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**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**

**Product identifier**

Product code **SIPM504**  
Product name **SIPM504 Aluminum Paste L-228**  
Product category **Metallic Powder or Paste**

**Other means of identification**

Synonyms None

**Recommended use of the chemical and restrictions on use**

Recommended use Printing operations

**Details of the supplier of the safety data sheet**

UNITED STATES	UNITED KINGDOM
Nazdar Company	Nazdar Limited
8501 Hedge Lane Terrace	Barton Road
Shawnee, KS 66227	Heaton Mersey
Tel: +001-913-422-1888	Stockport, England SK4 3EG
Tel: +001-800-677-4657	Tel: +44 161 442 2111
Fax: +001-913-422-2294	
www.nazdar.com	

**Emergency telephone number**

USA: Chemtrec: +001-800-424-9300  
Outside USA: Chemtrec: +001-703-527-3887  
24 Hour Emergency Phone Number

**2. HAZARDS IDENTIFICATION**

**Classification**

Aspiration toxicity	Category 1 - (H304)
Flammable Solids	Category 1 - (H228)

**Label elements**



**Signal Word**  
Danger

**Hazard Statements**

H304 - May be fatal if swallowed and enters airways  
H228 - Flammable solid

**Precautionary Statements**

P331 - Do NOT induce vomiting  
P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

**Hazards not otherwise classified (HNOC)**

No information available.

**3. COMPOSITION/INFORMATION ON INGREDIENTS****Mixture**

Component	CAS-No	Weight %	Trade Secret	Note
Aluminum powder (stabilized)	7429-90-5	60 - 100	*	
Solvent naphtha, petroleum, light aromatic	64742-95-6	10 - 30	*	
Petroleum distillates, hydrotreated light	64742-47-8	10 - 30	*	

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

**4. FIRST AID MEASURES****Description of first aid measures**

<b>General Advice</b>	Show this safety data sheet to the doctor in attendance.
<b>Eye Contact</b>	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Get medical attention if irritation develops and persists.
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water for at least 15 minutes. Remove contaminated clothing. If irritation (redness, rash, blistering) develops, get medical attention.
<b>Inhalation</b>	Remove person to fresh air and keep comfortable for breathing. If breathing is irregular or stopped, administer artificial respiration. Get medical attention immediately.
<b>Ingestion</b>	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

**Most important symptoms and effects, both acute and delayed**

None under normal use conditions.

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician** Treat symptomatically.

**5. FIRE-FIGHTING MEASURES****Suitable Extinguishing Media**Foam. Carbon dioxide (CO<sub>2</sub>). Dry chemical. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.**Unsuitable Extinguishing Media**

Do not use water.

**Specific Hazards Arising from the Chemical**

Thermal decomposition can lead to release of irritating gases and vapors. May emit toxic fumes under fire conditions. Dousing metallic fires with water may generate hydrogen gas, an extremely dangerous explosion hazard, particularly if fire is in a confined environment (i.e., building, cargo hold, etc.).

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Sealed containers may rupture when heated.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

**Personal Precautions** Remove all sources of ignition. Ventilate the area. Avoid contact with eyes, skin and clothing. Avoid breathing dust or vapor. Evacuate personnel to safe areas. Keep people

away from and upwind of spill/leak.

### Environmental precautions

Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. Keep out of drains, sewers, ditches and waterways. Local authorities should be advised if significant spillages cannot be contained.

### Methods and material for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Use clean non-sparking tools to collect absorbed material.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Handling** Use personal protective equipment as required. Do not eat, drink or smoke when using this product. Ensure adequate ventilation.

### Conditions for safe storage, including any incompatibilities

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep container closed when not in use. Keep out of the reach of children.

**Incompatible Products** Strong acids. Strong bases. Strong oxidizing agents. Reducing agent. Water.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### **Exposure limits**

Component	ACGIH TLV
Aluminum powder (stabilized) 7429-90-5	TWA: 1 mg/m <sup>3</sup> respirable particulate matter

Component	OSHA PEL
Aluminum powder (stabilized) 7429-90-5	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction

Component	OSHA PEL (vacated)
Aluminum powder (stabilized) 7429-90-5	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction

Component	Ontario TWA EV
Aluminum powder (stabilized) 7429-90-5	TWA: 1 mg/m <sup>3</sup> respirable

Component	Mexico OEL (TWA)
Aluminum powder (stabilized) 7429-90-5	TWA/VLE-PPT: 10 mg/m <sup>3</sup> dust

### Appropriate engineering controls

**Engineering Measures** Provide a good standard of general ventilation. Natural ventilation is from doors, windows etc. Controlled ventilation means air is supplied or removed by a powered fan. Users are advised to consider national Occupational Exposure Limits or other equivalent values. In case of insufficient ventilation, wear suitable respiratory equipment.

