

Product Name: POLYPROPYLENE FILM - OPPALYTE - PVDC COATED
Revision Date: 01.10.2013
Page 1 of 8

PRODUCT SAFETY DATA SHEET

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

As of the revision date above, this (M)SDS meets the regulations in the United Kingdom & Ireland.

PRODUCT

Product Name: POLYPROPYLENE FILM - OPPALYTE - PVDC COATED
Product Description: Polymer article, see Section 16 for applicable grades.
Intended Use: Labeling material, Packaging material

COMPANY IDENTIFICATION

Supplier: Films Europe s.a.r.l
1B, Rue Thomas Edison, BP 1902
L-1019 Luxembourg

24 Hour Environmental / Health Emergency Telephone +352 45102 2217
E-Mail Reach.CLP.Jindal@Jindalfilms.com

SECTION 2 HAZARDS IDENTIFICATION

This material is not considered to be hazardous according to regulatory guidelines see Section 15.

PHYSICAL / CHEMICAL HAZARDS

Heating to elevated temperature during processing may release irritating fumes. Thermal burn hazard - contact with hot material may cause thermal burns. Material can accumulate static charges which may cause an ignition.

HEALTH HAZARDS

Low order of toxicity. No adverse effects due to inhalation are expected. When heated, the vapour/fumes given off may cause respiratory tract irritation.

This product does not contain natural rubber, natural rubber latex, or their derivatives.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

No Reportable Hazardous Substance(s) or Complex Substance(s).

Product Name: POLYPROPYLENE FILM - OPPALYTE - PVDC COATED

Revision Date: 01.10.2013

Page 2 of 8

SECTION 4 FIRST AID MEASURES

INHALATION

In case of adverse exposure to vapours and / or aerosols formed at elevated temperatures, immediately remove the affected victim from exposure. Administer artificial respiration if breathing is stopped. Keep at rest.

SKIN CONTACT

If burned by contact with hot material, molten material adhering to skin should be cooled as quickly as possible with water, and see a physician for removal of adhering material and treatment of burn.

EYE CONTACT

Flush thoroughly with water. If irritation occurs, get medical assistance.

INGESTION

No adverse effects due to ingestion are expected.

SECTION 5 FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

Appropriate Extinguishing Media: Use water fog, foam, dry chemical or carbon dioxide (CO₂) to extinguish flames.

Inappropriate Extinguishing Media: Straight streams of water

FIRE FIGHTING

Fire Fighting Instructions: Assure an extended cooling down period to prevent re-ignition. Material will burn in a fire. Evacuate area. Prevent run-off from fire control or dilution from entering streams, sewers or drinking water supply. Fire-fighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.

Unusual Fire Hazards: Exposure to fire can generate toxic fumes.

Hazardous Combustion Products: Smoke, Fume, Incomplete combustion products, Oxides of carbon, Nitrogen oxides

FLAMMABILITY PROPERTIES

Flash Point [Method]: N/A

Flammable Limits (Approximate volume % in air): LEL: N/D UEL: N/D

Autoignition Temperature: N/A

SECTION 6 ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES

None required.

SPILL MANAGEMENT

Land Spill: Not applicable; product is not a liquid or flowable powder.

Water Spill: Warn other shipping. No immediate action required.

SECTION 7	HANDLING AND STORAGE
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HANDLING

When heated, the vapour/fumes given off may cause respiratory tract irritation. No special precautions are necessary beyond normal good hygiene practices. See Section 8 for additional personal protection advice when handling this product. Material can accumulate static charges which may cause an electrical spark (ignition source).

Static Accumulator: This material is a static accumulator.

STORAGE

The container choice, for example storage vessel, may effect static accumulation and dissipation. Store in a cool, dry place.

Storage Temperature: 15°C (59°F) - 30°C (86°F)

SPECIFIC END USES: Section 1 informs about identified end-uses. No industrial or sector specific guidance available.

SECTION 8	EXPOSURE CONTROLS / PERSONAL PROTECTION
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Note: Information about recommended monitoring procedures can be obtained from the relevant agency(ies)/institute(s):

UK Health and Safety Executive (HSE)

ENGINEERING CONTROLS

The level of protection and types of controls necessary will vary depending upon potential exposure conditions.

