INKTECH INTERNATIONAL CORPORATION

Issue Date
JUN. 21, 2019

SAFETY DATA SHEET

SECTION 1. IDENTIFICATION

PRODUCT IDENTIFIER

Product Code	**AL-8300**
Product Name	**ALUMINUM PASTE**
Product Category	**METALLIC ALUMINUM PASTE**

RECOMMENDED USE OF THE CHEMICAL AND RESTRICTIONS ON USE

Recommended Use PRINTING OPERATION

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 2 - (H228)
Serious eye damage/eye irritation	Category 2A – (H319)

LABEL ELEMENTS

SIGNAL WORD: DANGER!

HAZARD STATEMENTS

H228 Flammable Solids.
H319 Causes serious eye irritation.

PRECAUTIONARY STATEMENTS

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting equipment.
P264 Wash thoroughly after handling.
P280 Wear eye protection, face protection.
P305+P351+P338 If in the eyes, rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.
P37 +P378 In case of fire: use appropriate media to extinguish.

HAZARDS NOT OTHERWISE CLASSIFIED (HNOC)

No information available.

SECTION 3. COMPOSITION/ INFORMATION ON INGREDIENTS

Mixture:

COMPONENTS	WEIGHT %	CAS NO.	
ALUMINUM POWDER	60-80	7429-90-5	
ISOPROPYL ACETATE	20-40	108-21-4	

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 EFECTS, BOTH ACCUTE 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 INCOMPATIBILITES

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/m³ Respirable particulate matter.	TWA: 15 mg/m³ (Total Dust) TWA: 5 mg/m³ respirable fraction
Isopropyl Acetate 108-21-4	TWA: 100 ppm STEL: 200 ppm	TWA: 950 mg/m³

Component	Ontario TWAEV	Mexico OEL (TWA)
Aluminum 7429-90-5	TWA: 1 mg/m³ Respirable particulate matter.	TWA/VLE-PPT: 10 mg/m³

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	Paste	**Appearance**	Silver Paste
Odor	Mild	**Odor Threshold**	No information Available

Property	Values	Remarks/ Method
PH		No Data Available
Melting Point/ Freezing Point		No Data Available.
Boiling Point/ Boiling Range	88ºC/ 190ºF	
Flash Point	4ºC/ 39.2ºF	
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		No date Available
Water Solubility		No data Available
Solubility in Other Solvents		No Data Available
Partition Coefficient: N-Octanol/ Water		No Data Available
Auto Ignition Temperature	460˚C/ 860 ˚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
Stable and non-reactive under normal conditions of use, storage and transport.

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
No hazardous decomposition products are known.

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	Low ingestion hazard.

Component	CAS No.	Oral LD50
Isopropyl Acetate	108-21-4	6750 mg/kg (Rat) 6.95 g/kg (Rabbit)

Component	CAS No.	Inhalation LC50
Isopropyl Acetate	108-21-4	25300 mg/l (Rat)

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 1325
Proper Shipping name: Flammable Solids, Organic, N.O.S. (Aluminum Contains Isopropyl Acetate)
Hazard Class: 4.1
Packing Group: II

ICAO/ IATA/ IMDG/ IMO

UN/ ID No. UN 1325
Proper Shipping name: Flammable Solids, Organic, N.O.S. (Aluminum Contains Isopropyl Acetate)
Hazard Class: 4.1
Packing Group: II

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	60-80	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
Isopropyl Acetate	108-21-4	x	x

Component	CAS NO.	New Jersey Right to Know	Pennsylvania Right to Know
Aluminum	7429-90-5	x	x
Isopropyl Acetate	108-21-4	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	Flammability	Reactivity	Personal Protection
	1*	3	3	x

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