### Individual protection measures, such as personal protective equipment

**Eye/Face Protection** Wear safety glasses with side shields (or goggles). If splashes are likely to occur. Wear suitable face shield. Ensure that eyewash stations and safety showers are close to the

workstation location.

**Skin Protection**

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

**Respiratory Protection**

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before eating, drinking or smoking. Wash contaminated clothing before reuse. Avoid contact with eyes, skin and clothing. Wear suitable gloves and eye/face protection. Regular cleaning of equipment, work area and clothing is recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

<b>Physical State</b>	Paste	<b>Appearance</b>	Colored
<b>Odor</b>	Characteristic	<b>Odor Threshold</b>	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH		No data available
Melting Point / Freezing Point		No data available
Boiling Point / Boiling Range	> 149 °C / 300 °F	
Flash Point	42 °C / 108 °F	Setaflash closed cup
Evaporation rate		No data available
Flammability Limit in Air		
Upper flammability limit		No data available
Lower flammability limit		No data available
Vapor Pressure		No data available
Vapor Density		No data available
Specific Gravity	1.6	
Water Solubility		No data available
Solubility in other solvents		No data available
Partition coefficient: n-octanol/water		No data available
Autoignition Temperature		No data available
Decomposition temperature		No data available
Kinematic viscosity		No data available
Dynamic viscosity		No data available

**Explosive Properties** No data available

**Oxidizing Properties** No data available

**Other Information**

<b>Photochemically Reactive</b>	Yes
<b>Weight Per Gallon (lbs/gal)</b>	13.34

VOC by weight % (less water)	VOC by volume % (less water)	VOC lbs/gal (less water)	VOC grams/liter (less water)
35	No information available	4.67	559.99

## 10. STABILITY AND REACTIVITY

**Reactivity**

No information available.

**Chemical stability**

Stable under normal conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Keep away from open flames, hot surfaces and sources of ignition.

**Incompatible materials**

Strong acids. Strong bases. Strong oxidizing agents. Reducing agent. Water.

**Hazardous Decomposition Products**

Thermal decomposition can lead to release of irritating gases and vapors. Carbon dioxide (CO<sub>2</sub>). Carbon monoxide.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

<b>Inhalation</b>	Specific test data for the substance or mixture is not available.
<b>Eye Contact</b>	Specific test data for the substance or mixture is not available.
<b>Skin Contact</b>	Specific test data for the substance or mixture is not available.
<b>Ingestion</b>	Specific test data for the substance or mixture is not available.

Component	Oral LD50
Solvent naphtha, petroleum, light aromatic 64742-95-6	= 8400 mg/kg ( Rat )
Petroleum distillates, hydrotreated light 64742-47-8	> 5000 mg/kg ( Rat )

Component	Dermal LD50
Solvent naphtha, petroleum, light aromatic 64742-95-6	> 2000 mg/kg ( Rabbit )
Petroleum distillates, hydrotreated light 64742-47-8	> 2000 mg/kg ( Rabbit )

Component	Inhalation LC50
Solvent naphtha, petroleum, light aromatic 64742-95-6	= 3400 ppm ( Rat ) 4 h
Petroleum distillates, hydrotreated light 64742-47-8	> 5.2 mg/L ( Rat ) 4 h

**Information on toxicological effects**

**Symptoms** Specific test data for the substance or mixture is not available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

<b>Skin corrosion/irritation</b>	Specific test data for the substance or mixture is not available.
<b>Eye damage/irritation</b>	Specific test data for the substance or mixture is not available.
<b>Irritation</b>	Specific test data for the substance or mixture is not available.
<b>Corrosivity</b>	Specific test data for the substance or mixture is not available.
<b>Sensitization</b>	Specific test data for the substance or mixture is not available.
<b>Mutagenic Effects</b>	Specific test data for the substance or mixture is not available.
<b>Carcinogenic effects</b>	Specific test data for the substance or mixture is not available.
<b>Reproductive Effects</b>	Specific test data for the substance or mixture is not available.
<b>STOT - single exposure</b>	Specific test data for the substance or mixture is not available.
<b>STOT - repeated exposure</b>	Specific test data for the substance or mixture is not available.
<b>Chronic Toxicity</b>	Specific test data for the substance or mixture is not available
<b>Aspiration hazard</b>	Specific test data for the substance or mixture is not available. May be fatal if swallowed and enters airways. (based on components).
<b>Carcinogenicity</b>	This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

**Numerical measures of toxicity - Product Information**

**Unknown Acute Toxicity** 0 % of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document mg/kg mg/l

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Specific test data for the substance or mixture is not available.

