

HiTEC® 6457 Fuel Additive

SDS no. H6457

Date of issue/Date of revision 5/10/2023

## Section 1. Identification

**GHS product identifier** : HiTEC® 6457 Fuel Additive  
**Product use** : Petrochemical industry: Friction Modifier

### In case of emergency - Chemical

0800-70-77-022 (Brazil)  
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** : CARCINOGENICITY - Category 2  
TOXIC TO REPRODUCTION - Category 2

### GHS label elements

#### Hazard pictograms



**Signal word** : Warning

**Hazard statements** : Suspected of causing cancer.  
Suspected of damaging fertility or the unborn child.

### Precautionary statements

**Prevention** : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection.

**Response** : IF exposed or concerned: Get medical advice or attention.

**Storage** : Store locked up. Store in a well-ventilated place.

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

**Additional hazards** : None known.

## Section 3. Composition/information on ingredients

Substance/mixture : Substance

Ingredient name	CAS number	Conc. (% w/w)	US GHS Classification
Alkoxy long-chain alkyl amide 2,2'-iminodiethanol	52794-79-3 111-42-2	100 ≤1	Not classified. ACUTE TOXICITY (oral) - Category 4 SKIN IRRITATION - Category 2 SERIOUS EYE DAMAGE - Category 1 CARCINOGENICITY - Category 2 TOXIC TO REPRODUCTION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (blood, kidneys, liver, nervous system) - 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** : 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. 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. Wash clothing before reuse. Clean shoes thoroughly before reuse. Continue to rinse for at least 15 minutes.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. 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** : 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.

## Section 4. First aid measures

- Inhalation** : Adverse symptoms may include the following:  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:  
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. 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 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

**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 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).

### 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). 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 ingest. 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.

**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.

## 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
2,2'-iminodiethanol	<b>ACGIH TLV (United States, 1/2022).</b> <b>Absorbed through skin.</b> TWA: 1 mg/m <sup>3</sup> 8 hours. Form: Inhalable fraction and vapor

**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.

## Section 8. Exposure controls/personal protection

**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 side-shields.

### Skin protection

**Hand protection** : Hand Protection: Wear chemical resistant gloves. Nitrile gloves of minimum thickness 0.4 mm have an expected breakthrough time of 480 minutes or less when in frequent contact with the product. Due to variable exposure conditions the user must consider that the practical use of a chemical-protective glove in practice may be much shorter than the permeation time above. Manufacturer's directions for use, especially about the minimum thickness and the minimum breakthrough time, must be observed. This information does not replace suitability tests by the end user since glove protection varies depending on the conditions under which the product is used.

**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. [Clear viscous liquid.]

**Color** : Amber. Yellow.

**Odor** : Amine-like. [Slight]

**Odor threshold** : Not available.

**pH** : Not available.

**Melting point** : Not available.

**Boiling point** : 175°C (347°F)

**Flash point** : Closed cup: 110°C (230°F) [Pensky-Martens Minimum]

**Evaporation rate** : Not available.

**Flammability (solid, gas)** : Not available.

**Lower and upper explosive (flammable) limits** : Not available.

**Vapor pressure** : Not available.

**Vapor density** : Not available.

**Density** : 0.928 g/cm<sup>3</sup>

**Relative density** : 0.93

## Section 9. Physical and chemical properties

<b>Solubility(ies)</b>	: Not available.
<b>Partition coefficient: n-octanol/water</b>	: Not applicable.
<b>Auto-ignition temperature</b>	: Not available.
<b>Decomposition temperature</b>	: Not available.
<b>Viscosity</b>	: Kinematic (40°C (104°F)): 230 mm <sup>2</sup> /s (230 cSt) Minimum
<b>Explosive properties</b>	: Not available.
<b>Oxidizing properties</b>	: Not available.

