

# Heavy Duty Cleaner Degreaser 827B



Use when an aggressive cleaner degreaser is required and plastic compatibility or flammability is not a concern. Great for removing heavy oils and greases, burnt on flux, ionic residues, and difficult to remove soils. Very effective at cleaning and degreasing the solder side (non component) of PC boards. Extra effective with M.G. Cat. #'s <u>852</u> & <u>853</u> Hog Hair Cleaning Brushes.

- Aggressive cleaner
- Cost effect
- Test on plastics before using

# **Available Sizes**

Catalog Number	Sizes Available	Description
827B-425G	425g (15 oz)	Aerosol
827B-1L	1L (35 oz)	Liquid
827B-4L	4L (1 gal)	Liquid
827B-20L	20L (5 gal)	Liquid





#### **Section 1: Product Identification**

MSDS Code: 827B - liquidName: Heavy Duty Cleaner DegreaserRelated Part Numbers: 827B-1L; 827B-4L; 827B-20L

Use: Cleaning and degreaser for electronics.

#### Section 2: Hazardous Ingredients

CAS#	Chemical Name	Percentage by weight	ACGIH TWA	Osha Pel	Osha Stel
67-63-0	2-propanol	5 - 20	400ppm	400ppm	500ppm
141-78-6	Ethyl acetate	40 - 70	400ppm	400ppm	N/e
67-64-1	2-propanone	10 - 40	750ppm	1000ppm	1000ppm

## **Section 3: Hazards Identification**

WHMIS Codes:	: B2, D2B					
NFPA Ratings:	Health 1 Flammability 3 Reactivity 0					
HMIS Ratings:	Health 1 Flammability 3 Reactivity 0					
Eyes:	Liquid in contact with the eyes may cause permanent eye damage.					
Skin:	May cause skin irritation and possible pain and stinging if the skin is abraded.					
Inhalation:	Solvents may cause respiratory tract irritation, liver and kidney damage, and adverse central nervous system effects.					
Ingestion:	May cause respiratory and digestive tract irritation. May cause kidney damage, liver damage, and central nervous system depression.					
Chronic:	Prolonged or repeated exposure may cause dermatitis and defatting of the skin.					

#### **Section 4: First Aid Measure**

Eyes:	Remove contact lenses. Flush with water or saline for 20 minutes. Get medical aid.
Skin:	Wash skin with large quantities of soap and water. Get medical aid if symptoms persist.
Inhalation:	Immediately remove from exposure to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.
Ingestion:	Do not induce vomiting. If conscious, give 1-2 glasses of water. Get medical aid.

#### **Section 5: Fire Fighting Measures**

Autoignition Temperature:	465°C	Flash Point: -20°C	LEL / UEL: 2 / 13
Extinguishing Media:	Use water spray,	, dry chemical, carbon dioxide, or chemi	cal foam.



General Information:

entry:

Will burn if involved in a fire. Containers may explode in the heat of a fire. Vapors may form an explosive mixture with air. Vapors can travel to source of ignition and flash back.

#### Section 6: Accidental Release Measures

SpillRemove all sources of ignition. Provide adequate ventilation. Wear appropriate personal protection.Procedure:Sprinkle absorbent compound onto spill, then sweep into a plastic or metal container. Wipe up further<br/>residue with paper towel and place in container. Wash spill area with soap and water.

#### Section 7: Handling and Storage

- Handling: Wash thoroughly after handling. Avoid contact with eyes, skin, and clothing. Do not ingest or inhale. Do not expose container to heat or flame.
- **Storage:** Keep away from sources of ignition. Store in a cool, dry, well-ventilated area, away from incompatible substances.

#### Section 8: Exposure Controls

**Routes of** Eyes, ingestion, inhalation, and skin.

Ventilation: Use adequate general or local exhaust ventilation to keep airborne concentrations below exposure limits.

PersonalWear appropriate protective eyeglasses or chemical safety goggles. Wear appropriate protectiveProtection:clothing to prevent skin contact. Use a NIOSH approved respirator when necessary.

#### Section 9: Physical and Chemical Properties

Physical State:	Liquid	Odor:	Ethereal	Solubility:	Partial	Evaporation Rate:	N/a		
Boiling Point:	56°C	Specific Gravity:	0.83	Vapor Pressure:	307.9692hPa @25°C	Vapor Density:		pH:	N/a

#### Section 10: Stability and Reactivity

Stability:	Stable at normal temperatures and pressures.
Conditions to avoid:	Temperatures over 40°C, ignition sources, and incompatible substances.
Incompatibilities:	Strong oxidizers, alkali metals and their hydroxides, liquid oxygen, strong bases, caustics, mineral acids, amines and ammonia, halogens.
Polymerization:	Has not been reported.
Decomposition:	Carbon monoxide, carbon dioxide, acrid smoke and fumes.