0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Component	Fish
Solvent naphtha, petroleum, light aromatic 64742-95-6	96h LC50 Oncorhynchus mykiss: = 9.22 mg/L
Petroleum distillates, hydrotreated light 64742-47-8	96h LC50 Lepomis macrochirus: = 2.2 mg/L (static) 96h LC50 Pimephales promelas: = 45 mg/L (flow-through) 96h LC50 Oncorhynchus mykiss: = 2.4 mg/L (static)

Component	Crustacea
Solvent naphtha, petroleum, light aromatic 64742-95-6	48h EC50 Daphnia magna: = 6.14 mg/L

### Persistence and Degradability

No information available.

### Bioaccumulation

No information available

### Other adverse effects

No information available

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

**Waste Disposal Methods** Contain and dispose of waste according to local regulations.

**Contaminated Packaging** Empty containers should be taken to an approved waste handling site for recycling or disposal.

## 14. TRANSPORT INFORMATION

**Note:** This information is not intended to convey all specific transportation requirements relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation information can be found in the specific regulations for your mode of transportation. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

### DOT

<b>UN/ID no.</b>	UN1325
<b>Proper Shipping Name</b>	Flammable Solids, Organic, N.O.S. (Aliphatic Solvent Naphtha Petroleum, Aromatic Solvent Naphtha Petroleum)
<b>Hazard Class</b>	4.1
<b>Packing Group</b>	II

### ICAO / IATA / IMDG / IMO

<b>UN/ID no.</b>	UN1325
<b>Proper Shipping Name</b>	Flammable Solids, Organic, N.O.S. (Aliphatic Solvent Naphtha Petroleum, Aromatic Solvent

<b>Hazard Class</b>	Naphtha Petroleum)
<b>Packing Group</b>	4.1 II

## 15. REGULATORY INFORMATION

### International Inventories

All components are listed on the TSCA Inventory. For further information, please contact: Supplier (manufacturer/importer/downstream user/distributor).

### U.S. Federal Regulations

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Component	CAS-No	Weight %	SARA 313 - Threshold Values
Aluminum powder (stabilized)	7429-90-5	60 - 100	1.0

*Aluminum is reportable under SARA313 ONLY if it is a fume or dust form. Fume or dust refers to dry forms but does not refer to "wet" forms such as use in a solution or slurry.*

#### **Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

### U.S. State Regulations

Component	Massachusetts Right To Know
Aluminum powder (stabilized) 7429-90-5	X

Component	Minnesota Right To Know
Aluminum powder (stabilized) 7429-90-5	X

Component	New Jersey Right To Know
Aluminum powder (stabilized) 7429-90-5	X

Component	Pennsylvania Right To Know
Aluminum powder (stabilized) 7429-90-5	X

#### **California Prop. 65**

This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects

### Canada

Component	NPRI - National Pollutant Release Inventory
Aluminum powder (stabilized) 7429-90-5	Part 1, Group A Substance
Solvent naphtha, petroleum, light aromatic 64742-95-6	Part 5, Other Groups and Mixtures
Petroleum distillates, hydrotreated light 64742-47-8	Part 5, Other Groups and Mixtures

**Pursuant to NOM-018-STPS-2015**

This information within is considered correct but is not exhaustive and will be used for guidance only, which is based on the current knowledge of the substance or mixture and is applicable to the appropriate safety precautions for the product.

<b>16. OTHER INFORMATION</b>
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<u>HMIS:</u>	Health	Flammability	Reactivity	Personal Protection
	2 *	2	1	X

**Key or legend to abbreviations and acronyms used in the safety data sheet****Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA	TWA (time-weighted average)
STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value

**ACGIH: (American Conference of Governmental Industrial Hygienists)**

- A1 - Known Human Carcinogen
- A2 - Suspected Human Carcinogen
- A3 - Animal Carcinogen

**IARC: (International Agency for Research on Cancer)**

- Group 1 - Carcinogenic to Humans
- Group 2A - Probably Carcinogenic to Humans
- Group 2B - Possibly Carcinogenic to Humans

**NTP: (National Toxicity Program)**

- Known - Known Carcinogen
- Reasonably Anticipated to be a Human Carcinogen

**OSHA: (Occupational Safety & Health Administration)**

- X - Present

**Revision Date** Sep-26-2018

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**