

Section 1. Identification

GHS product identifier : HiTEC[®] 587 Performance Additive
Product use : Petrochemical industry: Grease 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 : SKIN IRRITATION - Category 2
SERIOUS EYE DAMAGE - Category 1
SKIN SENSITIZATION - Category 1
TOXIC TO REPRODUCTION (Fertility) - Category 2
TOXIC TO REPRODUCTION (Unborn child) - Category 2
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (blood system, kidneys) - Category 2

GHS label elements

Hazard pictograms



Signal word : Danger

Hazard statements : Causes serious eye damage.
Causes skin irritation.
May cause an allergic skin reaction.
Suspected of damaging fertility or the unborn child.
May cause damage to organs through prolonged or repeated exposure. (blood system, kidneys)

Precautionary statements

Section 2. Hazards identification

- Prevention** : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Do not breathe vapor. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.
- Response** : Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. 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. Immediately call a POISON CENTER or physician.
- Storage** : Store locked up.
- 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. When heated above 90°C (194°F), thermal decomposition may occur producing CO, CO₂, 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
2,6-di-tert-butylphenol	128-39-2	≥15 - ≤25	SKIN IRRITATION - Category 2
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7	≥10 - ≤15	Not classified.
Phosphorodithioic acid, mixed O,O-bis (2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts	85940-28-9	≥5 - ≤10	SKIN IRRITATION - Category 2 SERIOUS EYE DAMAGE - Category 1
Long-chain alkyl ester	Proprietary	≥1 - ≤3	ACUTE TOXICITY (oral) - Category 4 SKIN IRRITATION - Category 2
N-1-naphthylaniline	90-30-2	≥1 - ≤3	ACUTE TOXICITY (oral) - Category 4 SKIN SENSITIZATION - Category 1B SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (blood system, kidneys) - Category 2
(tetrapropenyl)succinic acid	27859-58-1	≥1 - ≤3	SKIN IRRITATION - Category 2 SERIOUS EYE DAMAGE - Category 1
Solvent naphtha (petroleum), heavy arom. Long-chain alkenyl amide	64742-94-5 68478-81-9	≥1 - ≤3 ≥0.5 - <1	ASPIRATION HAZARD - Category 1 SKIN IRRITATION - Category 2 TOXIC TO REPRODUCTION (Fertility) - Category 2 TOXIC TO REPRODUCTION (Unborn child) - Category 2

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** : Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician.
- Inhalation** : Get medical attention immediately. Call a poison center or physician. 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. 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. 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** : Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician. 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** : Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a 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 damage.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
dryness
cracking
blistering may occur
reduced fetal weight
increase in fetal deaths
skeletal malformations

Section 4. First aid measures

- Ingestion** : Adverse symptoms may include the following:
stomach pains
reduced fetal weight
increase in fetal deaths
skeletal malformations

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. 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 CO₂.
- 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. 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
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. Do not breathe 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".

Section 6. Accidental release measures

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. 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. 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. 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 breathe vapor or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. 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 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. 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 (H₂S) 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	<p>ACGIH TLV (United States, 3/2018). TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction</p> <p>OSHA PEL (United States, 5/2018). TWA: 5 mg/m³ 8 hours.</p> <p>NIOSH REL (United States, 10/2016). TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist</p>

- Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
- 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**
- 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 and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.
- 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.
- 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	: Brown to Amber. [Dark]
Odor	: Sulfurous. [Slight]
Odor threshold	: Not available.
pH	: Not available.
Melting point	: Not available.
Boiling point	: Not available.
Flash point	: Closed cup: 100°C (212°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	: 1.005 g/cm ³ [60.1°F (15.6°C)]
Relative density	: 1.007
Solubility	: Insoluble in the following materials: cold water.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	:
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

Acute toxicity

Product/ingredient name	Test	Result	Species	Dose	Exposure	Remarks
Not available.						

Conclusion/Summary : Not available.

Conclusion/Summary

Section 11. Toxicological information

- Skin** : Causes skin irritation.
Eyes : Causes serious eye damage.
Respiratory : Not available.

Sensitization

Conclusion/Summary

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

Mutagenicity

Product/ingredient name	Test	Experiment	Result	Remarks
Not available.				

- 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)

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** : Causes serious eye damage.
Inhalation : No known significant effects or critical hazards.
Skin contact : Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
 pain
 watering
 redness
- Inhalation** : Adverse symptoms may include the following:
 reduced fetal weight
 increase in fetal deaths
 skeletal malformations

Section 11. Toxicological information

- Skin contact** : Adverse symptoms may include the following:
 pain or irritation
 redness
 dryness
 cracking
 blistering may occur
 reduced fetal weight
 increase in fetal deaths
 skeletal malformations
- Ingestion** : Adverse symptoms may include the following:
 stomach pains
 reduced fetal weight
 increase in fetal deaths
 skeletal malformations

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** : May cause damage to organs through prolonged or repeated exposure. 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.
- 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.
- Fertility effects** : Suspected of damaging fertility.