## Section 10. Stability and reactivity

<b>Reactivity</b>	: No specific test data related to reactivity available for this product or its ingredients.
<b>Chemical stability</b>	: The product is stable.
<b>Possibility of hazardous reactions</b>	: Under normal conditions of storage and use, hazardous reactions will not occur.
<b>Conditions to avoid</b>	: High temperatures, sparks and open flames.
<b>Incompatible materials</b>	: Strong oxidizing and reducing agents.
<b>Hazardous decomposition products</b>	: 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
Alkoxy long-chain alkyl amide  2,2'-iminodiethanol	402 Acute Dermal Toxicity	LD50 Dermal	Rabbit	>2000 mg/kg	-	-
	420 Acute Oral Toxicity - Fixed Dose Method	LD50 Oral	Rat	>2000 mg/kg	-	-
	None available.	LC50 Inhalation Dusts and mists	Rat	<6.4 mg/l	105 minutes	-
	None available.	LC50 Inhalation Dusts and mists	Rat	>3.35 mg/l	4 hours	-
	-	LD50 Dermal	Rabbit	12200 mg/kg	-	-
	401 Acute Oral Toxicity	LD50 Oral	Rat	1600 mg/kg	-	-

**Conclusion/Summary** : Not available.

#### Irritation/Corrosion

Product/ingredient name	Test	Species	Result	Remarks
Alkoxy long-chain alkyl amide	405 Acute Eye Irritation/Corrosion	Rabbit	Eyes - Not an Irritant	-
2,2'-iminodiethanol	405 Acute Eye Irritation/Corrosion	Rabbit	Eyes - Visible necrosis	-
	404 Acute Dermal Irritation/Corrosion	Rabbit	Skin - Irritant	-

#### Conclusion/Summary

<b>Skin</b>	: Not available.
<b>Eyes</b>	: Non-irritating to the eyes. Based on test data for this or similar products.

## Section 11. Toxicological information

**Respiratory** : Not available.

### Sensitization

Product/ingredient name	Test	Route of exposure	Species	Result	Remarks
Alkoxy long-chain alkyl amide	406 Skin Sensitization	skin	Guinea pig	Not sensitizing	-
2,2'-iminodiethanol	406 Skin Sensitization	skin	Guinea pig	Not sensitizing	-

### Conclusion/Summary

**Skin** : Not available.

**Respiratory** : Not available.

### Mutagenicity

Product/ingredient name	Test	Experiment	Result	Remarks
Alkoxy long-chain alkyl amide	471 Bacterial Reverse Mutation Test	Experiment: In vitro Subject: Bacteria	Negative	-
	476 <i>In vitro</i> Mammalian Cell Gene Mutation Test	Experiment: In vitro Subject: Mammalian-Animal	Negative	-
	473 <i>In vitro</i> Mammalian Chromosomal Aberration Test	Experiment: In vitro Subject: Mammalian-Human	Negative	-
2,2'-iminodiethanol	471 Bacterial Reverse Mutation Test	Experiment: In vitro Subject: Bacteria	Negative	-
	479 Genetic Toxicology: <i>In vitro</i> Sister Chromatid Exchange Assay in Mammalian Cells	Experiment: In vitro Subject: Mammalian-Animal	Negative	-
	474 Mammalian Erythrocyte Micronucleus Test	Experiment: In vivo Subject: Mammalian-Animal	Negative	-

**Conclusion/Summary** : Not available.

### Carcinogenicity

Product/ingredient name	Test	Species	Exposure	Result	Remarks
2,2'-iminodiethanol	451 Carcinogenicity Studies	Rat	103 weeks; 5 days per week	Negative - Dermal - NOAEL	-
	451 Carcinogenicity Studies	Mouse	103 weeks; 5 days per week	Positive - Dermal - TD	-

