

Safety Data Sheet

SDS no.

H643D

GHS product identifier	: HiTEC® 643D Performance Additive	
Product use	: Petrochemical industry: Ashless Dispersan	t
In case of emergency - C	Chemical	
+1-703-527-3887 (International) +1-703-741-5979 (Spanish langu +1-800-424-9300 (US & Canada	lage)	
Manufacturer / Supplie	r	
Afton Chemical Corporation 500 Spring St.	Afton Chemical Corporation 7201 W. 65th Street Bedford Park, IL 60638, USA	Afton Chemical Canada Corporation 5045 South Service Road Suite 101

Section 2. Hazards identification

OSHA/HCS status	: While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Classification of the substance or mixture	: Not classified.
	Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 53.9%
GHS label elements	
Signal word	: No signal word.
Hazard statements	: No known significant effects or critical hazards.
Precautionary statements	
Prevention	: Not applicable.
Response	: Not applicable.
Storage	: Store in well-ventilated place.
Disposal	 Dispose of contents and container in accordance with all local, regional, national and international regulations.
Additional hazards	: None known.

Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Other means of	: Not available.
identification	

Section 3. Composition/information on ingredients

Ingredient name	CAS number	Conc. (% w/w)	US GHS Classification
Mineral oil	Mixture	30 - 60	Not classified.

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

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

Section 4. First aid measures

Description of necess	ary first aid measures
Eye contact	 Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	 If inhaled, remove to fresh air. Get medical attention if symptoms occur. If not breathing, give artificial respiration. If breathing is difficult, administer oxygen.
Skin contact	 Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if irritation occurs.
Ingestion	: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effe	<u>></u>	
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.	
<u>Over-exposure signs/symp</u>	<u>)ms</u>	
Eye contact	: No specific data.	
Inhalation	: No specific data.	
Skin contact	: No specific data.	
Ingestion	: No specific data.	
Indication of immediate medical attention and special treatment needed, if necessary		
Notes to physician	: 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.	

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 ₂ .
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.

Section 5. Fire-fighting measures

Hazardous thermal decomposition products	: 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, protec	tive equipment and emergency procedures
For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
For emergency responders	: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods and materials for co	ntainment and cleaning up
Small spill	: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	: Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures	Put on appropriate personal protective equipment (see Section 8).	
Advice on general occupational hygiene	Eating, drinking and smoking should be prohibited in areas where this material is nandled, stored and processed. Workers should wash hands and face before eat drinking and smoking. Remove contaminated clothing and protective equipment le entering eating areas. See also Section 8 for additional information on hygiene measures.	U /
Conditions for safe storage, including any incompatibilities	Store in accordance with local regulations. Store in original container protected fra direct sunlight in a dry, cool and well-ventilated area, away from incompatible mate see Section 10) and food and drink. Keep container tightly closed and sealed un eady for use. Containers that have been opened must be carefully resealed and upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.	erials til kept

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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
Mineral Oil	ACGIH (United States). TWA: 5 mg/m ³ OSHA (United States). TWA: 5 mg/m ³

Appropriate engineering controls	1	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
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 :	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.
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 :	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance	
Physical state	: Liquid. [Viscous liquid.]
Color	: Brown.
Odor	: Aromatic.
Odor threshold	: Not available.
рН	: Not available.
Melting point	: Not available.
Boiling point	: Not available.

Section 9. Physical and chemical properties

Flash point	: Closed cup: 150°C (302°F) [Pensky-Martens. Minimum] Open cup: >160°C (>320°F) [Cleveland.]
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not applicable.
Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Density	: 0.938 g/cm ³
Relative density	: 🛛 .946
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	: 590 cSt at 100°C (typical).
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	: No specific data.
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

Product / ingredient name	Result	Species	Dose	Exposure
Mineral oil	LC50 Inhalation Vapor	Rat	>5000 mg/m ³	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
Conclusion/Summary	: Not available.			
Irritation/Corrosion				
Conclusion/Summary				
Skin	: Not available.			
Skin Eyes	Not available.Not available.			
Eyes Respiratory	: Not available.			
Eyes Respiratory	: Not available.			
Eyes Respiratory <u>Sensitization</u>	: Not available.			

