

# **Safety Data Sheet**

**SDS no.** H5158

Date of issue/Date of revision 11/13/2018

# Section 1. Identification

**GHS** product identifier : HiTEC® 5158 Performance Additive

: Petrochemical industry: Lubricating Oil Additive. **Product use** 

### In case of emergency - Chemical

+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

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

Afton Chemical Canada Corporation

5045 South Service Road

Suite 101

Burlington, ON L7L 5Y7

905-631-5470

# 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 : CARCINOGENICITY - Category 2 ASPIRATION HAZARD - Category 1

#### **GHS label elements**

**Hazard pictograms** 



Signal word

: Danger

**Hazard statements** 

: Suspected of causing cancer.

May be fatal if swallowed and enters airways.

### **Precautionary statements**

**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.

Response

: IF exposed or concerned: Get medical attention. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting.

**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.

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# Section 3. Composition/information on ingredients

Substance/mixture : Mixture

| Ingredient name  | CAS number  | Conc. (% w/w) | US GHS Classification   |
|--|-------------|---------------|---|
| Distillates (petroleum), catalytic reformer fractionator residue, low-boiling                                    | 68477-31-6  | ≥75           | ASPIRATION HAZARD - Category 1  |
| Solvent naphtha (petroleum), heavy arom.   | 64742-94-5  | ≥1 - ≤3       | SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 1 |
| Alkylene carboxylic acid polymer condensation product with alkylphenols, aldehyde, anhydride and alkylene oxides | Proprietary | ≥1 - ≤3       | EYE IRRITATION - Category 2A  |
| naphthalene  | 91-20-3     | ≥0.1 - ≤0.5   | FLAMMABLE SOLIDS - Category 2<br>ACUTE TOXICITY (oral) - Category<br>4<br>CARCINOGENICITY - Category 2          |

<sup>\*</sup> HMIRA registration number:12206. Filing date: 27/7/2018.

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 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 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. 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. Get medical attention. 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. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. 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 contactInhalationNo known significant effects or critical hazards.No known significant effects or critical hazards.

**Skin contact**: Defatting to the skin. May cause skin dryness and irritation.

**Ingestion** : May be fatal if swallowed and enters airways.

#### Over-exposure signs/symptoms

Eye contact : No specific data.

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## Section 4. First aid measures

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:

> irritation drvness cracking

Ingestion : Adverse symptoms may include the following:

nausea or vomiting

### 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. It may

be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

### See toxicological information (Section 11)

# Section 5. Fire-fighting measures

#### **Extinguishing media**

Suitable extinguishing

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

**Unsuitable extinguishing** 

media

media

: Do not use water jet.

Specific hazards arising from the chemical

**Hazardous thermal** 

decomposition products

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

: Decomposition products may include the following materials: carbon dioxide

carbon monoxide

**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.

**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. 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 nonemergency 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

# Section 6. Accidental release measures

### **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). Avoid exposure obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not swallow. Avoid breathing vapor or mist. 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.

# including any incompatibilities

Conditions for safe storage, : 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.

# 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), catalytic reformer fractionator residue, low-boiling | OSHA PEL Z2 (United States).           |
|   | TWA: 500 ppm 8 hours.                  |
| naphthalene   | ACGIH TLV (United States, 3/2017).     |
|   | Absorbed through skin.                 |
|   | TWA: 10 ppm 8 hours.                   |
|   | TWA: 52 mg/m <sup>3</sup> 8 hours.     |
|   | OSHA PEL 1989 (United States, 3/1989). |
|   | TWA: 10 ppm 8 hours.                   |
|   | TWA: 50 mg/m <sup>3</sup> 8 hours.     |
|   | STEL: 15 ppm 15 minutes.               |
|   | STEL: 75 mg/m³ 15 minutes.             |
|   | OSHA PEL (United States, 6/2016).      |
|   | TWA: 10 ppm 8 hours.                   |
|   | TWA: 50 mg/m <sup>3</sup> 8 hours.     |
|   | NIOSH REL (United States, 10/2016).    |

# Section 8. Exposure controls/personal protection

TWA: 10 ppm 10 hours. TWA: 50 mg/m³ 10 hours. STEL: 15 ppm 15 minutes. STEL: 75 mg/m³ 15 minutes. Page: 5/13

# 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. 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: safety glasses with sideshields.