#### Section 11: Toxicological Information

Sensitization: (effects of repeated exposure)	Repeated skin contact may cause dermatitis.		
Carcinogenicity: (risk of cancer)	No		
Teratogenicity: (risk of malformation in an unborn fetus)	No		
Reproductive Toxicity: (risk of sterility)	No		
Mutangenicity: (risk of heritable genetic effects)	No		



Lethal Exposure Concentrations:	16,445 mg / kg (mouse)	Inhalation (LC50):	 Skin (LD50):	25030- 27900 mg/kg

Section 12: Ecological Information								
General Information:	Avoid runoff into storms and sewers, which lead into waterways. Water runoff can cause environmental damage.							
Environmental Impact Data: (percentage by weight)								
<b>CFC:</b> 0	<b>HFC</b> : 0	<b>CI.Solv</b> : 0	<b>VOC:</b> 100	<b>HCFC:</b> 0	<b>ODP</b> : 0			

#### Section 13: Disposal Information

GeneralDispose of in accordance with all local, provincial, state, and federal regulations. Water runoffInformation:can cause environmental damage.

#### Section 14: Transportation Information

Ground: (all sizes 1 liter or less)

Consumer Commodity, ORM-D

#### Ground: - Large Sizes: (all sizes larger than 1 liter)

Shipping Name – Flammable liquid N.O.S. [ethyl acetate] Flash Point -20°C, Class 3, UN# 1993, Packing Group II, Subsidiary Risk – nil, Use only MG Chemicals certified outer cartons. Tape all seems on the carton. Hazard Label required – Flammable Liquid. A double arrow orientation label is required and is already printed on the original outer carton. Shipper must be trained and certified to handle dangerous documented goods. Refer to CFR 49, TDG regulations (Canada).

#### Air:

Shipper must be trained and certified. Refer to IATA regulations.

#### Sea - All Sizes:

Class 3, UN# 1993, Packing Group II. Shipper must be trained and certified. Refer to IMDG regulations.

#### Section 15: Regulatory Information

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

SARA (Superfund Amendments and Reauthorization Act of 1986, USA, 40 CFR 372.4)

None of the chemicals in this product have a reportable quantity.

EPCRA (Emergency Planning and Right to Know Act, USA, 40 CFR 372.45

This product does not contain any chemicals subject to the reporting requirements of section 313 Title III of the SARA of 1986 and 40 CFR part 372.

**TSCA** (Toxic Substances Control Act of 1976, USA)

All substances are TSCA listed.

CAA (Clean Air Act, USA)

This product does not contain any class 1-ozone depletors.

This product does not contain any class 2-ozone depletors.

This product does not contain any chemicals listed as hazardous air pollutants.

California Proposition 65 (Chemicals know to cause cancer or reproductive toxicity, May 1, 1997 revision, USA)

This product does not contain any chemicals listed.



# **Material Safety Data Sheet**

Section 1: Product Identification

MSDS Code: 827B - aerosol Name: Heavy Duty Cleaner Degreaser

#### Related Part Numbers: 827B-425G

Use: Cleaning and degreaser for electronics.

## Section 2: Hazardous Ingredients

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CAS#	Chemical Name	Percentage by weight	ACGIH TWA	Osha Pel	Osha Stel
67-63-0	2-propanol	7-13	400ppm	400ppm	500ppm
141-78-6	Ethyl acetate	30-60	400ppm	400ppm	N/e
67-64-1	2-propanone	10-30	750ppm	1000ppm	1000ppm
74-98-6	Propane	5-20	Asphyxiant	N/e	N/e
75-28-5	Isobutane	5-10	1000ppm	N/e	N/e

#### **Section 3: Hazards Identification**

WHMIS Codes	: A, B5, D2B
NFPA Ratings:	Health 2 Flammability 3 Reactivity 0
HMIS Ratings:	: Health 2 Flammability 4 Reactivity 0
Eyes:	Liquid in contact with the eyes may cause permanent eye damage.
Skin:	Solvents may cause respiratory tract irritation, liver and kidney damage, and adverse central nervous system effects.
Inhalation:	Solvents may cause respiratory tract irritation, liver and kidney damage, and adverse central nervous system effects.
Ingestion:	May cause respiratory and digestive tract irritation. May cause kidney damage, liver damage, and central nervous system depression.
Chronic:	Prolonged or repeated exposure may cause dermatitis and defatting of the skin.