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Section 11. Toxicological information

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Mutagenicity							
Conclusion/Summary	÷	Not availa	able.				
Carcinogenicity			bla				
Conclusion/Summary Classification	÷	Not availa	able.				
	-						
Product / ingredient name		OSHA	IARC	NTP			
Not available.							
Reproductive toxicity							
Conclusion/Summary	÷	Not availa	able.				
<u>Teratogenicity</u>							
Conclusion/Summary	÷	Not availa	able.				
Information on the likely routes of exposure	:	Skin, Eye	s, Ingestior	n, and Inhalation			
Potential acute health effects							
Eye contact	:	No knowr	n significant	t effects or critical hazards.			
Inhalation	:	No knowr	n significant	t effects or critical hazards.			
Skin contact	;	No knowr	n significant	effects or critical hazards.			
Ingestion	÷	No knowr	n significant	t effects or critical hazards.			
Symptoms related to the phys	sic	al chomi	cal and tox	ricological characteristics			
Eye contact		No specif					
Inhalation		-	No specific data.				
Skin contact		-	No specific data.				
Ingestion		No specif					
	S	and also d	chronic eff	ects from short and long term exposure			
Short term exposure Potential immediate		Not availa	blo				
effects	1	INUL availa	able.				
Potential delayed effects	÷	Not availa	able.				
Long term exposure							
Potential immediate effects	1	Not availa	able.				
Potential delayed effects	:	Not availa	able.				
Potential chronic health effe	<u>ct</u>	<u>s</u>					
Conclusion/Summary	÷	Not detern	nined.				
General			-	t effects or critical hazards.			
Carcinogenicity	÷		-	t effects or critical hazards.			
Mutagenicity	÷		-	t effects or critical hazards.			
Teratogenicity	÷		-	t effects or critical hazards.			
Developmental effects			-	t effects or critical hazards.			
Fertility effects	÷	No knowr	n significant	t effects or critical hazards.			

Section 12. Ecological information

Toxicity

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. 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	Not regulated.	-	-	-		-
TDG Classification	Not regulated.	-	-	-		-
IMDG Class	Not regulated.	-	-	-		-
IATA-DGR Class	Not regulated.	-	-	-		-

This product is classified as non hazardous for transport when shipped in non-bulk quantities but when shipped in bulk by road, rail or sea may be classified as UN3257, Elevated temperature liquid, n.o.s., (Petroleum distillates), 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.

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Section 15. Regulatory information

US regulations		
SARA 313 toxic chemical notification and release reporting (w/w%)	:	No SARA 313 chemicals are present above the reporting threshold.
SARA 311/312 Hazardous Categorization	:	SARA 311/312 Nuisance Mist/Dust Only
RQ (Reportable quantity)	:	CERCLA: Hazardous substances.: No products were found.
State - California Prop. 65	:	No products were found.
Canadian regulations HMIRA Registry Number International Inventory Status	:	Not available.
United States inventory (8b)	(TS	CA : All components are listed or exempted.
Canada inventory		: All components are listed or exempted.
Europe inventory		: All components are listed or exempted.
Japan inventory		: Mi components are listed or exempted.
Australia inventory (AIC	C S)	: All components are listed or exempted.
Korea inventory (KECI)		: All components are listed or exempted.
China inventory (IECSC)	: All components are listed or exempted.
Philippines inventory (P		 All components are listed or exempted.
New Zealand Inventory (Chemicals (NZIoC)	of	: All components are listed or exempted.
Taiwan Chemical Substa Inventory (TCSI)	ince	s : All components are listed or exempted.

Section 16. Other information

Hazardous Material Information System (U.S.A.)



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

<u>History</u>	
Date of issue/Date of revision	: 12/20/2017
Prepared by	: EHS Department (Tel: +1 804 788 5800)

Section 16. Other information

: 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

V Indicates information that has changed from previously issued version.

Notice to reader

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