#### **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**

**Boiling point** 

Physical state : Liquid.

Color : Slight Hazy Amber.
Odor : Not available.
Odor threshold : Not available.
pH : Not available.
Melting point : Not available.

Flash point : Closed cup: 98°C (208.4°F) [Minimum Pensky-Martens.]

: Not available.

Evaporation rate : Not available.

Flammability (solid, gas) : Not available.

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#### **HiTEC® 5158 Performance Additive**

# Section 9. Physical and chemical properties

Lower and upper explosive : Not available.

(flammable) limits

Vapor pressure : Not available. Vapor density : Not available.

**Density** : 0.993 g/cm³ [60.1°F (15.6°C)]

**Relative density** : 0.996

**Solubility** : Not available. Partition coefficient: n-: Not available.

octanol/water

**Auto-ignition temperature** : Not available. **Decomposition temperature**: Not available.

**Viscosity** : Kinematic (40°C): 0.031 cm<sup>2</sup>/s

**Viscosity** : Not available.

**Aerosol product** 

# 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

: 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                                |
|--|-------------------------------------|---------------------------------|---------|--------------|----------|--|
| Distillates (petroleum),<br>catalytic reformer fractionator<br>residue, low-boiling                              | None available.                     | LC50 Inhalation<br>Vapor        | Rat     | >5 mg/l      | 4 hours  | -                                      |
| _  | None available.                     | LD50 Dermal                     | Rat     | >5000 mg/kg  | -        | -                                      |
|  | None available.                     | LD50 Oral                       | Rat     | >2000 mg/kg  | _        | _                                      |
| Solvent naphtha (petroleum), heavy arom.   | -                                   | LC50 Inhalation Dusts and mists | Rat     | >11.67 mg/m³ | 6 hours  | -                                      |
|  | -                                   | LD50 Dermal                     | Rabbit  | >2000 mg/kg  | _        | -                                      |
|  | _                                   | LD50 Oral                       | Rat     | >2500 mg/kg  | _        | _                                      |
| Alkylene carboxylic acid polymer condensation product with alkylphenols, aldehyde, anhydride and alkylene oxides | None available.                     | LD50 Oral                       | Rat     | >2000 mg/kg  | -        | Based on data for a similar substance. |
| naphthalene  | -                                   | LC50 Inhalation Gas.            | Rat     | >100 ppm     | 8 hours  | -                                      |
|  | 403 Acute<br>Inhalation<br>Toxicity | LC50 Inhalation<br>Vapor        | Rat     | >0.4 mg/l    | 4 hours  | -                                      |
|  | -                                   | LD50 Dermal                     | Rat     | >2500 mg/kg  | -        | _                                      |

# Section 11. Toxicological information

| 402 Acute       | LD50 Dermal | Rat   | >16000 mg/kg | - | - |
|-----------------|-------------|-------|--------------|---|---|
| Dermal Toxicity |             |       |              |   |   |
| 401 Acute Oral  | LD50 Oral   | Mouse | 533 mg/kg    | - | - |
| Toxicity        |             |       |              |   |   |
| -               | LD50 Oral   | Rat   | 2600 mg/kg   | - | - |

## **Conclusion/Summary**

: Not available.

## **Irritation/Corrosion**

| Product/ingredient name  | Test                               | Species          | Result                                       | Remarks                                |
|--|------------------------------------|------------------|--|--|
| Alkylene carboxylic acid polymer condensation product with alkylphenols, aldehyde, anhydride and alkylene oxides | None available.                    | Rabbit           | Eyes - Irritant                              | Based on data for a similar substance. |
| naphthalene  | None available.<br>None available. | Rabbit<br>Rabbit | Skin - Mild irritant<br>Eyes - Mild irritant | -                                      |

## **Conclusion/Summary**

Skin: Not available.Eyes: Not available.Respiratory: Not available.

