



REACH Ready!

SAFETY DATA SHEET

SECTION 1: Identification of the substance and company undertaking

1.1 Product name: AOS Heat Sink Compound

AOS Product Codes: 52022, 52027, 52029, 52030, 52130, 52032, 52034, 52037, 52038, 52039, 52041, 52042, 52050, 52051, 52052, 52053, 52153, 52054, 52055, 52056, 52057, 52060, 52061, 52160, 52070, 53053, 53054, 53299, 53300

Synonyms: TIM, Thermal Interface Material, Thermal Compound, CPU Grease, Gap Filler

1.2 Relevant identified uses of the substance and uses advised against

Product Restrictions: Not applicable

1.3 Supplier details

Manufacturers Name: AOS Thermal Compounds
Manufacturers Address: 22 Meridian Road #6
Manufacturers City: Eatontown
Manufacturers State: New Jersey
Manufacturers Zip Code: 07724
Manufacturers Country: USA
Business Phone: (732) 389-5514 X 5

SECTION 2: Hazard Identification

2.1 Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP]

GHS Class Phrases: Hazardous to the aquatic environment, short term, acute, category 1
 Hazardous to the aquatic environment, long term, chronic, category 1



AOS Thermal Compounds

Tel. (732)389-5514 22 Meridian Road, Suite 6, Eatontown, NJ 07724 Fax (732)389-6380

Signal Words: Warning.

Hazard Statements: H400 - Very toxic to aquatic life
H410 – Very toxic to aquatic life with long lasting effects

Precautionary Statement: P273 – Avoid release to the environment
P391 – Collect Spillage
P501 – Dispose of contents/container in accordance with Local, State, Federal, and Provincial Regulations.

2.3 Other Hazards: none

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Zinc Oxide	CAS# 1314-13-2	0 – 90% H315, H319, H400, H410 Skin Irritation, category 2 Eye Irritation, category 2 Hazardous to the aquatic environment, short term, acute, category 1 Hazardous to the aquatic environment, long term, chronic, category 1
Proprietary	No Data	0 – 10%
Magnesium Oxide	CAS # 1309-48-4	0 – 90%
Aluminum Nitride	CAS # 24304-00-5	0 – 90%
Aluminum Powder	CAS # 7429-90-5	0 – 90%
Aluminum Oxide	CAS # 1344-28-1	0 – 90%
Boron Nitride	CAS # 10043-11-5	0 – 90%

Zinc Oxide Comment: Skin and Eye irritation warnings are applicable to the loose powder form only and do not apply to this product

SECTION 4: First Aid Measures

4.1 Description of First Aid Measures

Eye Contact: Immediately flush eyes with water for 15 to 20 minutes. Get medical attention if irritation or symptoms of overexposure persist.

Skin Contact: Immediately wash skin with soap and water. Get medical attention if irritation develops or persists.

Inhalation: If inhaled remove to fresh air. If not breathing give artificial respiration or oxygen by a trained personnel. Seek immediate medical attention.

Ingestion: If swallowed do not induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects both acute and delayed

Other First Aid: Exposure to soldering fumes and vapors may be irritation to the eyes, respiratory system and skin.

4.3 Indication of immediate medical attention and special treatment needed

Note to Physicians: none

SECTION 5: Fire Fighting Measures

5.1 Extinguishing Media

Extinguishing Media: Foam, carbon dioxide, dry chemical, water fog or spray.

Unsuitable Media: Not determined

5.2 Special hazards arising from the substance or mixture

Unusual Fire Hazards: None known

5.3 Advice for firefighters

Fire Fighting Instructions: Evacuate area of unprotected personnel. Use cold water spray to cool fire exposed containers to minimize risk of rupture. Do not enter confined fire space without full protective gear. If possible, contain fire run-off water.

Protective Equipment: As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA Fire: 0

NFPA Health: 1

NFPA Reactivity: 0

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions: Do not ingest. Use proper personal protective equipment as listed in Section 8, wear gloves.

6.2 Environmental precautions

Environmental Precautions: Avoid run-off into storm sewers, ditches and waterways

6.3 Methods and materials for containment and cleaning up

Methods for Containment: Collect product and repackage in a container.

Methods for Cleanup: Use common solvents such as mineral spirits, acetone or IPA. Provide ventilation. After removal, flush spill area with soap and water to remove trace residue.

6.4 Reference to other sections

Other Spill Precautions: See section 13 for disposal information

SECTION 7: Handling and Storage

7.1 Precautions for safe handling

Handling: Use with adequate ventilation. Avoid breathing vapor and contact with eyes, skin and clothing.

Hygiene Practices: Wash thoroughly after handling. Avoid contact with eyes and skin.

