

SAFETY DATA SHEET

SECTION 1. IDENTIFICATION

PRODUCT IDENTIFIER

Product Code	AL-7300
Product Name	ALUMINUM POWDER EX-FINE
Product Category	METALLIC POWDER

RECOMMENDED USE OF THE CHEMICAL AND RESTRICTIONS ON USE

Recommended Use	PRINTING OPERATION
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DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Inktech International Corporation
 160 Fenmar Drive,
 Toronto, Ontario M9L 1M6
 Tel: 1-416-743-4111
 Fax: 1-416-743-1511

EMERGENCY TELEPHONE NUMBER

Chemtrec 1-613-996-6666

SECTION 2. HAZARDS IDENTIFICATION

CLASSIFICATION

FLAMMABLE SOLIDS	Category 1 - (H228)
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LABEL ELEMENTS


SIGNAL WORD: DANGER!

HAZARD STATEMENTS

H228 Flammable Solids

PRECAUTIONARY STATEMENTS

P210 – Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

HAZARDS NOT OTHERWISE CLASSIFIED (HNOC)

No information available.

SECTION 3. COMPOSITION/ INFORMATION ON INGREDIENTS

Mixture:

COMPONENTS	WEIGHT %	CAS NO.
ALUMINUM POWDER	95-100	7429-90-5

SECTION 4. FIRST AID MEASURES**DESCRIPTION OF FIRST AID MEASURES****General Advice**

Show this safety data sheet to the doctor in attendance.

Eye Contact

Immediately flush with plenty of water. After flushing, remove any contact lenses and continue flushing for at least 15 minutes. Get medical attention if irritation develops and persists.

Skin Contact

Wash immediately with soap and plenty of water for at least 15 minutes. Remove contaminated clothing. If irritation such as redness, rash, blistering develops, get medical attention.

Inhalation

Remove person to fresh air and keep comfortable for breathing. If breathing is irregular or stopped, administer artificial respiration. Get medical attention immediately.

Ingestion

Do Not induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or poison control immediately.

MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

None under normal use conditions.

INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT

Notes to Physician: Treat symptomatically.

SECTION 5. FIRE FIGHTING PROCEDURE**SUITABLE EXTINGUISHING MEDIA**

Foam, Carbon Dioxide (CO₂), Dry chemical, and Water Spray. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

UNSUITABLE EXTINGUISHING MEDIA:

No information available.

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL

Thermal decomposition can lead to release of irritating gases and vapors. May emit toxic fumes under fire conditions.

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. Cool containers/ tanks with water spray. Sealed containers may rupture when heated.

SECTION 6. ACCIDENTAL RELEASE MEASURE**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 upwind of spill/leak.

Environmental Precautions

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

Methods and Material for Containment and Cleanup

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.

SECTION 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 reach of children.

Incompatible Products

Strong acids, strong bases, strong oxidizing and reducing agents.

SECTION 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

CONTROL PARAMETERS

Exposure Limits

Component	ACGIH TLV	OSHA PEL
Aluminum 7429-90-5	TWA: 1 mg/m ³ Respirable particulate matter.	TWA: 15 mg/m ³ (Total Dust) TWA: 5 mg/m ³ respirable fraction

Component	Ontario TWAEV	Mexico OEL (TWA)
Aluminum 7429-90-5	TWA: 1 mg/m ³ Respirable particulate matter.	TWA/VLE-PPT: 10 mg/m ³

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 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 goggle). If splashes are likely to occur, wear suitable face shield. Ensure the eye wash 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 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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	Solid (Powder)	Appearance	Silver
Odor	Odorless	Odor Threshold	No information Available

