



REACH Ready!

SAFETY DATA SHEET

SECTION 1: Identification of the substance and company undertaking

1.1 Product name: AOS Heat Sink Compounds

AOS Product Codes: 52022, 52025, 52027, 52029, 52030, 52031, 52130, 52032, 52034, 52037, 52038, 52039, 52041, 52042, 52050, 52051, 52052, 52053, 52153, 52155, 52054, 52055, 52056, 52057, 52060, 52061, 52160, 52070, 53053, 53054, 53299, 53300, 53304

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
24-hour emergency response company PERS,
contract 12233 AOS Thermal Compounds:
001-801-629-0667

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



Signal Words: Warning.

AOS Thermal Compounds

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

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
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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 Classification	TDG Classification	Mexico Classification	IMDG	IATA
UN number	Not available.	UN3077	UN3077	UN3077	UN3077
UN proper shipping name	Not available.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide)
Transport hazard class(es)	Not available.	9  	9  	9  	9  
Packing group	-	III	III	III	III
Environmental hazards	No.	Yes.	Yes.	Yes.	Yes.

Additional information

- TDG Classification** : Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.43-2.45 (Class 9), 2.7 (Marine pollutant mark). Non-bulk packages of this product are not regulated as dangerous goods when transported by road or rail.
- Mexico Classification** : The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.
- IMDG** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.
- IATA** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not available.

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: November 29, 2023

Author: AOS

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