



Revision Number: 002.1

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**1. PRODUCT AND COMPANY IDENTIFICATION**

**Product name:** AERODAG CERAMISHIELD  
**Product type:** Coating  
**IDH number:** 1225184  
**Region:** United States  
**Company address:**  
 Henkel Corporation  
 32100 Stephenson Highway  
 Madison Heights, MI 48071  
**Contact information:**  
 Telephone: 248.583.9300  
 MEDICAL EMERGENCY Phone: Poison Control Center  
 1-877-671-4608 (toll free) or 1-303-592-1711  
 TRANSPORT EMERGENCY Phone: CHEMTREC  
 1-800-424-9300 (toll free) or 1-703-527-3887  
 Internet: www.henkelna.com

**2. HAZARDS IDENTIFICATION**

**EMERGENCY OVERVIEW**

<b>Physical state:</b>	Liquid	<b>HMIS:</b>	
<b>Color:</b>	White	<b>HEALTH:</b>	2
<b>Odor:</b>	Solvent	<b>FLAMMABILITY:</b>	4
		<b>PHYSICAL HAZARD:</b>	0
		<b>Personal Protection:</b>	Not available
<b>DANGER:</b>	EXTREMELY FLAMMABLE. CAUSES EYE, SKIN AND RESPIRATORY TRACT IRRITATION. MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS.		

**Relevant routes of exposure:** Skin, Inhalation, Eyes

**Potential Health Effects**

**Inhalation:** This product is irritating to the respiratory system. Excessive inhalation of this material causes headache, dizziness, nausea and incoordination.  
**Skin contact:** This product is irritating to the skin. Prolonged or repeated contact with this product may dry and/or defat the skin. This product may be harmful if it is absorbed through the skin.  
**Eye contact:** This product is irritating to the eyes.  
**Ingestion:** May cause gastrointestinal tract irritation if swallowed. May cause dizziness, incoordination, headache, nausea, and vomiting.

**Existing conditions aggravated by exposure:** Eye, skin, and respiratory disorders.

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

See Section 11 for additional toxicological information.

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

Hazardous components	CAS NUMBER	%
Acetone	67-64-1	10 - 30
Propane	74-98-6	10 - 30
Butane	106-97-8	10 - 30
Methyl ethyl ketone	78-93-3	10 - 30
Boron nitride	10043-11-5	5 - 10
Dimethoxymethane	109-87-5	1 - 5
1,3-Dioxolane	646-06-0	1 - 5

#### 4. FIRST AID MEASURES

<b>Inhalation:</b>	If inhaled, immediately remove the affected person to fresh air. If symptoms develop and persist, get medical attention.
<b>Skin contact:</b>	Immediately wash skin thoroughly with soap and water. If symptoms develop and persist, get medical attention.
<b>Eye contact:</b>	In case of contact with the eyes, rinse immediately with plenty of water for 15 minutes, and seek immediate medical attention.
<b>Ingestion:</b>	Get immediate medical attention. Do not induce vomiting.
<b>Notes to physician:</b>	Treat symptomatically and supportively.

#### 5. FIRE FIGHTING MEASURES

<b>Flash point:</b>	-4 °F (-20°C)
<b>Autoignition temperature:</b>	465 °C (869°F)
<b>Flammable/Explosive limits - lower:</b>	2.2 %
<b>Flammable/Explosive limits - upper:</b>	13 %
<b>Extinguishing media:</b>	Water spray (fog), foam, dry chemical or carbon dioxide.
<b>Special firefighting procedures:</b>	Wear full protective clothing. Wear self-contained breathing apparatus.
<b>Unusual fire or explosion hazards:</b>	DANGEROUS when exposed to heat or flame. This material can be ignited by flame or spark under all normal atmospheric conditions. Vapors are heavier than air and may travel to ignition sources and flash back. Closed containers may rupture (due to build up of pressure) when exposed to extreme heat.
<b>Hazardous combustion products:</b>	Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

#### 6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

<b>Environmental precautions:</b>	Prevent further leakage or spillage if safe to do so. Wear appropriate protective equipment and clothing during clean-up. Do not allow product to enter sewer or waterways.
<b>Clean-up methods:</b>	Absorb spill with inert material. Shovel material into appropriate container for disposal. Dispose of according to Federal, State and local governmental regulations.