Section 12. Ecological information

Toxicity

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

Persistence and degradability









Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
2,6-di-tert-butylphenol	4.5	-	high
N-1-naphthylaniline	4.28	1424	high
Solvent naphtha (petroleum), heavy arom.	2.8 to 6.5	99 to 5780	high

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. 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
DOT Classification	UN3082	Environmentally hazardous substance, liquid, n.o.s. (2,6-di-tert-butylphenol). Marine pollutant	9	III	 	
TDG Classification	UN3082	Environmentally hazardous substance, liquid, n.o.s. (2,6-di-tert-butylphenol). Marine pollutant	9	III	 	
IMDG Class	UN3082	Environmentally hazardous substance, liquid, n.o.s. (2,6-di-tert-butylphenol) Marine pollutant	9	III	 	Remarks Marine pollutant
IATA-DGR Class	UN3082	Environmentally hazardous substance, liquid, n.o.s. (2,6-di-tert-butylphenol)	9	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

Name	%	EHS	SARA 302 TPQ		SARA 304 RQ	
			(lbs)	(gallons)	(lbs)	(gallons)
ethylenediamine	≤0.1	Yes.	10000	1337.1	5000	668.5
aniline	≤0.01	Yes.	1000	117.6	5000	587.9
phenol	≤0.01	Yes.	500 / 10000	-	1000	-
propylene oxide	≤0.00001	Yes.	10000	1444.3	100	14.4
ethylene oxide	≤0.00001	Yes.	1000	-	10	-

[SARA 311/312](#)

Section 15. Regulatory information

Classification : SKIN IRRITATION - Category 2
 SERIOUS EYE DAMAGE - Category 1
 SKIN SENSITIZATION - Category 1
 TOXIC TO REPRODUCTION (Fertility) - Category 2
 TOXIC TO REPRODUCTION (Unborn child) - Category 2
 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (blood system, kidneys) - Category 2
 HNOC - Defatting irritant

Composition/information on ingredients

Name	%	Classification
2,6-di-tert-butylphenol	≥15 - ≤25	SKIN IRRITATION - Category 2
Phosphorodithioic acid, mixed O, O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts	≥5 - ≤10	SKIN IRRITATION - Category 2 SERIOUS EYE DAMAGE - Category 1
Long-chain alkyl ester	≥1 - ≤3	ACUTE TOXICITY (oral) - Category 4 SKIN IRRITATION - Category 2
N-1-naphthylaniline	≥1 - ≤3	ACUTE TOXICITY (oral) - Category 4 SKIN SENSITIZATION - Category 1B SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (blood system, kidneys) - Category 2
(tetrapropenyl)succinic acid	≥1 - ≤3	SKIN IRRITATION - Category 2 SERIOUS EYE DAMAGE - Category 1
Solvent naphtha (petroleum), heavy arom.	≥1 - ≤3	ASPIRATION HAZARD - Category 1 HNOC - Defatting irritant HNOC - Static-accumulating flammable liquid
Long-chain alkenyl amide	≥0.5 - <1	SKIN IRRITATION - Category 2 TOXIC TO REPRODUCTION (Fertility) - Category 2 TOXIC TO REPRODUCTION (Unborn child) - Category 2

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	Phosphorodithioic acid, mixed O,O-bis (2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts	85940-28-9	≥5 - ≤10
	N-2-naphthylaniline	135-88-6	<0.1
Supplier notification	Phosphorodithioic acid, mixed O,O-bis (2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts	85940-28-9	≥5 - ≤10

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.: phenol: 1000 lbs. (454 kg); naphthalene: 100 lbs. (45.4 kg); 2-methylpropan-1-ol: 5000 lbs. (2270 kg); ethylenediamine: 5000 lbs. (2270 kg); 1-methylnaphthalene: No RQ is being assigned to the generic or broad class.; 2-methylnaphthalene: 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); toluene: 1000 lbs. (454 kg); benzene: 10 lbs. (4.54 kg); ethylbenzene: 1000 lbs. (454 kg); 1-naphthylamine: 100 lbs. (45.4 kg); 2-naphthylamine: 10 lbs. (4.54 kg); aniline: 5000 lbs. (2270 kg); Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts: No RQ is being assigned to the generic or broad class.;

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.

Section 15. Regulatory information

Ingredient name	%	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Naphthalene	≤0.01	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.	-
Toluene	≤0.00001	No.	Yes.	-	Yes.
Benzene	≤0.00001	Yes.	Yes.	Yes.	Yes.
Ethylbenzene	≤0.00001	Yes.	No.	Yes.	-
1-Naphthylamine	≤0.01	Yes.	No.	-	-
2-Naphthylamine	≤0.001	Yes.	No.	Yes.	-
Aniline	≤0.01	Yes.	No.	Yes.	-

Canadian regulations

Canadian NPRI : The following components are listed: zinc (and its compounds); heavy aromatic solvent naphtha

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 : Not determined.

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 : Not determined.

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 : 1/11/2020

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.