## **Sensitization**

| Product/ingredient name |                           | Route of exposure | Species    | Result          | Remarks |
|-------------------------|---------------------------|-------------------|------------|-----------------|---------|
| naphthalene             | 406 Skin<br>Sensitization | skin              | Guinea pig | Not sensitizing | -       |

## **Conclusion/Summary**

Skin : Not available.

Respiratory : Not available.

## **Mutagenicity**

| Product/ingredient name | Test                      | Experiment                | Result   | Remarks        |
|-------------------------|---------------------------|---------------------------|----------|----------------|
| naphthalene             | 473 In vitro Mammalian    | Experiment: In vitro      | Positive | WOE does not   |
|                         | Chromosomal Aberration    | Subject: Mammalian-Animal |          | support        |
|                         | Test                      |                           |          | classification |
|                         | -                         | Experiment: In vitro      | Negative | -              |
|                         |                           | Subject: Bacteria         |          |                |
|                         | 471 Bacterial Reverse     | Experiment: In vitro      | Negative | -              |
|                         | Mutation Test             | Subject: Bacteria         |          |                |
|                         | 479 Genetic Toxicology:   | Experiment: In vitro      | Negative | -              |
|                         | In vitro Sister Chromatid | Subject: Mammalian-Animal |          |                |
|                         | Exchange Assay in         |                           |          |                |
|                         | Mammalian Cells           |                           |          |                |
|                         | None available.           | Experiment: In vitro      | Negative | -              |
|                         |                           | Subject: Mammalian-Human  |          |                |
|                         | 486 Unscheduled DNA       | Experiment: In vivo       | Negative | -              |
|                         | Synthesis (UDS) Test      | Subject: Mammalian-Animal |          |                |
|                         | with Mammalian Liver      |                           |          |                |
|                         | Cells in vivo             |                           |          |                |

## **Conclusion/Summary**

: Not available.

Carcinogenicity

Result

| Product/ingredient name | Test            | Species | Exposure | Result   | Remarks |
|-------------------------|-----------------|---------|----------|--|---------|
| naphthalene             | None available. | Rat     | week     | Positive -<br>Route of<br>exposure<br>unreported | -       |

# **Section 11. Toxicological information**

Conclusion/Summary

: Not available.

Classification

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

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#### Reproductive toxicity

| Product/ingredient name | Test  | Route of exposure | Species | Maternal toxicity | Fertility | Development toxin | Remarks |
|-------------------------|---|-------------------|---------|-------------------|-----------|-------------------|---------|
| naphthalene             | 413 Subchronic<br>Inhalation Toxicity:<br>90-day Study  | Inhalation        | Rat     | Positive          | Negative  | Negative          | -       |
|                         | 408 Repeated Dose 90-Day Oral Toxicity Study in Rodents | Oral              | Rat     | Positive          | Negative  | Negative          | -       |
|                         | 411 Subchronic<br>Dermal Toxicity:<br>90-day Study      | Dermal            | Rat     | Positive          | Negative  | Negative          | -       |

Conclusion/Summary

: Not available.

### **Teratogenicity**

| Product/ingredient name | Test                                      | Species | Result          | Remarks |
|-------------------------|---|---------|-----------------|---------|
| naphthalene             | 414 Prenatal Developmental Toxicity Study | Rat     | Negative - Oral | -       |

# Conclusion/Summary: Not available. Specific target organ toxicity (single exposure)

| Name                                     | 3.3        | Route of exposure | Target organs    |
|--|------------|-------------------|------------------|
| Solvent naphtha (petroleum), heavy arom. | Category 3 | Not applicable.   | Narcotic effects |

### **Aspiration hazard**

| Name  | Result   |
|-------|--|
| 1 7 7 | ASPIRATION HAZARD - Category 1<br>ASPIRATION HAZARD - Category 1 |

Information on the likely routes of exposure

: Skin, Eyes, Ingestion, and Inhalation

## Potential acute health effects

Eye contactInhalationNo known significant effects or critical hazards.No known significant effects or critical hazards.