7.2 Conditions for safe storage, including any incompatibilities

Storage: Store in a cool, dry, well ventilated area away from heat sources, combustible materials and incompatible substances. Keep container tightly closed when not in use.

7.3 Specific end use(s)

SECTION 8: Exposure Controls, Personal Protection

8.2 Exposure controls

Engineering Controls:	Safety Glasses and Gloves are recommended for hygienic practice.
Ventilation:	Under normal conditions no special ventilation is needed.
Eye Protection:	Safety glasses are not necessary.
Skin Protection:	Gloves are not necessary.
Hygiene Practices:	Wash thoroughly after handling. Avoid contact with eyes and skin.

SECTION 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Physical State:	Paste
Color:	White, off white or grey
Odor:	Odorless
pH:	Not determined
Melting Temperature:	Not determined
Boiling Temperature:	>400 F / >204 C
Flash Point:	Not determined
Ignition Temperature:	Not determined
Lower Flammable Limit:	Not determined
Upper Flammable Limit:	Not determined
Vapor Pressure:	Not determined
Vapor Density:	Not determined
Solubility:	Insoluble
Specific Gravity:	2.2 – 3.0 (H ₂ O = 1)
Evaporation Rate:	< 0.01 (butyl acetate = 1)
Partition Coefficient:	Not determined
Percent Volatile:	Not determined
VOC Content:	Not determined
Viscosity:	100,000 – 1,500,000 cP@ 1, 10 sec-1 shear @ 25 C
Odor Threshold:	Not determined
Oxidizing Properties:	Not an oxidizer
Explosive Properties:	Not determined

9.2 Other information

SECTION 10: Stability and Reactivity

10.1 Reactivity

Reactivity:	No data available
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10.2 Chemical Stability

Chemical Stability: Stable under recommended handling and storage conditions

10.3 Possibility of hazardous polymerization

Hazardous Polymerization: Will not occur

10.4 Conditions to avoid

Conditions to Avoid: Heat, flames and sparks

10.5 Incompatible materials

Incompatible Materials: Oxidizing agents.

10.6 Hazardous decomposition

Hazardous Decomposition: Toxic gases such as ZnO fumes may be released in a fire

SECTION 11: Toxicological Information

11.1 Information on toxicological effects

PreExisting Conditions	None generally recognized.
Aggravated by Exposure:	
Acute Inhalation Effects:	May be harmful if inhaled.
Acute Skin Effects:	May cause skin irritation.
Acute Ingestion Effects:	May be harmful if ingested.
Acute Eye Effects:	May cause eye irritation.
Zinc Oxide Eye Toxicity:	Administration into the eye – Rabbit Standard Draize test: 500mg/24H [Mild] (RTECS)

SECTION 12: Ecological Information

12.1 Ecotoxicity

Ecotoxicity: Harmful to aquatic organisms, may cause long term effects in the aquatic environment.

Environmental Stability: No data available for this product.

12.3 Bioaccumulative potential

Bioaccumulation: No data available for this product.

12.4 Mobility in soil

Mobility in environmental Media: No data available for this product

SECTION 13: Disposal Information

13.1 Waste treatment methods

Waste Disposal: Dispose of in accordance with Local, State, Federal and Provincial regulations

SECTION 14: Transport Information

DOT Shipping Name: Not regulated as hazardous material for transportation
DOT UN Number: Not regulated as hazardous material for transportation
IMDG Shipping Name: Environmentally hazardous substance, solid, n.o.s (ZnO)
IMDG UN Number: UN3077
IMDG Hazard Class: 9
IMDG Packing Group: III
IATA Shipping Name: Environmentally hazardous substance, solid, n.o.s (ZnO)
IATA UN Number: UN3077
IATA Hazard Class: III
IATA Subrisk: 9
RID/ADR Shipping Name: Environmentally hazardous substance, solid, n.o.s. (ZnO)
RID/ADR UN Number: UN3077
RID/ADR Hazard Class: 9
RID/ADR Packing Group: III

SECTION 15: Regulatory Information

15.1 Safety, health, and environmental regulations/legislation specific for the substance

Regulatory – Product Based

SARA: Listed, Zinc Compounds

Regulatory – Ingredient Based:

Zinc Oxide:

Canada DSL: Listed

TSCA Inventory Status: Listed

EC Number: 215-222-5

SECTION 16: Other Information

Revision Date: July 15, 2019

Author: AOS

Disclaimer: The information herein is presented in good faith and believed to be accurate as of the revision date shown above. However, no warranty, expressed or implied is given. It is the buyer's responsibility to ensure that its activities comply with local, state, federal and provincial laws. Additionally, AOS Thermal Compounds assumes no responsibility for injury to the end user, who assumes the risk in the use of this material.

HMIS:

Health	1
Flammability	0
Reactivity	0
PPE	X