor** : Not available.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point** : Not available.
- Boiling point** : Not available.
- Flash point** : Closed cup: 49°C (120.2°F) [Pensky-Martens. Minimum]
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Not available.
- Vapor pressure** : Not available.
- Vapor density** : Not available.
- Density** : 0.878 g/cm<sup>3</sup> [60.1°F (15.6°C)]
- Relative density** : Not available.
- Solubility** : Insoluble in the following materials: cold water.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.



## Section 9. Physical and chemical properties

- Viscosity** : ☒ Kinematic (40°C (104°F)): 0.4 cm<sup>2</sup>/s (40 cSt)  
Not available.
- Explosive properties** : ☒ Not available.
- Oxidizing properties** : ☒ Not available.

## Section 10. Stability and reactivity

- Reactivity** : 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

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Test	Result	Species	Dose	Exposure	Remarks
<input checked="" type="checkbox"/> Distillates (petroleum), hydrotreated light	403 Acute Inhalation Toxicity	LC50 Inhalation Vapor	Rat	>5.28 mg/l	4 hours	Based on data for a similar substance.
	402 Acute Dermal Toxicity	LD50 Dermal	Rabbit	>2000 mg/kg	-	Based on data for a similar substance.
	420 Acute Oral Toxicity - Fixed Dose Method	LD50 Oral	Rat	>5000 mg/kg	-	Based on data for a similar substance.
Distillates (petroleum), hydrotreated heavy paraffinic	403 Acute Inhalation Toxicity	LC50 Inhalation Vapor	Rat	>5.53 mg/l	4 hours	-
	402 Acute Dermal Toxicity	LD50 Dermal	Rabbit	>5000 mg/kg	-	Based on data for a similar substance.
	401 Acute Oral Toxicity	LD50 Oral	Rat	>5000 mg/kg	-	Based on data for a similar substance.
bis(dipentylphenyl) hydrogen phosphate	402 Acute Dermal Toxicity	LD50 Dermal	Rat	>5000 mg/kg	-	-
	401 Acute Oral Toxicity	LD50 Oral	Rat	2610 mg/kg	-	-

**Conclusion/Summary** : Not available.

#### Irritation/Corrosion

## Section 11. Toxicological information

Product/ingredient name	Test	Species	Result	Remarks
Distillates (petroleum), hydrotreated light	404 Acute Dermal Irritation/Corrosion None available.	Rabbit Rabbit	Skin - Irritant Eyes - Irritant	Based on data for a similar substance. Based on data for a similar substance.
Distillates (petroleum), hydrotreated heavy paraffinic	404 Acute Dermal Irritation/Corrosion 405 Acute Eye Irritation/Corrosion	Rabbit Rabbit	Skin - Not an Irritant Eyes - Not an Irritant	Based on data for a similar substance. Based on data for a similar substance.
bis(dipentylphenyl) hydrogen phosphate	404 Acute Dermal Irritation/Corrosion 405 Acute Eye Irritation/Corrosion	Rabbit Rabbit	Skin - Severe irritant Eyes - Visible necrosis	- -

### Conclusion/Summary

- Skin** : Causes skin irritation. Based on test data for this or similar products.
- Eyes** : Causes serious eye irritation. Based on test data for this or similar products.
- Respiratory** : Not available.

### Sensitization

Product/ingredient name	Test	Route of exposure	Species	Result	Remarks
Distillates (petroleum), hydrotreated light	406 Skin Sensitization	skin	Guinea pig	Not sensitizing	Based on data for a similar substance.
Distillates (petroleum), hydrotreated heavy paraffinic	406 Skin Sensitization	skin	Guinea pig	Not sensitizing	Based on data for a similar substance.
bis(dipentylphenyl) hydrogen phosphate	406 Skin Sensitization	skin	Guinea pig	Sensitizing	-

### Conclusion/Summary

- Skin** : May cause an allergic skin reaction.
- Respiratory** : Not available.