**Skin contact**: Defatting to the skin. May cause skin dryness and irritation.

**Ingestion** : May be fatal if swallowed and enters airways.

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

Eye contact : No specific data.

Inhalation : No specific data.

**Skin contact**: Adverse symptoms may include the following:

irritation dryness cracking

**Ingestion**: Adverse symptoms may include the following:

nausea or vomiting

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# Section 11. Toxicological information

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

**Short term exposure** 

**Potential immediate** 

: Not available.

effects

Potential delayed effects

: Not available.

**Long term exposure** 

Potential immediate

: Not available.

effects

Potential delayed effects

: Not available.

## Potential chronic health effects

| Product/ingredient name   | Test  | Species | Dose       | Exposure | Result                                      | Remarks |
|---|---|---------|------------|----------|---|---------|
| Distillates (petroleum), catalytic reformer fractionator residue, low-boiling | None available.   | Rat     | 300 mg/kg  | -        | Sub-chronic<br>NOAEL Oral                   | -       |
| naphthalene   | 408 Repeated Dose<br>90-Day Oral Toxicity<br>Study in Rodents | Rat     | 200 mg/kg  | -        | Sub-chronic<br>NOAEL Oral                   | -       |
|   | 411 Subchronic<br>Dermal Toxicity:<br>90-day Study            | Rat     | 1000 mg/kg | -        | Sub-chronic<br>NOAEL Dermal                 | -       |
|   | None available.   | Rat     | 1 ppm      | 90 days  | Sub-chronic<br>NOAEL<br>Inhalation<br>Vapor | -       |
|   | 413 Subchronic<br>Inhalation Toxicity:<br>90-day Study        | Rat     | 0.011 mg/l | 13 weeks | Sub-chronic<br>LOAEL<br>Inhalation<br>Vapor | -       |

**Conclusion/Summary** 

**General** 

: Not available.

: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or

dermatitis.

**Carcinogenicity** : Suspected of causing cancer. Risk of cancer depends on duration and level of

exposure.

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**

| Product/ingredient name                  | Result                    | Species                                    | Exposure | Remarks                                |
|--|---------------------------|--|----------|--|
| Solvent naphtha (petroleum), heavy arom. | Acute EL50 >1 mg/l        | Algae - Pseudokirchneriella subcapitata    | 72 hours | -                                      |
| ·  | Acute EL50 1.4 mg/l       | Daphnia - Daphnia magna                    | 48 hours | Based on data for a similar substance. |
|  | Acute LL50 2 to 5 mg/l    | Fish - Oncorhynchus mykiss                 | 96 hours | -                                      |
|  | Chronic NOEL 1 mg/l       | Algae - Pseudokirchneriella<br>subcapitata | 72 hours | -                                      |
|  | Chronic NOEL 0.48<br>mg/l | Daphnia - Daphnia magna                    | 21 days  | Based on data for a similar            |

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# **Section 12. Ecological information**

|             |                        |   |          | substance. |
|-------------|------------------------|---|----------|------------|
| naphthalene | Acute EC50 2.96 mg/    | Algae - Pseudokirchneriella subcapitata | 96 hours | -          |
|             | Acute EC50 2.16 mg/    | Daphnia - Daphnia magna                 | 48 hours | -          |
|             | Acute LC50 0.96 mg/l   | Fish - Oncorhynchus gorbuscha           | 96 hours | -          |
|             | Chronic NOEC 0.59 mg/l | Daphnia - Daphnia pulex                 | 125 days | -          |
|             | Chronic NOEC 0.12 mg/l | Fish - Oncorhynchus gorbuscha           | 40 days  | -          |

**Conclusion/Summary** 

: Harmful to aquatic life with long lasting effects.

