



**\*\*\* MATERIAL SAFETY DATA SHEET \*\*\***

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**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

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PRODUCT NUMBER: 8800010  
PRODUCT NAME: AERODAG G

- MANUFACTURER -

Henkel Corporation (formerly Acheson Colloids Company)  
32100 Stephenson Highway  
Madison Heights, MI 48071

**EMERGENCY CONTACT NUMBERS:**

MEDICAL: 866.359.5657 (Health & Safety Call Center-24 hours)

TRANSPORT: CHEMTREC: 800.424.9300 (24 hours)

CHEMTREC International: 703.527.3887

(call collect)

Corporate Phone: 248.583.9300 (8AM-5PM, Mon-Fri)

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**2. HAZARDS IDENTIFICATION**

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**EMERGENCY OVERVIEW**

**DANGER!**  
**EYE IRRITANT.**  
**HARMFUL IF SWALLOWED.**  
**CARDIAC SENSITIZER.**  
**FLAMMABLE.**  
Possible birth defect hazard.  
Colorless Liquid Hydrocarbon odor

EYE CONTACT	Will cause eye irritation. The vapor and the liquid may cause burning, intense irritation and excessive watering of the eye.
SKIN CONTACT	Repeated or prolonged skin contact may result in mild irritation. Repeated or prolonged contact may cause defatting of the skin resulting in dryness, cracking and dermatitis. May be absorbed through the skin.
INHALATION	The vapor has anesthetic properties and when inhaled at concentrations above the occupational exposure limit, it may cause respiratory irritation, headache, fatigue, dizziness and incoordination. Vapor may be irritant to the respiratory tract. Avoid breathing vapors or mists.
INGESTION	Will cause irritation to mouth, throat, and stomach. May cause nausea, vomiting and diarrhea. Aspiration of the product into the lungs following ingestion may cause pulmonary injury leading to pneumonitis.

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**3. COMPOSITION/INFORMATION ON INGREDIENTS**

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<u>COMPONENT</u>	<u>CAS NUMBER</u>	<u>CONCENTRATION</u> (weight %)
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Heptane	142-82-5	30 - 60
Isopropanol	67-63-0	10 - 30
Propane	74-98-6	10 - 30
Butane	106-97-8	10 - 30
Toluene	108-88-3	1 - 5

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#### 4. FIRST-AID MEASURES

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EYE CONTACT	Immediately irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 10 minutes. If symptoms develop, obtain medical attention.
SKIN CONTACT	Flush exposed areas thoroughly with soap and water until all chemical is removed. Remove contaminated clothing and launder before reuse. If symptoms develop, obtain medical attention.
INHALATION	Remove to fresh air. Get medical attention if irritation persists.
INGESTION	DO NOT attempt to give anything by mouth to an unconscious person. If swallowed, DO NOT induce vomiting. Keep at rest. Aspiration into the lungs may cause chemical pneumonitis, which can be fatal. Treat symptomatically and supportively. If individual is conscious, give water to dilute stomach contents. Get prompt medical attention.

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#### 5. FIREFIGHTING MEASURES

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AUTOIGNITION	204 °C
FLASH POINT	-4 °C (Closed Cup)
EXTINGUISHING MEDIA	Foam; Water spray or fog, CO <sub>2</sub> , Dry Chemical; Do not use direct water stream on burning liquid.
SPECIAL FIREFIGHTING PROCEDURES	A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions.; Cool containers exposed to fire with water.; Water or water foam may cause frothing which can be violent, especially if sprayed into container of hot burning liquid, and can possibly endanger fire fighter.
FIRE & EXPLOSION HAZARDS	Dangerous fire hazard when exposed to heat or flame. Combustion will evolve toxic and irritant vapors. The vapor of this product can form potentially explosive mixtures with air. The vapor is heavier than air and may travel a considerable distance to a source of ignition and flashback. Containers can build up pressure if exposed to heat (fire) and may explode.
HAZARDOUS COMBUSTION PRODUCTS	Carbon monoxide, carbon dioxide, unknown hydrocarbons.
LOWER EXPLOSION LIMIT (%)	1.05 %
UPPER EXPLOSION LIMIT (%)	6.7 %

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#### 6. ACCIDENTAL RELEASE MEASURES

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Spill and Leak Procedures	No smoking, flames or flares in hazard area. Keep unnecessary people away; isolate hazard area and deny entry. Ventilate area. Avoid contact. Use suitable protective clothing. Provided it is safe to do so, isolate the source of the leak. Do not allow to enter drains, sewers or watercourses. Contain the spillage and pump up as much as possible. Spills should be taken up with sand, earth or any suitable absorbent material and placed in containers. Spill area can be washed with water; collect wash water for approved disposal. Do not flush to storm sewer or waterway. Scrape absorbed material into proper waste containers. Wash area with soap and
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water; prevent entry of wash water into drains or other waterways. Dispose of wastes and water in accordance with all applicable federal, provincial and local regulations.