**Conclusion/Summary** : Suspected of causing cancer.

### Classification

Product/ingredient name	OSHA	IARC	NTP
2,2'-iminodiethanol	-	2B	-

### Reproductive toxicity

Product/ingredient name	Test	Route of exposure	Species	Maternal toxicity	Fertility	Development toxin	Remarks
Alkoxy long-chain alkyl amide	422 Combined Repeated Dose Toxicity Study with the Reproduction/ Developmental Toxicity Screening Test	Oral	Rat	Positive	Negative	Negative	-
2,2'-iminodiethanol	443 Extended One-	Oral	Rat	Positive	Positive	Positive	-

## Section 11. Toxicological information

	Generation Reproductive Toxicity Study						
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**Conclusion/Summary** : North America and South America GHS classification: Suspected of damaging fertility or the unborn child.  
For other regional GHS classifications: Not classified.

### Teratogenicity

Product/ingredient name	Test	Species	Result	Remarks
2,2'-iminodiethanol	414 Prenatal Developmental Toxicity Study	Rat	Equivocal - Dermal	-
	414 Prenatal Developmental Toxicity Study	Rat	Equivocal - Inhalation	-
	None available.	Rat	Equivocal - Oral	-

**Conclusion/Summary** : Not available.

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
2,2'-iminodiethanol	Category 2	-	blood, kidneys, liver, nervous system

### Aspiration hazard

Not available.

**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** : Adverse symptoms may include the following:  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations  
**Skin contact** : Adverse symptoms may include the following:  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations  
**Ingestion** : Adverse symptoms may include the following:  
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** : Not available.

**Potential delayed effects** : Not available.



## Section 11. Toxicological information

### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : STOT = Specific Target Organ Toxicity. Not applicable. Based on test data for this or similar products.

### Potential chronic health effects

Product/ingredient name	Test	Species	Dose	Exposure	Result	Remarks
Alkoxy long-chain alkyl amide	422 Combined Repeated Dose Toxicity Study with the Reproduction/ Developmental Toxicity Screening Test	Rat	100 mg/kg	-	Sub-acute NOAEL Oral	-
2,2'-iminodiethanol	411 Subchronic Dermal Toxicity: 90-day Study	Rat	32 mg/kg	-	Sub-chronic LOAEL Dermal	-
	408 Repeated Dose 90-Day Oral Toxicity Study in Rodents	Rat	14 mg/kg	-	Sub-chronic LOAEL Oral	-
	413 Subchronic Inhalation Toxicity: 90-day Study	Rat	3 mg/m <sup>3</sup>	90 days; 6 hours per day	Sub-chronic NOAEL Inhalation Dusts and mists	-

**Conclusion/Summary** : Not available.

**General** : No known significant effects or critical hazards.

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

**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

Product/ingredient name	Result	Species	Exposure	Remarks
Alkoxy long-chain alkyl amide	Acute EL50 >100 mg/l	Algae - Pseudokirchnerella subcapitata	72 hours	-
	Acute EL50 >100 mg/l	Daphnia - Daphnia magna	48 hours	-
	Acute EL50 >1000 mg/l	Micro-organism	3 hours	-
	Acute LL50 >100 mg/l	Fish - Oncorhynchus mykiss	96 hours	-
	Chronic NOEL 100 mg/l	Algae - Pseudokirchnerella subcapitata	72 hours	-
2,2'-iminodiethanol	Acute EL10 >1000 mg/l	Micro-organism	30 minutes	-
	Acute EL50 9.5 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours	-
	Acute EL50 30.1 mg/l	Daphnia - Ceriodaphnia dubia	48 hours	-
	Acute LC50 1370 mg/l	Fish - Pimephales promelas	96 hours	-

## Section 12. Ecological information

	I Fresh water Acute LL50 460 mg/l Chronic EL10 0.78 mg/l Chronic NOEL 0.6 mg/l	Sub-adult Fish - Oncorhynchus mykiss Daphnia - Daphnia magna Algae - Pseudokirchneriella subcapitata	96 hours 21 days 72 hours	- - -
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**Conclusion/Summary** : Not available.