#### Persistence and degradability

| Product/ingredient name                               | Test   | Result |   | Remarks            |                      |
|---|--|--------|---|--------------------|----------------------|
| Solvent naphtha (petroleum), heavy arom.  naphthalene | OECD 301F Ready Biodegradability - Manometric Respirometry Test OECD 302C Inherent Biodegradability: Modified MITI Test (II) |        | nerent - 28 days<br>lot readily - 28 days | Based on substance | data for a similar   |
| Product/ingredient name                               | Aquatic half-life  |        | Photolysis                                |                    | Biodegradability     |
| Solvent naphtha (petroleum), heavy arom. naphthalene  | -  |        | -   |                    | Inherent Not readily |

## **Bioaccumulative potential**

| Product/ingredient name                  | LogPow     | BCF         | Potential |
|--|------------|-------------|-----------|
| Solvent naphtha (petroleum), heavy arom. | 2.8 to 6.5 | 99 to 5780  | high      |
| naphthalene                              | 3.4        | 36.5 to 168 | 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. 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.

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# Section 14. Transport information

| Regulatory information | UN<br>number   | Proper shipping name | Class | Packing group | Label | Additional information |
|------------------------|----------------|----------------------|-------|---------------|-------|------------------------|
| DOT<br>Classification  | Not regulated. | -                    |       | -             |       | -                      |
| TDG<br>Classification  | Not regulated. | -                    |       | -             |       | -                      |
| IMDG Class             | Not regulated. | -                    | -     | -             |       | -                      |
| IATA-DGR<br>Class      | Not regulated. | -                    | -     | -             |       | -                      |

#### 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** 

|                 |      |      | SARA 302 TPQ |           | <b>SARA 304 F</b> | RQ        |
|-----------------|------|------|--------------|-----------|-------------------|-----------|
| Name            | %    | EHS  | (lbs)        | (gallons) | (lbs)             | (gallons) |
| ethylenediamine | <0.1 | Yes. | 10000        | 1337.1    | 5000              | 668.5     |

**SARA 311/312** 

Classification : CARCINOGENICITY - Category 2

ASPIRATION HAZARD - Category 1

HNOC - Defatting irritant

### **Composition/information on ingredients**

| Name   | %           | Classification  |
|--|-------------|---|
| Distillates (petroleum), catalytic reformer fractionator residue, low-boiling                                    | ≥1 - ≤3     | ASPIRATION HAZARD - Category 1 HNOC - Defatting irritant HNOC - Static-accumulating flammable liquid            |
| Solvent naphtha (petroleum), heavy arom.   | ≥1 - ≤3     | SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 1 |
| Alkylene carboxylic acid polymer condensation product with alkylphenols, aldehyde, anhydride and alkylene oxides | ≥1 - ≤3     | EYE IRRITATION - Category 2A  |
| naphthalene  | ≥0.1 - ≤0.3 | FLAMMABLE SOLIDS - Category 2 ACUTE TOXICITY (oral) - Category 4 CARCINOGENICITY - Category 2                   |

**SARA 313** 

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#### **HiTEC® 5158 Performance Additive**

# Section 15. Regulatory information

|                                 | Product name | CAS number | %           |
|---------------------------------|--------------|------------|-------------|
| Form R - Reporting requirements | naphthalene  | 91-20-3    | ≥0.3 - ≤0.5 |
| Supplier notification           | naphthalene  | 91-20-3    | ≥0.3 - ≤0.5 |

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); 1-methylnaphthalene: No RQ is being assigned to the generic or broad class.; ethylenediamine: 5000 lbs. (2270 kg); 2-methylpropan-1-ol: 5000 lbs. (2270 kg); 2-methylnaphthalene: No RQ is being assigned to the generic or broad class.;

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

<u>List name</u> <u>Status</u> <u>Name on list</u> <u>Ref. number</u>

None of the components are listed.

### TSCA 8(a) CDR Exempt/Partial exemption: Not determined

State - California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

| Ingredient name | Cancer | Reproductive | level | Maximum acceptable dosage level |
|-----------------|--------|--------------|-------|---------------------------------|
| Naphthalene     | Yes.   | No.          | Yes.  | -                               |

#### **Canadian regulations**

#### **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 : All components are listed or exempted.

Korea

New Zealand: All components are listed or exempted.Philippines: All components are listed or exempted.Taiwan: All components are listed or exempted.United States: All components are listed 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

: 11/13/2018

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

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## **Section 16. Other information**

✓ 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.