#### 7. HANDLING AND STORAGE

<b>Handling:</b>	Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Avoid breathing vapors or mists of this product. Do not take internally. For industrial use only.
<b>Storage:</b>	Keep in a cool, well ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready for use. Do not store with oxidizing materials.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous components	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Acetone	500 ppm TWA 750 ppm STEL	1,000 ppm (2,400 mg/m <sup>3</sup> ) TWA	None	None
Propane	1,000 ppm TWA	1,000 ppm (1,800 mg/m <sup>3</sup> ) TWA	None	None
Butane	1,000 ppm TWA	None	None	None
Methyl ethyl ketone	200 ppm TWA 300 ppm STEL	200 ppm (590 mg/m <sup>3</sup> ) TWA	None	None
Boron nitride	None	None	None	None
Dimethoxymethane	1,000 ppm TWA	1,000 ppm (3,100 mg/m <sup>3</sup> ) TWA	None	None
1,3-Dioxolane	20 ppm TWA	None	None	None

**Engineering controls:**

Provide local and general exhaust ventilation to effectively remove and prevent buildup of any vapors or mists generated from the handling of this product.

**Respiratory protection:**

If ventilation is not sufficient to effectively prevent buildup of aerosols, mists or vapors, appropriate NIOSH/MSHA respiratory protection must be provided.

**Eye/face protection:**

Safety glasses with side-shields.

**Skin protection:**

Wear impervious gloves for prolonged contact. Use of impervious apron and boots are recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Liquid
<b>Color:</b>	White
<b>Odor:</b>	Solvent
<b>Odor threshold:</b>	Not available
<b>pH:</b>	6 - 8
<b>Vapor pressure:</b>	231 mm hg (25 °C (77°F))
<b>Boiling point/range:</b>	56 °C (132.8 °F)
<b>Melting point/ range:</b>	-95 °C (-139°F)
<b>Specific gravity:</b>	1.2
<b>Vapor density:</b>	2.0
<b>Flash point:</b>	-4 °F (-20°C)
<b>Flammable/Explosive limits - lower:</b>	2.2 %
<b>Flammable/Explosive limits - upper:</b>	13 %
<b>Autoignition temperature:</b>	465 °C (869°F)
<b>Evaporation rate:</b>	14.4
<b>Solubility in water:</b>	Soluble
<b>Partition coefficient (n-octanol/water):</b>	Not available
<b>VOC content:</b>	778 g/l

## 10. STABILITY AND REACTIVITY

**Stability:**

Stable at normal conditions.

**Hazardous reactions:**

Will not occur.

**Hazardous decomposition products:**

Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

**Incompatible materials:**

This product may react with oxidizing agents.

**Conditions to avoid:**

Heat, flames, sparks and other sources of ignition.

## 11. TOXICOLOGICAL INFORMATION

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Acetone	No	No	No
Propane	No	No	No
Butane	No	No	No
Methyl ethyl ketone	No	No	No
Boron nitride	No	No	No
Dimethoxymethane	No	No	No
1,3-Dioxolane	No	No	No

Hazardous components	Health Effects/Target Organs
Acetone	Blood, Central nervous system, Irritant, Reproductive
Propane	Cardiac, Central nervous system, Irritant
Butane	Cardiac, Central nervous system, Irritant
Methyl ethyl ketone	Irritant, Central nervous system
Boron nitride	Irritant, Corrosive
Dimethoxymethane	Irritant, Central nervous system
1,3-Dioxolane	Blood, Central nervous system, Irritant, Kidney, Liver, Mutagen

## 12. ECOLOGICAL INFORMATION

Ecological information: Not available

## 13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Dispose of according to Federal, State and local governmental regulations.

Hazardous waste number: If discarded, this product is considered a RCRA ignitable waste, D001.

## 14. TRANSPORT INFORMATION

### U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: Aerosols  
Hazard class or division: 2.1  
Identification number: UN 1950  
Packing group: None  
DOT Reportable quantity: Acetone, Methyl ethyl ketone

### International Air Transportation (ICAO/IATA)

Proper shipping name: Aerosols, flammable  
Hazard class or division: 2.1  
Identification number: UN 1950  
Packing group: None

### Water Transportation (IMO/IMDG)

Proper shipping name: AEROSOLS  
Hazard class or division: 2.1  
Identification number: UN 1950  
Packing group: None

## 15. REGULATORY INFORMATION

### United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.

TSCA 12(b) Export Notification: None above reporting de minimus

**CERCLA/SARA Section 302 EHS:** None above reporting de minimus  
**CERCLA/SARA Section 311/312:** Immediate Health, Fire  
**CERCLA/SARA 313:** This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). Methyl ethyl ketone (CAS# 78-93-3).  
**CERCLA Reportable quantity:** Acetone (CAS# 67-64-1) 5,000 lbs. (2,270 kg)  
Methyl ethyl ketone (CAS# 78-93-3) 5,000 lbs. (2,270 kg)  
**California Proposition 65:** This product contains a chemical known in the State of California to cause cancer. This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

#### Canada Regulatory Information

**CEPA DSL/NDL Status:** All components are listed on or are exempt from listing on the Canadian Domestic Substances List.  
**WHMIS hazard class:** A, B.1, D.2.B

### 16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: New Material Safety Data Sheet format.

**Prepared by:** Mark Mau, Regulatory Affairs Specialist

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