For safety and environmental precautions, please review entire Material Safety Data Sheet for necessary information.

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### 7. HANDLING AND STORAGE

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STORAGE TEMPERATURE	Room
HANDLING/STORAGE	Keep containers properly sealed when not in use. Keep away from heat, sources of ignition and direct sunlight. Store in a cool, dry area away from heat, sparks or fire. Keep away from oxidizing agents. Empty containers may contain product residue; follow MSDS and label warnings even after they have been emptied.
SENSITIVITY TO STATIC ELECTRICITY	Yes
SPECIAL SENSITIVITY	Avoid excessive heat.
SENSITIVITY TO MECHANICAL IMPACT	No
OTHER PRECAUTIONS	Vent process vessels to atmosphere using appropriate pollution control devices. Ground containers securely when transferring contents. Wear low static or properly grounded shoes. All handling equipment must be properly grounded. This material should not be spilled, dumped, or flushed into sewers or public waterways.

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### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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<u>COMPONENT</u>	<u>EXPOSURE LIMITS</u>
Heptane	500 ppm STEL 400 ppm TWA.
Isopropanol	400 ppm STEL 200 ppm TWA.
Propane	1000 ppm TWA (listed under Aliphatic hydrocarbon gases: Alkane C1-C4).
Butane	1000 ppm TWA (listed under Aliphatic hydrocarbon gases: Alkane C1-C4).
Toluene	20 ppm TWA.
VENTILATION	Use in a well-ventilated area. Provide local exhaust ventilation system to meet published exposure limits.
EYE PROTECTION	Safety glasses, goggles or face shield to protect against splashing. Eye washing equipment must be provided at handling points.
GLOVES	The use of chemically resistant gloves is recommended.
CLOTHING	Appropriate protective clothing and equipment is recommended to minimize skin contact with this substance. Uniforms, coveralls, or a lab coat should be worn. Rubber boots and apron if exposure is severe.
CHANGE/REMOVAL OF CLOTHING	Remove contaminated clothing and laundry before reuse.
WASH REQUIREMENTS	Wash exposed areas with soap and water.
RESPIRATOR	Where suitable engineering controls are not fitted or are inadequate, wear suitable protective equipment. Respiratory protection required if the exposure level is unknown or has been measured and found to exceed the

published exposure limits.  
NIOSH approved respirator if required. Self-contained  
breathing apparatus in emergency and non-routine situations.

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### 9. PHYSICAL AND CHEMICAL PROPERTIES

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PURE SUBSTANCE OR MIXTURE	Pure
PHYSICAL FORM	Liquid
COLOUR	Colorless
ODOUR	Hydrocarbon
ODOR THRESHOLD	Not available
MOLECULAR WEIGHT	100
pH AS IS	Not applicable
OXIDIZING PROPERTIES	Not applicable
BOILING POINT	98 °C
MELTING/FREEZING POINT	-91 °C
SOLUBILITY IN WATER	Negligible
PARTITION COEFFICIENT (n-octanol/water)	Not available
SPECIFIC GRAVITY (WATER=1)	0.684
EVAPORATION RATE	2.8
VAPOUR PRESSURE	40 @ 20°C
VAPOUR DENSITY (Air=1)	3.5
VOLATILES (%)	100 %
VOLATILE ORGANIC COMPOUNDS	696 g/liter 5.7 lb/gal
AUTOIGNITION	204 °C
FLASH POINT	-4 °C (Closed Cup)

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### 10. STABILITY AND REACTIVITY

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STABILITY	Stable
HAZARDOUS DECOMPOSITION PRODUCTS	Material is stable under normal temperatures and pressures.
MATERIALS TO AVOID	Oxidizers
CONDITIONS TO AVOID	Elevated temperatures
HAZARDOUS DECOMPOSITION PRODUCTS	Thermal decomposition products are hazardous and/or toxic. Carbon monoxide, carbon dioxide, unknown hydrocarbons.
HAZARDOUS POLYMERIZATION CONDITIONS	Hazardous polymerization will not occur.

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### 11. TOXICOLOGICAL INFORMATION

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ROUTE OF ENTRY	Eye Contact; Inhalation; Skin Contact
<b>CHRONIC (LONG TERM) EFFECTS OF EXPOSURE</b>	
TARGET ORGANS	Central nervous system; Eyes
CARDIAC SENSITIZATION	High exposure may cause anesthesia and irregular heartbeat (cardiac arrhythmia) due to the heart's increased sensitivity to adrenaline.
POSSIBLE BIRTH DEFECT HAZARD	Yes
CARCINOGEN	No.
<b>PRODUCT TOXICOLOGY</b>	
PRODUCT INFORMATION	High exposures by inhalation may produce anesthetic effects. Symptoms may include nausea and vomiting, abdominal discomfort, dizziness and headache.
EYE IRRITATION	Will cause eye irritation. Mild irritant to skin. Vapor, if

generated, can cause irritation of the eyes, nose and respiratory tract.

