



# Safety Data Sheet

**HiTEC® 11170 Performance Additive**

**SDS no.** H11170

**Date of issue/Date of revision** 9/2/2020

## Section 1. Identification

**GHS product identifier** : HiTEC® 11170 Performance Additive  
**Product use** : Petrochemical industry: Lubricating Oil 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** : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

**Classification of the substance or mixture** : Not classified.

### **GHS label elements**

**Signal word** : No signal word.

**Hazard statements** : No known significant effects or critical hazards.

### **Precautionary statements**

**Prevention** : Not applicable.

**Response** : Not applicable.

**Storage** : Store in well-ventilated place.

**Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Additional hazards** : When heated above 90°C (194°F), thermal decomposition may occur producing CO, CO<sub>2</sub>, phosphorus oxides, metal oxide/ oxides, hydrogen sulfide.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

Ingredient name	CAS number	Conc. (% w/w)	US GHS Classification
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7	≥25 - ≤35	Not classified.
zinc O,O',O',O'-tetrakis(1,3-dimethylbutyl) bis (phosphorodithioate)	2215-35-2	≥5 - ≤10	SKIN IRRITATION - Category 2 SERIOUS EYE DAMAGE - Category 1
Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	≥3 - ≤5	Not classified.
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7	≥1 - ≤3	ASPIRATION HAZARD - Category 1
zinc bis[O,O-bis(2-ethylhexyl)] bis (dithiophosphate)	4259-15-8	≥1 - ≤3	SERIOUS EYE DAMAGE - Category 1

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. Get medical attention if irritation occurs.
- Inhalation** : If inhaled, remove to fresh air. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. If not breathing, give artificial respiration. If breathing is difficult, administer oxygen.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- Ingestion** : Wash out mouth with water. 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. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

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

#### Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : No specific data.

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

## Section 4. First aid measures

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** : In a fire or if heated, a pressure increase will occur and the container may burst.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides  
sulfur oxides  
phosphorus oxides  
metal oxide/oxides  
Hydrogen sulfide

**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. Take precautions to limit storage vessel surface temperature to below 121°C (250°F).

**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. 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).

### Methods and materials for containment and cleaning up

**Small spill** : Stop leak if without risk. Move containers from spill area. 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. 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. 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).
- 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 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. 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.

The following information is provided for health and safety purposes. Please refer to individual product specification documents for quality-related storage and handling. Preferred storage temperature is between ambient and 70°C. Exposure to elevated temperatures will increase the rate of hydrogen sulfide (H<sub>2</sub>S) and mercaptan generation. Temperatures above 90°C should be avoided unless an appropriate engineering review has been conducted on the process.

## 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 heavy paraffinic	<b>ACGIH TLV (United States, 3/2018).</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. <b>NIOSH REL (United States, 10/2016).</b> TWA: 5 mg/m <sup>3</sup> 10 hours. Form: Mist STEL: 10 mg/m <sup>3</sup> 15 minutes. Form: Mist
Distillates (petroleum), solvent-dewaxed heavy paraffinic	<b>ACGIH TLV (United States, 3/2018).</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. <b>NIOSH REL (United States, 10/2016).</b> TWA: 5 mg/m <sup>3</sup> 10 hours. Form: Mist STEL: 10 mg/m <sup>3</sup> 15 minutes. Form: Mist
Distillates (petroleum), hydrotreated heavy paraffinic	<b>ACGIH TLV (United States, 3/2018).</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. <b>NIOSH REL (United States, 10/2016).</b> TWA: 5 mg/m <sup>3</sup> 10 hours. Form: Mist STEL: 10 mg/m <sup>3</sup> 15 minutes. Form: Mist

- Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

## Section 8. Exposure controls/personal protection

<b>Environmental exposure controls</b>	: 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.
<b>Individual protection measures</b>	
<b>Hygiene measures</b>	: 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.
<b>Eye/face protection</b>	: 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: safety glasses with side-shields.
<b>Skin protection</b>	
<b>Hand protection</b>	: 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.
<b>Body protection</b>	: 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.
<b>Other skin protection</b>	: 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.
<b>Respiratory protection</b>	: 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

<b>Physical state</b>	: Liquid. [Viscous]
<b>Color</b>	: Brown. [Dark]
<b>Odor</b>	: Mild Petroleum.
<b>Odor threshold</b>	: Not available.
<b>pH</b>	: Not available.
<b>Melting point</b>	: Not available.
<b>Boiling point</b>	: Not available.
<b>Flash point</b>	: Closed cup: 135°C (275°F) [Pensky-Martens. Minimum]
<b>Evaporation rate</b>	: Not available.
<b>Flammability (solid, gas)</b>	: Not available.
<b>Lower and upper explosive (flammable) limits</b>	: Not available.
<b>Vapor pressure</b>	: Not available.
<b>Vapor density</b>	: Not available.
<b>Density</b>	: 0.966 g/cm <sup>3</sup> [60.1°F (15.6°C)]
<b>Relative density</b>	: 0.967
<b>Solubility</b>	: Not available.
<b>Partition coefficient: n-octanol/water</b>	: Not available.
<b>Auto-ignition temperature</b>	: Not available.