### Persistence and degradability

Product/ingredient name	Test	Result	Remarks
Alkoxy long-chain alkyl amide	OECD 301B Ready Biodegradability - CO <sub>2</sub> Evolution Test	49 % - Not readily - 28 days	-
2,2'-iminodiethanol	OECD 301F Ready Biodegradability - Manometric Respirometry Test	93 % - Readily - 28 days	-

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
2,2'-iminodiethanol	-1.43	-	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.

## Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	IATA
<b>UN number</b>	Not regulated.	Not regulated.	Not regulated.	Not regulated.
<b>UN proper shipping name</b>	-	-	-	-
<b>Transport hazard class(es)</b>	-	-	-	-
<b>Packing group</b>	-	-	-	-

## Section 14. Transport information

<b>Environmental hazards</b>	No.	No.	No.	No.
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**Special precautions for user** : **Transport within user’s premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to IMO instruments** : Not available.

**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

#### United States - TSCA Section 5

##### **TSCA 5(a)2 final significant new use rules**

None of the components are listed.

##### **TSCA 5(a)2 proposed significant new use rules**

None of the components are listed.

##### **TSCA 5(e) substance consent order**

None of the components are listed.

#### United States - TSCA Section 6

##### **TSCA 6 final risk management**

None of the components are listed.

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

##### Name on list

##### Status

##### Ref. number

None of the components are listed.

#### SARA 302/304

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

None of the components are listed.

**SARA 304 RQ** : Not applicable.

**CERCLA** : CERCLA: Hazardous substances.: 2,2'-iminodiethanol: 100 lbs. (45.4 kg);

#### SARA 311/312

**Classification** : CARCINOGENICITY - Category 2  
TOXIC TO REPRODUCTION - Category 2

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

Name	%	Classification
2,2'-iminodiethanol	≤1	ACUTE TOXICITY (oral) - Category 4 SKIN IRRITATION - Category 2 SERIOUS EYE DAMAGE - Category 1 CARCINOGENICITY - Category 2 TOXIC TO REPRODUCTION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (blood, kidneys, liver, nervous system) - Category 2

#### SARA 313

## Section 15. Regulatory information

	Product name	CAS number	%
Form R - Reporting requirements	2,2'-iminodiethanol	111-42-2	≤1

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

### State - California Prop. 65

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

Ingredient name	%	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Diethanolamine	≤1	Yes.	No.	-	-

www.P65Warnings.ca.gov.

### Canadian regulations

- Canada Significant New Activity Notice** : None of the components are listed.
- Canadian NPRI** : The following components are listed: Diethanolamine (and its salts)
- CEPA Toxic substances** : None of the components are listed.

### International Inventory Status

- Australia (AIC)** : All components are listed or exempted.
- Canada (DSL/NDL)** : All components are listed or exempted.
- China (IECSC)** : All components are listed or exempted.
- Europe (REACH)** : For information on compliance with this regulation please contact your Afton representative (EHS.CustomerVolumes@AftonChemical.com).
- Japan (ENCS)** : All components are listed or exempted.
- Republic of Korea (ECL)** : All components are listed or exempted.
- New Zealand (NZIoC)** : All components are listed or exempted.
- Philippines (PICCS)** : All components are listed or exempted.
- Switzerland (SWISS)** : For information on compliance with this regulation please contact your Afton representative (EHS.CustomerVolumes@AftonChemical.com).
- Turkey (KKDIK)** : For information on compliance with this regulation please contact your Afton representative (EHS.CustomerVolumes@AftonChemical.com).
- Taiwan (TCSI)** : All components are listed or exempted.
- United Kingdom (UK REACH)** : For information on compliance with this regulation please contact your Afton representative (EHS.CustomerVolumes@AftonChemical.com).
- United States Active (TSCA)** : All components are active or exempted.

## Section 16. Other information

### History

- Date of issue/Date of revision** : 5/10/2023
- 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

## Section 16. Other information

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.*