### Mutagenicity

Product/ingredient name	Test	Experiment	Result	Remarks
Distillates (petroleum), hydrotreated light	471 Bacterial Reverse Mutation Test 479 Genetic Toxicology: <i>In vitro</i> Sister Chromatid Exchange Assay in Mammalian Cells	Experiment: In vitro Subject: Bacteria Experiment: In vitro Subject: Mammalian-Animal	Negative Negative	- Based on data for a similar substance.
Distillates (petroleum), hydrotreated heavy paraffinic	471 Bacterial Reverse Mutation Test 473 <i>In vitro</i> Mammalian Chromosomal Aberration Test 476 <i>In vitro</i> Mammalian Cell Gene Mutation Test 474 Mammalian Erythrocyte Micronucleus Test	Experiment: In vitro Subject: Bacteria Experiment: In vitro Subject: Mammalian-Animal Experiment: In vitro Subject: Mammalian-Animal Experiment: In vivo Subject: Mammalian-Animal	Negative Negative Negative Negative	Based on data for a similar substance. Based on data for a similar substance. Based on data for a similar substance. Based on data for a similar substance.
bis(dipentylphenyl) hydrogen phosphate	None available.	Experiment: In vitro Subject: Bacteria	Negative	-

- Conclusion/Summary** : Not available.

### Carcinogenicity

Product/ingredient name	Test	Species	Exposure	Result	Remarks
Distillates (petroleum), hydrotreated heavy paraffinic	451 Carcinogenicity Studies	Mouse	78 weeks	Negative - Dermal - NOAEL	Based on data for a similar substance.



## Section 11. Toxicological information

**Conclusion/Summary** : Not available.

### Classification

#### Reproductive toxicity

Product/ingredient name	Test	Route of exposure	Species	Maternal toxicity	Fertility	Development toxin	Remarks
Distillates (petroleum), hydrotreated light	None available.	Oral	Rat	Negative	Negative	Negative	Based on data for a similar substance.
Distillates (petroleum), hydrotreated heavy paraffinic	421 Reproduction/ Developmental Toxicity Screening Test	Oral	Rat	Negative	Negative	Negative	Based on data for a similar substance.

**Conclusion/Summary** : Not available.

#### Teratogenicity

Product/ingredient name	Test	Species	Result	Remarks
Distillates (petroleum), hydrotreated light	414 Prenatal Developmental Toxicity Study	Rat	Negative - Oral	Based on data for a similar substance.
	414 Prenatal Developmental Toxicity Study	Rat	Negative - Route of exposure unreported	Based on data for a similar substance.
Distillates (petroleum), hydrotreated heavy paraffinic	414 Prenatal Developmental Toxicity Study	Rat	Negative - Dermal	Based on data for a similar substance.

**Conclusion/Summary** : Not available.

#### Specific target organ toxicity (single exposure)

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

#### Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Not available.			

#### Aspiration hazard

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

**Information on the likely routes of exposure** : Skin, Eyes, Ingestion, and Inhalation

#### Potential acute health effects

**Eye contact** : Causes serious eye irritation.

**Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.

**Skin contact** : Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.

**Ingestion** : Can cause central nervous system (CNS) depression.

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

**Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness

## Section 11. Toxicological information

- Inhalation** : Adverse symptoms may include the following:  
nausea or vomiting  
headache  
drowsiness/fatigue  
dizziness/vertigo  
unconsciousness
- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness  
dryness  
cracking
- Ingestion** : No specific data.

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

#### Short term exposure

- Potential immediate effects** : Inhalation of oil mist or vapors at elevated temperatures may cause respiratory irritation. Ingestion may cause gastrointestinal irritation and diarrhea.
- Potential delayed effects** : Not available.

#### Long term exposure

- Potential immediate effects** : Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.
- Potential delayed effects** : Not available.