## Section 9. Physical and chemical properties

**Decomposition temperature** : Not available.

**Viscosity** :  
87 cSt at 100°C

**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** : High temperatures, sparks and open flames.

**Incompatible materials** : Strong oxidizing and reducing agents.

**Hazardous decomposition products** : Hydrogen sulfide

## Section 11. Toxicological information

### Information on toxicological effects

**Conclusion/Summary** : Not available.

#### Conclusion/Summary

**Skin** : Causes mild skin irritation.

**Eyes** : Non-irritating to the eyes. Based on test data for this or similar products.

**Respiratory** : Not available.

#### Sensitization

##### Conclusion/Summary

**Skin** : Not available.

**Respiratory** : Not available.

#### Mutagenicity

**Conclusion/Summary** : Not available.

#### Carcinogenicity **Result**

**Conclusion/Summary** : Not available.

#### Classification

#### Reproductive toxicity

**Conclusion/Summary** : Not available.

#### Teratogenicity

**Conclusion/Summary** : Not available.

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

Name	Category	Route of exposure	Target organs
Not available.			

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

## Section 11. Toxicological information

Name	Category	Route of exposure	Target organs
Not available.			

### Aspiration hazard

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

### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : No known significant effects or critical hazards.  
**Ingestion** : No known significant effects or critical hazards.

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

**Eye contact** : No specific data.  
**Inhalation** : No specific data.  
**Skin contact** : No specific data.  
**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

**Conclusion/Summary** : Not available.  
**General** : No known significant effects or critical hazards.  
**Carcinogenicity** : No known significant effects or critical hazards.  
**Mutagenicity** : No known significant effects or critical hazards.  
**Teratogenicity** : No known significant effects or critical hazards.  
**Developmental effects** : No known significant effects or critical hazards.  
**Fertility effects** : No known significant effects or critical hazards.

## Section 12. Ecological information

### Toxicity

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

### Persistence and degradability

### Bioaccumulative potential



## Section 12. Ecological information

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)	3.59	-	low

## 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. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-
Transport hazard class(es)	-	-	-	-
Packing group	-	-	-	-
Environmental hazards			No.	No.

### 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.

### Additional information

**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.

**Transport in bulk according to Annex II of MARPOL and the IBC Code** : Not available.



## Section 15. Regulatory information

U.S. Federal regulations :

### SARA 302/304

#### Composition/information on ingredients

Name	%	EHS	SARA 302 TPQ		SARA 304 RQ	
			(lbs)	(gallons)	(lbs)	(gallons)
ethylenediamine	≤0.1	Yes.	10000	1337.1	5000	668.5

### SARA 311/312

Classification : Not applicable.

#### Composition/information on ingredients

Name	%	Classification
zinc O,O,O',O'-tetrakis (1,3-dimethylbutyl) bis (phosphorodithioate)	≥5 - ≤10	SKIN IRRITATION - Category 2 SERIOUS EYE DAMAGE - Category 1
Distillates (petroleum), hydrotreated heavy paraffinic	≥1 - ≤3	ASPIRATION HAZARD - Category 1
zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)	≥1 - ≤3	HNOC - Static-accumulating flammable liquid SERIOUS EYE DAMAGE - Category 1

### SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	zinc O,O,O',O'-tetrakis(1,3-dimethylbutyl) bis (phosphorodithioate)	2215-35-2	≥5 - ≤10
	zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)	4259-15-8	≥1 - ≤3
Supplier notification	zinc O,O,O',O'-tetrakis(1,3-dimethylbutyl) bis (phosphorodithioate)	2215-35-2	≥5 - ≤10
	zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)	4259-15-8	≥1 - ≤3

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.

**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); methyl methacrylate: 1000 lbs. (454 kg); zinc O,O,O',O'-tetrakis(1,3-dimethylbutyl) bis(phosphorodithioate): No RQ is being assigned to the generic or broad class.; zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate): No RQ is being assigned to the generic or broad class.; propylene oxide: 100 lbs. (45.4 kg); ethylene oxide: 10 lbs. (4.54 kg); 1,4-dioxane: 100 lbs. (45.4 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
<input checked="" type="checkbox"/> Naphthalene	≤0.00001	Yes.	No.	Yes.	-
Toluene	≤0.00001	No.	Yes.	-	Yes.
Benzene	≤0.00001	Yes.	Yes.	Yes.	Yes.
Ethylbenzene	≤0.00001	Yes.	No.	Yes.	-
Propylene oxide	≤0.00001	Yes.	No.	-	-
Ethylene oxide	≤0.00001	Yes.	Yes.	Yes.	Yes.
1,4-Dioxane	≤0.00001	Yes.	No.	Yes.	-

## Section 15. Regulatory information

### Canadian regulations

**Canadian NPRI** : The following components are listed: Zinc (and its compounds); Zinc (and its compounds)

**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.  
**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** : 9/2/2020

**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.*