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This information is based upon typical technical information believed to be reliable. It is subject to revision as additional knowledge and experience are gained

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND COMPANY UNDERTAKING


Product Name	Al bare foil.
Product Information	Plain Bare Foil (SRC/Light gauge for Flexible packaging)
Company Name	Jindal aluminum limited, KIADB IND AREA, Tumkur road Dabaspete, Bangalore
Phone No.	080-27735051/27735003
Fax No. / Email	080-23715555/ jindal@jindalaluminium.com

2. COMPOSITION / INFORMATION ON INGREDIENTS

Product	Aluminium Foil (Barrier Foils) Alloy-8011 / 8006/01235 For pharma / Blister-Foil.
Chemical Composition	Si-0.60-0.95, Fe-0.60-0.95, Cu-0.01Max, Mn-0.01Max,Mg-0.01Max,Zn-0.01Max, Ti-0.020-0.030, Aluminium—98%Min.
Product Code	N/A
Hazardous Ingredients / Components	Presence of ingredients below the specified limits
CAS No.	N/A
Other Components: Risk Phrases & Symbol	N/A

3. HAZARDS IDENTIFICATION

Health Inhalation	If foil is exposed to high temperatures fumes or vapours of decomposition products may arise
Skin Contact	Sharp edges may cut the skin
Eye Contact	Irritation if foil is burnt
Ingestion	Irritation to breathing if foil is burned
Fire	Burns at high temperature

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4. FIRST AID MEASURES


Inhalation	<p>No specific intervention is indicated, as the compounds forms film layer on the Al. foil and hence not likely to be hazardous by Inhalation.</p> <p>However, if exposed to fumes from overheating or combustion, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult give oxygen. Call a physician if necessary.</p>
Skin Contact	<p>Use gloves while handling Al. foil. At higher temperature thermal Burns is possible, cool rapidly with cold water. Obtain medical Treatment for thermal burn. While handling it may causes cutting of the skin, give first aid and consult physician</p>
Eye Contact	<p>In case of contact immediately flush eyes with plenty of water for at least 15minutes.It is due to cutting. Call a physician</p>
Ingestion	<p>Ingestion is not expected route of exposure during normal use of the product. If ingested, consult a physician.</p>

5. FIRE FIGHTING MEASURES

Extinguishing media	Water, Foam, Dry Chemical, CO2
Fire Fighting Protective Equipment	Keep personnel removed and upwind of fire. Wear self-contained Breathing apparatus. Wear full protective equipment
Specific Hazards	Peel able HSL and laminated layer in wacker can be combustible Only by remaining in contact with flame. If flame source is Stationary it causes ignition. Avoid spark of engineering works, Static electricity. Hazardous gases/vapors produced in the fire are carbon dioxide, carbon monoxide, organic acids, aldehydes and alcohols.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Use appropriate Personal Protective Equipment during cleanup.
Environmental Precautions	Destruction to be followed as per local regulations
Method for Cleaning up	Sweep up to avoid slipping hazard.


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7. HANDLING AND STORAGE

Handling	<p><u>Personal Aspect</u> - Do not breathe vapours or fumes that may be Evolved during processing. Avoid skin contact wit sharp edge of The Al. foil. Avoid touching to al. foil during processing of the Al. Foil at higher temperature.</p> <p><u>Physical Aspect</u> - Roll of foil may telescope. Use caution when Handling. Rolled foil should be stored at mentioned storage condition to avoid oxidation of the aluminum and unwrapped from the covered film at the time of processing only and area Should be free from ignition source e.g. solvent etc. While handling use appropriate lifting equipment to bare weight of the roll.</p>
Storage	<p>Store away from heat source of ignition and humid condition. Do Not store in the direct sunlight. Avoid prolonged storage in high or Low temperature.</p> <p>Stored in the mentioned condition only with proper wrapping. Recommended storage conditions with proper wrapping are below 30 °C & 60 ± 5 % RH.</p>


8. EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering measures	Proper Exhaust is requiring during processing. Local exhaust ventilation is requiring keeping employee exposure below recommended limits. Proper material handling equipments should be use for the movement of aluminum foil rolls.
Respirators	Provide respiratory protection at high temperature application
Eye Protection	Wear safety glasses. Provide organic vapor canister mask (3M) to face.
Personal Protective Equipment	Special protective clothing is not needed for normal use.
Gloves	Wear gloves and footwear while handling
Safety Glasses	Not during normal operations
Occupational Exposure Limits – Hazardous Ingredients	Nil

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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Opaque
Form	Solid
Colour	One side bright and other side dull, various colours are artwork in case of printed foils
Odour	Negligible
pH (Value)	N/A
Boiling Point	N/A
Melting Point	Aluminium foil melt above 659°C but coated layer may melt above 350°C
Flash Point	N/A
Flammable Limits	N/A
Auto Ignition Temperature	N/A
Explosive Properties	N/A
Oxidising Properties	Yes
Vapour Pressure (mmHg)	Negligible @ 20°C
Density (g/sq.cm)	2.71
Solubility (Water)	Insoluble
Solubility (Other)	Nil
Partition Coefficient	N/A

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10. STABILITY AND REACTIVITY


Hazardous Reaction	Stable at mentioned storage condition at higher humidity condition Al foil will oxidize.
Hazardous Decomposition Product (S)	Solid Decomposed if burned
Conditions to Avoid	Do not Keep open to Atmosphere.
Materials to avoid	Moisture and oxidizing agent oxidized the Al Foil.

11. TOXICOLOGY INFORMATION

Inhalation (LC-50)	N/A
Skin Contact (Dermal-LD50)	N/A
Eye Contact	N/A
Ingestion (Oral-LD50)	N/A
Other	JINDAL Plain/ printed Blister Al –Foil.

12. ECOLOGICAL INFORMATION.

Environmental Hazards	Air pollution when Material Burn.
Persistence and Degradation	Nil
Toxicity	Jindal Aluminum Foils Comply with toxicity test as per USP
Effect on Effluent Treatment	Non biodegradable

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13. DISPOSAL CONSIDERATIONS.

Product & Contaminated packaging	Waste Disposal Treatment, storage, transportation, and disposal must be in accordance with applicable central or State Pollution Control Board's standard regulation in India and specific country wise regulation as applicable.
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14. TRANSPORT INFORMATION

IATA	Not known
ADR	Not known
IMO	Not known
UN NO.	Not known
Other	Pay Attention not to wet in Rain Shipping information DOT Proper shipping Name.

15. REGULATORY INFORMATION.

Classification and Labelling	
Danger Symbol	Nil
Danger Label	Nil
Safety Phrases	Nil

16. OTHER INFORMATION. - Nil

The information provided in this safety data Sheet is correct to the best of my knowledge, information and belief at the date of its publication. The information given is designed only as 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 not be valid for such material used in combination with any other materials or in any process unless specified in the test.

.....End of MSDS