Product Information

Silicone Free Heat Sink Compound

Heat Sink Compound
1978

Introduction

A silicone free compound applied under power transistors and other devices that generate heat to assist in transferring heat from generating objects to metal chassis for dissipation. Product will not harden, dry out, melt, or contaminate wave solder baths. Designed to eliminate the phenomenon of silicone migration. Product has a functional temperature range from -40°C (-40°F) to 200°C (392°F).

Features / Benefits

Functional Temperature Range (-40°C - 200°C)
Will Not Harden
Silicone Free

Technical Data	
Color	Smooth White
Solids Content:	WT. % 65 % Min
Thermal Conductivity	@ 36°C 16.7x10-4 CAL/SEC Cm C, Min.
Interface Thermal Resistance	(Recs) 0.043 C/W
Bleed	24 Hrs. @ 200°C, WT.% 0.09% Max
Evaporation	24 Hrs. @ 200°C, WT.% 0.06% Max.
Volume Resistivity	2.3x10^12 OHMS/CM
Dielectric Strength	200 volts/Mil
Specific Gravity	2.7 @ 25˚C per ASTM D70 test method
Penetration	360
Operating Range	-40°C (-40°F) to 200°C (392°F)

Chemical Components

Zinc Oxide, USP……..(1314-13-2) <70%
00840600 Trade Secret # 5000P
00840600 Trade Secret # 5001P
00840600 Trade Secret # 5002P
Trade Secret Registered with State of New Jersey.
Zinc oxide in paste form and does not exhibit a dust hazard.
This product does not contain any hazardous ingredients as per OSHA 29 CFR 1910.1200 Subpt.(z).

Environmental Policy

Techspray® is committed to developing products that have minimal effects on the environment. We will continue to meet and sustain the regulations of all federal, state and local government agencies.

Packaging and Availability

Silicone Free Heat Sink Compound is available in the following sizes:

1978-DP	4 Ounce Squeeze Tube
1978-1	1 Pound Tub

MATERIAL SAFETY DATA SHEET

MSDS Ref. No : 1978

Silicone-free Heat Sink Compound

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Silicone-free Heat Sink Compound
PRODUCT DESCRIPTION: Silicone-free Heat Sink Compound
PRODUCT CODE: 1978-1, 1978-DP

MANUFACTURER

Techspray, L.P.

2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Content	CAS	EINECS
Zinc oxide	< 70	1314-13-2	
NJ Trade Secret Reg. #00840600-5000P	15 - 20		
NJ Trade Secret Reg. #00840600-5001P	10 - 15		
NJ Trade Secret Reg. #00840600-5002P	3 - 5		

EEC LABEL SYMBOL AND CLASSIFICATION

Currently not classified according to EEC Directives.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Odorless white paste

POTENTIAL HEALTH EFFECTS

EYES: Avoid contact with eyes; may cause redness, irritation and conjunctivitis.

SKIN: Prolonged or repeated contact may cause skin irritation.

SKIN ABSORPTION: None Expected.

INGESTION: Not yet Determined

INHALATION: Not yet Determined

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Symptoms of overexposure include: stinging, tearing, redness and pain.

SKIN: Prolonged or exposure may cause skin irritation.

SKIN ABSORPTION: None Expected.

INGESTION: Ingestion may result in diarhea and/or nausea.

INHALATION: None Expected.

ACUTE TOXICITY: Low hazard for usual industrial or commercial handling.

CHRONIC: Frequent or prolonged contact may irritate the skin and cause a skin rash (dermatitis).

CARCINOGENICITY: NOT listed

MUTAGENICITY: Not yet Determined

REPRODUCTIVE TOXICITY

REPRODUCTIVE EFFECTS: NOT listed

TERATOGENIC EFFECTS: Not yet Determined

CANCER STATEMENT: NOT listed

COMMENTS: Zinc oxide component (USP) is in paste form and does not exhibit a dust hazard.

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4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water. Get medical attention, if irritation persists.

SKIN: Immediately wash skin with soap and plenty of water. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

INGESTION: If swallowed, do not induce vomiting. If conscious and alert, give two glasses of water. Seek medical attention.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.

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5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: 296°C (565°F)

FLAMMABLE LIMITS: Not Determined to Not Determined

AUTOIGNITION TEMPERATURE: Not Available

SKIN: Not Applicable

RESPIRATORY: Not Applicable

WORK HYGIENIC PRACTICES: Avoid contact with eyes. Avoid fume inhalation. Limit skin contact.

OTHER USE PRECAUTIONS: Emergency shower and eyewash facility should be in close proximity.

COMMENTS: This material is in paste form; zinc oxide does not pose a dust hazard.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Semisolid
ODOR: None
APPEARANCE: Gray Solid with low odor
pH: NA = Not Applicable
PERCENT VOLATILE: Not Established
VAPOR PRESSURE: < 0.1 mmHg
VAPOR DENSITY: Not Applicable
BOILING POINT: > 204°C (400°F)
FREEZING POINT: Not Applicable
SOLUBILITY IN WATER: Insoluble
EVAPORATION RATE: < 0.01 (n-Butyl Acetate=1)
SPECIFIC GRAVITY: 2.7 (water=1)
VISCOSITY: Not Available

10. STABILITY AND REACTIVITY

STABILITY: Stable under normal conditions.

POLYMERIZATION: Will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS: None known.

INCOMPATIBLE MATERIALS: Oxidizing materials.

11. TOXICOLOGICAL INFORMATION

EYE EFFECTS: No data available. Contact Env. Dept.

SKIN EFFECTS: No data available. Contact Env. Dept.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: No data available. Contact Env. Dept.

ECOTOXICOLOGICAL INFORMATION: Not Applicable