#### Potential chronic health effects

Product/ingredient name	Test	Species	Dose	Exposure	Result	Remarks
Distillates (petroleum), hydrotreated light	None available.	Rat	750 mg/kg	-	Sub-chronic NOAEL Oral	Based on data for a similar substance.
	410 Repeated Dose Dermal Toxicity: 21/28-day Study	Rat	500 mg/kg	-	Sub-acute NOAEL Dermal	Based on data for a similar substance.
	413 Subchronic Inhalation Toxicity: 90-day Study	Rat	0.5 mg/l	90 days	Sub-chronic LOAEL Inhalation Vapor	Based on data for a similar substance.
	408 Repeated Dose 90-Day Oral Toxicity Study in Rodents	Rat	125 mg/kg	-	Sub-chronic LOAEL Oral	Based on data for a similar substance.
	411 Subchronic Dermal Toxicity: 90-day Study	Rat	30 mg/kg	-	Sub-chronic NOAEL Dermal	Based on data for a similar substance.
	410 Repeated Dose Dermal Toxicity: 21/28-day Study	Rabbit	1000 mg/kg	-	Sub-acute NOAEL Dermal	Based on data for a similar substance.
	None available.	Rat	0.22 mg/l	4 weeks	Sub-chronic NOAEL Inhalation Dusts and mists	Based on data for a similar substance.
	None available.	Rat	0.15 mg/l	13 weeks	Sub-chronic NOAEL Inhalation Dusts and mists	Based on data for a similar substance.
Distillates (petroleum), hydrotreated heavy paraffinic						

- Conclusion/Summary** : Not available.
- General** : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

## Section 11. Toxicological information

<b>Carcinogenicity</b>	: No known significant effects or critical hazards.
<b>Mutagenicity</b>	: No known significant effects or critical hazards.
<b>Teratogenicity</b>	: No known significant effects or critical hazards.
<b>Developmental effects</b>	: No known significant effects or critical hazards.
<b>Fertility effects</b>	: No known significant effects or critical hazards.

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure	Remarks
Distillates (petroleum), hydrotreated light	Acute EL50 1 to 3 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours	-
	Acute EL50 1.4 mg/l	Daphnia - Daphnia magna	48 hours	-
	Acute LL50 2 to 5 mg/l	Fish - Oncorhynchus mykiss	96 hours	-
	Chronic NOEL 0.89 mg/l	Daphnia - Daphnia magna	21 days	-
	Chronic NOEL 0.098 mg/l	Fish - Oncorhynchus mykiss	28 days	-
Distillates (petroleum), hydrotreated heavy paraffinic	Acute EL50 >10000 mg/l	Daphnia - Daphnia magna	48 hours	Based on data for a similar substance.
	Acute LL50 >100 mg/l	Fish - Pimephales promelas	96 hours	Based on data for a similar substance.
	Chronic NOEL ≥100 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours	Based on data for a similar substance.
	Chronic NOEL 10 mg/l	Daphnia - Daphnia magna	21 days	Based on data for a similar substance.
	Chronic NOEL 1000 mg/l	Fish - Oncorhynchus mykiss	14 days	QSAR result.
bis(dipentylphenyl) hydrogen phosphate	Acute EC50 32.5 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours	-
	Acute EL50 1.8 mg/l	Daphnia - Daphnia magna	48 hours	-
	Chronic EC10 16.2 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours	-

**Conclusion/Summary** : Toxic to aquatic life with long lasting effects.

### Persistence and degradability

Product/ingredient name	Test	Result	Remarks
Distillates (petroleum), hydrotreated heavy paraffinic	OECD 301F Ready Biodegradability - Manometric Respirometry Test	31 % - Not readily - 28 days	Based on data for a similar substance.
bis(dipentylphenyl) hydrogen phosphate	OECD 301D Ready Biodegradability - Closed Bottle Test	6.2 % - Not readily - 28 days	-

## Section 12. Ecological information

### Bioaccumulative potential




Not available.

## 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 handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. 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.

## Section 14. Transport information

Regulatory information	UN number	Proper shipping name	Class	Packing group	Label	Additional information
<b>DOT Classification</b>	NA1993	Combustible liquid, n.o.s. (Alkaryl phosphate )	Combustible liquid.	III		
<b>TDG Classification</b>	UN1993	FLAMMABLE LIQUID, N.O. S. ( Alkaryl phosphate). Marine pollutant	3	III		
<b>IMDG Class</b>	UN1993	FLAMMABLE LIQUID, N.O. S. ( Alkaryl phosphate). Marine pollutant	3	III		<b>Remarks</b> Marine pollutant
<b>IATA-DGR Class</b>	UN1993	FLAMMABLE LIQUID, N.O. S. ( Alkaryl phosphate)	3	III		

### Notice to reader

The above transport information is provided to assist in the proper classification of this product and may not be suitable for all shipping conditions.