<u>Property</u>	<u>Values</u>	<u>Remarks/ Method</u>
PH		No Data Available
Melting Point/ Freezing Point	660°C/ 1120°F	
Boiling Point/ Boiling Range	2467°C/ 4472 °F	
Flash Point		No Data Available
Evaporation Rate		No Data Available
Flammability Limit in Air		
Upper Flammability Limit (% vol)		No Data Available
Lower Flammability Limit (% vol)		No Data Available
Vapor Pressure		No Data Available
Vapor Density		No Data Available
Specific Gravity	2.7	
Water Solubility	Insoluble in cold water	
Solubility in Other Solvents		No Data Available
Partition Coefficient: N-Octanol/ Water		No Data Available
Auto Ignition Temperature	340 °C/ 644 °F	
Decomposition Temperature		No Data Available
Kinetic Viscosity		No Data Available
Dynamic Viscosity		No Data Available
Explosive Property		No Data Available
Oxidizing Property		No Data Available

Other Information:

Photochemically Reactive NO

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Highly reactive with oxidizing agents like acids, alkalis and moisture.

Chemical Stability

Stable under normal condition

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, reducing agent.

Hazardous Decomposition Products

Carbon Dioxide

SECTION 11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation	May cause respiratory tract irritation.
Eye Contact	May cause irritation by mechanical means. Symptoms may include pain or irritation, watering and or redness.
Skin Contact	May cause irritation on repeated contact. Symptoms may include dryness of skin.
Ingestion	None known.

Information on Toxicological Effects**Symptoms** There is no data for this product.**Delayed and Immediate Effects as well as Chronic Effects from Short and Long Term Exposure.**

Skin Corrosion/ Irritation	Specific test data for the substance or mixture is not available.
Eye Damage/ Irritation	Specific test data for the substance or mixture is not available.
Irritation	Specific test data for the substance or mixture is not available.
Corrosivity	Specific test data for the substance or mixture is not available.
Sensitization	Specific test data for the substance or mixture is not available.
Mutagenic Effects	Specific test data for the substance or mixture is not available.
Reproductive Effects	Specific test data for the substance or mixture is not available.
STOT – Single exposure	Specific test data for the substance or mixture is not available.
STOT- Repeated Exposure	Specific test data for the substance or mixture is not available.
Chronic Toxicity	Specific test data for the substance or mixture is not available.
Aspiration Hazard	Specific test data for the substance or mixture is not available.
Carcinogenicity	This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC, or NTP.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity: None known

0% of the mixture consists of component of unknown hazards to the environment.

Persistence and Degradability: No information Available**Bioaccumulation:** No information Available**Other Adverse Effects:** No information available

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Treatments 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.

SECTION 14. TRANSPORT INFORMATION

DOT

UN/ ID No.	UN 1309
Proper Shipping name:	Aluminum Powder, Coated
Hazard Class:	4.1
Packing Group:	II

ICAO/ IATA/ IMDG/ IMO

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SECTION 15. REGULATORY INFORMATION

International Inventories

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

US 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	7429-90-5	95-100	1.0

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPS) (see 40 CFR 61)

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

U.S. State Regulations

Component	CAS NO.	Massachusetts Right to Know	Minnesota Right to Know
Aluminum	7429-90-5	x	x

Component	CAS NO.	New Jersey Right to Know	Pennsylvania Right to Know
Aluminum	7429-90-5	x	x

California Prop. 65

This product does not contain chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

Canada

Component	NPRI – National Pollutant Release Inventory
Aluminum 7429-90-5	Part 1. Group A Substance

SECTION 16. OTHER INFORMATION

HMIS	Health 1*	Flammability 3	Reactivity 3	Personal Protection x
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Key or legend to abbreviations and acronyms used in safety data sheet.

Legend – Section 8: Exposure Controls/Personal Protection

TWA Time Weighted Average
 STEL Short Term Average
 Ceiling Maximum Limit Value

ACGIH American Conference of Governmental Industrial Hygienist
 A1 Known Human Carcinogen
 A2 Suspended 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 Human

NTP National Toxicity Program

Known Known Carcinogen
 Reasonably Anticipated to be a Human Carcinogen

OSHA Occupational Health and Safety Administration

X Present

Date JUN. 21, 2019

DISCLAIMER

This 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 guide 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 SDS