#### Section 4: First Aid Measure

Eyes:	Remove contact lenses. Flush with water or saline for 20 minutes. Get medical aid.
Skin:	Wash skin with large quantities of soap and water. Get medical aid if symptoms persist.
Inhalation:	Immediately remove from exposure to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.
Ingestion:	Do not induce vomiting. If conscious, give 1-2 glasses of water. Get medical aid.



# Section 5: Fire Fighting Measures

Autoignition Temperature:	225-399°C	Flash Point: -18°C	LEL / UEL: 1/12.8		
Extinguishing Media:	Use water spray, dry chemical, carbon dioxide, or chemical foam.				
General Information:	Will burn if involved in a fire. Containers may explode in the heat of a fire. Vapors form an explosive mixture with air. Vapors can travel to source of ignition and flat back.				

#### **Section 6: Accidental Release Measures**

SpillRemove all sources of ignition. Provide adequate ventilation. Wear appropriate personal protection.Procedure:Sprinkle absorbent compound onto spill, then sweep into a plastic or metal container. Wipe up further<br/>residue with paper towel and place in container. Wash spill area with soap and water.

#### Section 7: Handling and Storage

Handling: Wash thoroughly after handling. Avoid contact with eyes, skin, and clothing. Do not ingest or inhale. Do not expose container to heat or flame.

**Storage:** Keep away from sources of ignition. Store in a cool, dry, well-ventilated area, away from incompatible substances.

## Section 8: Exposure Controls

Routes of entry:	Eyes, ingestion, inhalation, and skin.
Ventilation:	Use adequate general or local exhaust ventilation to keep airborne concentrations below exposure limits.
Personal Protection:	Wear appropriate protective eyeglasses or chemical safety goggles. Wear appropriate protective clothing to prevent skin contact. Use a NIOSH approved respirator when necessary.

# Section 9: Physical and Chemical Properties

Physical State:	Aerosol	Odor:	Mild	Solubility:	Negligible	Evaporation Rate:	>1 (n-Butyl Acetate=1)		
Boiling Point:	57- 83°C	Specific Gravity:		Vapor Pressure:	50-60 PSI @20°C	Vapor Density:		pH:	N/a

#### Section 10: Stability and Reactivity

Stability:	Stable at normal temperatures and pressures.
Conditions to avoid:	Temperatures over 40°C, ignition sources, and incompatible substances.
Incompatibilities:	Strong oxidizing agents.
Polymerization:	Has not been reported.
Decomposition:	Carbon monoxide, carbon dioxide, hydrogen chloride, phosgene, hydrofluoric acid, and carbonyl fluoride.

# Section 11: Toxicological Information

Sensitization: (effects of repeated exposure)	Repeated skin contact may cause dermatitis.
Carcinogenicity: (risk of cancer)	The ingredients of this product are not classified as being carcinogenic by ACGIH (American Conference of Governmental industrial Hygienists) or IARC (International



Agency for Research on Cancer), not regulated as carcinogens by OSHA (Occupational Safety and Health Administration), and not listed as carcinogens by NTP (National Toxicology Program)

Teratogenicity: (risk of malformation in an unborn fetus)	No					
Reproductive Toxicity: (risk of sterility)	No					
Mutangenicity: (risk of heritable genetic effects)	No					
Lethal Exposure Concentrations:	Ingestion (LD50):	2737 mg / kg (mouse)	Inhalation (LC50):	23500 mg / m3 / 8H (rat)	Skin (LD50):	N/e

#### Section 12: Ecological Information

 

 General Information:
 Avoid runoff into storms and sewers, which lead into waterways. Water runoff can cause environmental damage.

 Environmental Impact Data: (percentage by weight)
 VOC: 79-80
 HCFC: 0
 ODP: 0

#### Section 13: Disposal Information

GeneralDispose of in accordance with all local, provincial, state, and federal regulations. Water runoffInformation:can cause environmental damage.

#### Section 14: Transportation Information

#### Ground:

Consumer Commodity, ORM-D

#### Air:

Shipper must be trained and certified. Refer to IATA regulations.

#### Sea:

UN# 1950. Class 2.1. Shipper must be trained and certified. Refer to IMDG regulations.

#### Section 15: Regulatory Information

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

SARA (Superfund Amendments and Reauthorization Act of 1986, USA, 40 CFR 372.4)

None of the chemicals in this product have a reportable quantity.

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All substances are TSCA listed.

CAA (Clean Air Act, USA)

This product does not contain any class 1-ozone depletors.

This product does not contain any class 2-ozone depletors.

This product does not contain any chemicals listed as hazardous air pollutants.