Control measures to consider:

Adequate ventilation should be provided whenever the material is heated or mists are generated.

PERSONAL PROTECTION

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

Respiratory Protection: If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator

Product Name: POLYPROPYLENE FILM - OPPALYTE - PVDC COATED

Revision Date: 01.10.2013

Page 4 of 8

selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include:

No special requirements under ordinary conditions of use and with adequate ventilation.

Hand Protection: Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include:

If product is hot, thermally protective, chemical resistant gloves are recommended. If contact with forearms is likely, wear gauntlet style gloves. CEN standards EN 420 and EN 374 provide general requirements and lists of glove types.

Eye Protection: If contact is likely, safety glasses with side shields are recommended.

Skin and Body Protection: Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include:

If product is hot, thermally protective, chemical resistant apron and long sleeves are recommended.

Specific Hygiene Measures: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

ENVIRONMENTAL CONTROLS

See Sections: 6, 7, 12, 13

SECTION 9	PHYSICAL AND CHEMICAL PROPERTIES
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Typical physical and chemical properties are given below. Consult the Supplier in Section 1 for additional data.

GENERAL INFORMATION

Physical State: Solid
Form: Film
Colour: Colourless
Odour: None to Mild
Odour Threshold: N/D

IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION

Relative Density (at 20 C): 0.9
Flash Point [Method]: N/A
Flammable Limits (Approximate volume % in air): LEL: N/D UEL: N/D
Autoignition Temperature: N/A
Boiling Point / Range: N/A
Vapour Density (Air = 1): N/A
Vapour Pressure: N/A
Evaporation Rate (n-butyl acetate = 1): N/A

Product Name: POLYPROPYLENE FILM - OPPALYTE - PVDC COATED
 Revision Date: 01.10.2013
 Page 5 of 8

pH: N/A
Log Pow (n-Octanol/Water Partition Coefficient): N/A
Solubility in Water: Negligible
Viscosity: N/A
Explosive Properties: N/D
Oxidizing Properties: See Hazards Identification Section.

OTHER INFORMATION

Freezing Point: N/D
Melting Point: 116°C (240°F) - 171°C (340°F)

SECTION 10	STABILITY AND REACTIVITY
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STABILITY: Material is stable under normal conditions.

CONDITIONS TO AVOID: None

MATERIALS TO AVOID: Strong oxidisers

HAZARDOUS DECOMPOSITION PRODUCTS: Material does not decompose at ambient temperatures.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 11	TOXICOLOGICAL INFORMATION
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ACUTE TOXICITY

<u>Route of Exposure</u>	<u>Conclusion / Remarks</u>
Inhalation	
Toxicity: Data available.	Minimally Toxic. Based on test data for structurally similar materials.
Irritation: Data available.	Negligible hazard at ambient/normal handling temperatures. Based on test data for structurally similar materials.
Ingestion	
Toxicity: Data available.	Minimally Toxic. Based on test data for structurally similar materials.
Skin	
Toxicity: Data available.	Minimally Toxic. Based on test data for structurally similar materials.
Irritation: Data available.	Negligible irritation to skin at ambient temperatures. Based on test data for structurally similar materials.
Eye	
Irritation: No end point data.	Not applicable.

OTHER HEALTH EFFECTS FROM SHORT AND LONG TERM EXPOSURE

Product Name: POLYPROPYLENE FILM - OPPALYTE - PVDC COATED

Revision Date: 01.10.2013

Page 6 of 8

Anticipated health effects from sub-chronic, chronic, respiratory or skin sensitization, mutagenicity, reproductive toxicity, carcinogenicity, target organ toxicity (single exposure or repeated exposure), aspiration toxicity and other effects based on human experience and/or experimental data.

CHRONIC/OTHER EFFECTS

For the product itself:

Elevated temperatures or mechanical action may form vapours, mists or fumes which may be irritating to the eyes and respiratory tract.

Additional information is available by request.

SECTION 12	ECOLOGICAL INFORMATION
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The information given is based on data available for the material, the components of the material, and similar materials.