## Section 15. Regulatory information

### U.S. Federal regulations :

#### SARA 302/304

#### Composition/information on ingredients

No products were found.

#### SARA 311/312

## Section 15. Regulatory information

**Classification** : FLAMMABLE LIQUIDS - Category 3  
 SKIN IRRITATION - Category 2  
 EYE IRRITATION - Category 2A  
 SKIN SENSITIZATION - Category 1  
 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3  
 HNOC - Defatting irritant

### Composition/information on ingredients

Name	%	Classification
Distillates (petroleum), hydrotreated light	≥35 - ≤45	FLAMMABLE LIQUIDS - Category 3 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 1 HNOC - Defatting irritant HNOC - Static-accumulating flammable liquid
bis(dipentylphenyl) hydrogen phosphate	≥3 - <5	FLAMMABLE LIQUIDS - Category 3 SKIN CORROSION - Category 1C SERIOUS EYE DAMAGE - Category 1 SKIN SENSITIZATION - Category 1B

### SARA 313

No SARA 313 chemicals are present above the reporting threshold.

**RQ (Reportable quantity)** : CERCLA: Hazardous substances.: naphthalene: 100 lbs. (45.4 kg); toluene: 1000 lbs. (454 kg); benzene: 10 lbs. (4.54 kg); ethylbenzene: 1000 lbs. (454 kg);

### United States - TSCA 12(b) - Chemical export notification

List name	Status	Name on list	Ref. number
None of the components are listed.			

### State - California Prop. 65

**WARNING:** This product contains less than 0.1% of a chemical known to the State of California to cause cancer.

**WARNING:** This product contains less than 1% of a chemical known to the State of California to cause birth defects or other reproductive harm.

Ingredient name	%	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Naphthalene	≤0.0001	Yes.	No.	Yes.	-
Toluene	≤0.0001	No.	Yes.	-	Yes.
Benzene	≤0.0001	Yes.	Yes.	Yes.	Yes.
Ethylbenzene	≤0.0001	Yes.	No.	Yes.	-

### Canadian regulations

**Canadian NPRI** : The following components are listed: hydrotreated light distillate

**CEPA Toxic substances** : None of the components are listed.

### International Inventory Status

**Australia** : All components are listed or exempted.  
**Canada** : All components are listed or exempted.  
**China** : All components are listed or exempted.  
**Japan** : All components are listed or exempted.  
**Republic of Korea** : All components are listed or exempted.  
**New Zealand** : All components are listed or exempted.  
**Philippines** : All components are listed or exempted.  
**Taiwan** : All components are listed or exempted.  
**United States Active** : All components are active or exempted.

## Section 15. Regulatory information

### Europe

: For information on compliance with regulation (EC) No. 1907/2006 (REACH) and amendments please contact your Afton representative.

## Section 16. Other information

### History

**Date of issue/Date of revision** : 2/28/2020

**Prepared by** : EHS Department (Tel: +1 804 788 5800)

### Key to abbreviations

: ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container  
IMDG = International Maritime Dangerous Goods  
LogPow = logarithm of the octanol/water partition coefficient  
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
UN = United Nations  
WOE = Weight of Evidence

Indicates information that has changed from previously issued version.

### Notice to reader

*This information and these recommendations are offered in good faith and believed to be correct as of the date hereof. Information and recommendations are supplied upon the condition that the recipients will make their own decision as to safety and suitability for their purposes. No representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose, or of any other nature, are made with respect to the product or the information and recommendations. Afton makes no representation as to completeness or accuracy. In no event will Afton be responsible for damages of any nature whatsoever resulting from the use or reliance upon the information and recommendations.*