NOTES ON ORAL TOXICITY

Heptane		Will cause irritation to mouth, throat, and stomach. Aspiration of the product into the lungs following ingestion may cause pulmonary injury leading to pneumonitis.
Isopropanol	Oral LD50: Rat 5045 mg/kg Oral LD50: Mouse 3600 mg/kg Oral LD50: Dog. 4797 mg/kg Oral LD50: Rabbit 6410 mg/kg Oral LD50: Rabbit 8000 mg/kg	Slightly toxic. May cause irritation of mouth, throat and digestive tract and depression of the central nervous system. May cause nausea, vomiting and diarrhea.
Propane		No hazard in normal industrial use.
Butane		No hazard in normal industrial use.
Toluene	Oral LD50: Rat 636 mg/kg	Ingestion may cause irritation of the gastrointestinal tract. May cause nausea, vomiting and diarrhea. Aspiration of the product into the lungs following ingestion may cause pulmonary injury leading to pneumonitis.

NOTES ON DERMAL TOXICITY

Heptane		Repeated or prolonged skin contact may result in mild irritation. May be absorbed through the skin.
Isopropanol	Dermal LD50: Rabbit 12800 mg/kg	Repeated or prolonged skin contact may result in mild irritation. May be absorbed through the skin. Repeated or prolonged contact may cause defatting of the skin resulting in dryness, cracking and dermatitis.
Propane		Liquid causes freeze burns.
Butane		Liquid causes freeze burns.
Toluene	Dermal LD50: Rabbit 12124 mg/kg	Mild irritant to skin. Repeated or prolonged contact may cause defatting of the skin resulting in dryness, cracking and dermatitis. May be absorbed through the skin.

NOTES ON INHALATION TOXICITY

Heptane	Inhalation LC50 (4hr): Rat 103 mg/l	The vapor has anesthetic properties and when inhaled at concentrations above the occupational exposure limit, it may cause respiratory irritation, headache, fatigue, dizziness and incoordination.
Isopropanol	Inhalation LC50 (4hr): Rat 16000 ppm Inhalation LC50 (3.00hr): Mouse 12800 ppm	Vapor may be irritant to the respiratory tract. The vapor has anesthetic properties and when inhaled at concentrations above the occupational exposure limit, it may cause respiratory irritation, headache, fatigue, dizziness and incoordination.
Propane		The vapor has anesthetic properties and when inhaled at concentrations above the occupational exposure limit, it may cause respiratory irritation, headache, fatigue, dizziness and incoordination. A simple asphyxiant. Ensure adequate ventilation.
Butane	Inhalation LC50 (4hr): Rat 658 mg/l	Vapor, if generated, can cause irritation of the eyes, nose and respiratory tract. A simple asphyxiant. Ensure adequate ventilation.
Toluene	Inhalation LC50 (4hr): Rat 8000 ppm	May cause irritation to eyes and respiratory system. The vapor has anesthetic properties and when

inhaled at concentrations above the occupational exposure limit, it may cause respiratory irritation, headache, fatigue, dizziness and incoordination. Cardiac Sensitizer. May cause irregular heartbeat. Avoid breathing vapors or mists.

**NOTES ON EYE IRRITATION**

Heptane	Will cause eye irritation.
Isopropanol	Will cause eye irritation. Contact with eyes causes redness and discomfort which is transient.
Propane	Contact with eyes causes redness and discomfort which is transient.
Butane	Will cause eye irritation. May cause permanent damage if eye is not immediately irrigated.
Toluene	Irritating, but does not injure eye tissue. Contact with eyes causes redness and discomfort which is transient. The vapor and the liquid may cause burning, intense irritation and excessive watering of the eye.

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**12. ECOLOGICAL INFORMATION**

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POTENTIAL EFFECT ON ENVIRONMENT	Do not allow to enter drains, sewers or watercourses.
MOBILITY	Insoluble
PERSISTENCE AND DEGRADABILITY	Not readily biodegradable.
POTENTIAL TO BIOACCUMULATE	Not available.
AQUATIC TOXICITY	Not available.

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**13. DISPOSAL CONSIDERATIONS**

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WASTE DISPOSAL METHODS	Disposal should be in accordance with local, state or national legislation.
EMPTY CONTAINER WARNINGS	Empty containers may contain product residue; follow MSDS and label warnings even after they have been emptied.

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**14. TRANSPORTATION INFORMATION**

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T.D.G. INFORMATION

<b>T.D.G. CLASS</b>	Not regulated
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**15. REGULATORY INFORMATION**

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This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Canadian Domestic Substance List (DSL)    On Inventory

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**16. OTHER INFORMATION**

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