ECOTOXICITY

Material -- Not expected to be harmful to aquatic organisms.

MOBILITY

Material -- Low solubility and floats and is expected to migrate from water to the land. Expected to partition to sediment and wastewater solids.

PERSISTENCE AND DEGRADABILITY

Biodegradation:

Material -- Expected to be persistent.

Hydrolysis:

Material -- Transformation due to hydrolysis not expected to be significant.

Photolysis:

Material -- Transformation due to photolysis not expected to be significant.

Atmospheric Oxidation:

Material -- Transformation due to atmospheric oxidation not expected to be significant.

BIOACCUMULATION POTENTIAL

Material -- Potential to bioaccumulate is low.

SECTION 13	DISPOSAL CONSIDERATIONS
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Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal. None required.

DISPOSAL RECOMMENDATIONS

PVDC coated film may give off hydrochloric acid when it is recovered in a process where the film is heated. Additives are required in the recovery process to convert the liberated acid to a non-hazardous salt. Suitable routes of disposal are supervised incineration, preferentially with energy recovery, or appropriate recycling methods in accordance with applicable regulations and material characteristics at the time of disposal.

Product Name: POLYPROPYLENE FILM - OPPALYTE - PVDC COATED
Revision Date: 01.10.2013
Page 7 of 8

REGULATORY DISPOSAL INFORMATION

European Waste Code: 15 01 02

NOTE: These codes are assigned based upon the most common uses for this material and may not reflect contaminants resulting from actual use. Waste producers need to assess the actual process used when generating the waste and its contaminants in order to assign the proper waste disposal code(s).

SECTION 14	TRANSPORT INFORMATION
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LAND (ADR/RID): Not Regulated for Land Transport

INLAND WATERWAYS (ADNR/ADN): Not Regulated for Inland Waterways Transport

SEA (IMDG): Not Regulated for Sea Transport according to IMDG-Code

AIR (IATA): Not Regulated for Air Transport

SECTION 15	REGULATORY INFORMATION
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REACH Information: A Chemical Safety Assessment has not been carried out for the substance(s) that make up this material or for the material itself.

Material is not dangerous as defined by the EU Dangerous Substances/Preparations Directives.

EU LABELING: Not regulated according to EC Directives

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REGULATORY STATUS AND APPLICABLE LAWS AND REGULATIONS

Complies with the following national/regional chemical inventory requirements: TSCA, IECSC, AICS, KECI, PICCS, ENCS, DSL

EU Directive:

1907/2006 [... on the Registration, Evaluation, Authorisation and Restriction of Chemicals ... and amendments thereto]

This product fully complies with Coalition of Northeastern Governors (CONEG) legislation and Directive 94/62/EC on Packaging and Packaging Waste that limits content of lead, mercury, cadmium and hexavalent chromium. This product does not contain, nor was it manufactured with, Class I or Class II Ozone Depleting Substances (ODS), based on information from our suppliers.

Product Name: POLYPROPYLENE FILM - OPPALYTE - PVDC COATED
Revision Date: 01.10.2013
Page 8 of 8

SECTION 16	OTHER INFORMATION
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N/D = Not determined, N/A = Not applicable, NE = Not established

THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:

Safety Data Sheet updated in accordance with the provisions of REACH (EC) No 1907/2006.

THIS SDS COVERS THE FOLLOWING MATERIALS:

OPPALYTE (TM) 30MW747 | OPPALYTE (TM) 36MO747 | OPPALYTE (TM) 42AH748 | OPPALYTE (TM) 50MO747 | OPPALYTE (TM) 30MH347 | OPPALYTE (TM) 42SWHM | OPPALYTE (TM) 60MH247

Jindal Films and its affiliates have prepared this Product Safety Data Sheet to provide health and safety information on our Films products. Note, however, under various regulations, such products are considered “articles” for which a (Material) Safety Data Sheet is not required. For example, in the U.S., as defined in the OSHA Hazard Communication Standard, Section 1910.1200(c), Jindal Films products are manufactured “articles”, which do not result in exposure to hazardous chemical(s) under normal conditions of use. For this reason, Material Safety Data Sheets are not required under this standard.

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