SECTION-1. IDENTIFICATION

Product/Material: Linear Low Density Polyethylene Resin Film Grade
Product grade: ASRENE UF1820S1
Application: Blown film, Garbage bags, Agriculture film, Multilayer film, Shopping bags, Inner liner, etc.
Manufacturer: PT. CHANDRA ASRI PETROCHEMICAL Tbk (CAP)
Jakarta 11410, Indonesia.
Plant: Jl Raya Anyer Km.123, Ciwandan, Cilegon 42447, Indonesia. Phone: 62-254-601501
Emergency contact (24 hrs): GROUPSHEDIVISION@capcx.com, Phone: +62-254-601829; 254-601501 Ext 1232
Additional Information: GROUPRND@capcx.com, Phone: +62-254-601501 Ext 1309, 1616

SECTION-2. HAZARD IDENTIFICATION

Hazardous Component: None
Hazard statements: Avoid contact with molten material
NFPA Hazard rating: Health = 0  Flammability = 1  Reactivity = 0

SECTION-3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name / Family Name: Polyethylene / Polyolefin  Chemical Formula: (C2H4)n
Common Name, Trade Name: LLDPE  CAS No: 9002-88-4

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<th>NO.</th>
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<td>Linear Low Density Polyethylene</td>
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SECTION-4. FIRST-AID MEASURES

The Health effects below are based upon component health effects consistent with requirement under OSHA hazard communication (29 CFR 1910.1200).

First-Aid Step
Inhalation: Product fines may cause mechanical irritation
Skin Contact: Product is unlikely to cause irritation at room temperature
Eye Contact: Product fines may cause mechanical irritation
Ingestion: Product is practically non-toxic
Sign and Symptoms: Irritation as noted above
Aggravated Medical Condition: Preexisting eye and respiratory disorder may be aggravated by exposure to product fines

SECTION-5. FIRE-FIGHTING MEASURES

Extinguishing Media: Use water fog, foam, dry chemical or CO2.
Unusual Fire and Explosion Hazard: Treat as a solid that can burn, molded parts generally burn slowly with a low smoke density and flaming drips under certain conditions can burn with a high smoke density.
Fire Fighting Procedures and Precaution: Material will not burn unless preheated. Do not enter confined fire space without full bunker gear (helmet with face shield, bunker coats, gloves and rubber boots) including a positive pressure NIOSH approved self-contained breathing apparatus. Cool fire exposed containers with water.

Protective Clothing for Fire Fighter: Hand gloves, goggles

### SECTION-6. ACCIDENTAL RELEASE MEASURES

Small Spill and Leak: Pellets on the floor could present a serious slipping problem. Exercise good housekeeping to avoid this hazard. Sweep, shovel or vacuum material into clean containers.

Large Spill and Leak: Use a shovel to put the material into a convenient waste disposal container does not allow any potentially contaminated water with pellets to entry any waterway, sewer or drain.

### SECTION-7. HANDLING AND STORAGE

Personal Precautionary Measures: Avoid contact with molten material

Handling: Maintain good housekeeping. Keep away from heat, sparks, open flame or any ignition source. Use with adequate ventilation. After handling, always wash hands thoroughly with soap and water. Spilled pellet may create a slipping hazard. Electrostatic charge may build up during handling. Grounding of equipment is recommended.

Storage: Store in a dry place with adequate ventilation and away from direct sunlight, excessive heat and strong oxidizers. Keep packaging (container) closed to prevent contamination

### SECTION-8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters: Although general room ventilation should be adequate in most applications, local exhaust ventilation is recommended for control of airborne dust, fumes and vapors, particularly in confined areas.

Respiratory Protection: Use NIOSH approved respirator if unable to control airborne dust, fumes and vapors.

Eye Protection: Wear eye protection (safety glasses, goggles, face-shield) when processing.

Skin and Body Protection: Wear chemical-resistant gloves, heat protective gloves and protective clothing as well as a face-shield.

Other Personal Protection: Use safety non-slip shoes in area where spills or leaks occur.

### SECTION-9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: 3mm ø Solid, Whitish in color and essentially odorless pellet

Organoleptic: Tasteless

Melting Point / freezing Point: 105 – 125°C / Not applicable

Initial Boiling Point: Not applicable

Flash Point: Not applicable, Combustible solid

Evaporation Rate (n-Butyl Acetate = 1): Not applicable

Specific Gravity (H₂O=1): <1.0

Solubility (in water): Insoluble
Viscosity : Solid, not applicable
Melt Index 190°C/2.16kg : 2.0 gr/10min
Density : 0.922 gr/cm³

SECTION-10. STABILITY AND REACTIVITY

Stability : Stable under normal operating conditions of storage, handling and use.
Hazardous Reaction : Not likely to occur under normal operating conditions of storage, handling and use
Conditions to Avoid : Strong oxidizing agents. Temperature over 300°C, sparks and open flame.
Hazardous Decomposition Products : Thermal decomposition products are highly dependent on the combustion conditions. A complex mixture of airborne solid. Liquid particulates and gases will evolve when this material undergoes pyrolysis or combustion. Carbon monoxide and unidentified organic compounds may be formed upon combustion.

SECTION-11. TOXICOLOGICAL INFORMATION

Symptoms related to toxicological characteristic : Material is considered essentially inert, non-toxic and practically not harmful as well as not hazardous substances under RoHS regulation. Exposures to high levels of dust or heated fumes may cause irritation.
Carcinogenicity : Material is not carcinogenic as listed by OSHA, NTP or IARC

SECTION-12. ECOLOGICAL INFORMATION

Ecotoxicity : Material is not expected to be harmful to aquatic organisms
Environmental Fate : Material is not volatile, insoluble in water, and resistant to biodegradation
Mobility : The product has low soil mobility. This material floats on water.

SECTION-13. DISPOSAL CONSIDERATIONS

Waste Disposal : Place in an appropriate disposal facility in compliance with local regulations

SECTION-14. TRANSPORT INFORMATION

Transportation Classification : Not controlled under DOT (USA), TDG (Canada), ADR (Europe), IMDG and IATA

SECTION-15. REGULATORY INFORMATION

The components of this product are listed on the EPA/TSCA inventory of chemical substances.

HCS Classification : This product is not a "Hazardous Chemical" as defined by the OSHA Hazard Communication

SECTION-16. OTHER INFORMATION

Abbreviations that may have been used in this document:

ACGIH : AMERICAN CONFERENCE of GOVERNMENTAL INDUSTRIAL HYGIENISTS
DOT : DEPARTMENT OF TRANSPORTATION
NIOSH : NATIONAL INSTITUTE for OCCUPATIONAL SAFETY & HEALTH
OSHA : OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION
RoHS : RESTRICTION of HAZARDOUS SUBSTANCES
NTP : NATIONAL TOXICOLOGY PROGRAM
IART : INTERNATIONAL ASSOCIATION of RESPIRATORY THERAPISTS
HCS : HAZARD COMMUNICATION STANDARD
LDK : LEMBAR DATA KESELAMATAN
EEC : EUROPE ECONOMIC COMMITTEE
### This Safety Data Sheet contains the following historical of revisions:

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<td>SECTION-02</td>
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<td>SECTION-05</td>
<td>Protective clothing for fire fighter was modified</td>
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