MATERIAL SAFETY DATA SHEET

(According to Regulation EC No 1907/2006 - REACH)

RESINA EVA ALCUDIA PA-443

1. PRODUCT IDENTIFICATION		
Company: REPSOL QUÍMICA S.A.	Commercial name: RESINA EVA ALCUDIA PA-443	
	Chemical name: Ethylene vinyl acetate copolymer	
Address: Paseo de la Castellana, 280 28046 - MADRID	Synonyms: EVA resins.	
Tel# +34 91 348 80 00	Molecular formula: (C ₄ H ₆ O ₂ .C ₂ H ₄)x	CAS #: NP
Fax# +34 91 348 94 94 e-mail address: SDSChemicals@repsol.com		
Emergency Telephone #: Puertollano: +34 926 41 95 00	EC (EINECS)#: NP	Annex I (Dir. 67/548/EEC)#: NP

2. HAZARDS IDENTIFICATION		
PHYSICAL / CHEMICAL	TOXICITY (SYMPTOMS)	
Powder polymer may explode in air in presence of ignition sources, such as it occurs with any organic dust.	Inhalation: Vapours from melted product may result irritating to the respiratory tract and it may cause dizziness or difficult breathing.	
Floats on water. May obstruct sewers and water intakes.	Ingestion/Aspiration: Ingestion is easy to prevent and not frequent. Contact skin/eyes: Exposure to melted product causes burns. Vapours from melted product may be irritating to eyes.	
	General toxic effects: Vapours from melted product may cause irritation to the respiratory tract. Exposure to melted product causes burns.	

3. COMPOSITION			
General composition: Ethylene vinyl acetate copolymer with additives.			
Dangerous components	Range %	Classification	S Phrases
NP			

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4. FIRST-AID MEASURES

Inhalation: Remove the affected person to fresh air. Administer oxygen if necessary.

Ingestion/Aspiration: Not frequent. Intestinal absorption is very low.

Contact skin/eyes: In case of melted product burns, cool the material quickly with plenty of water. Do not remove the solidified product without the assistance of medical aid. Call a doctor and treat as a normal hot-burn. In case of contact with eyes, if it is necessary flush with large amounts of water for 15 min., holding eyelids open.

General measures: Obtain medical attention.

5. FIRE-FIGHTING MEASURES

Extinguishing agents: AFFF foams, dry chemicals, CO₂ and water spray.

Non suitable extinguishing agents: Water jet applied directly may disperse the material.

Combustion products: Total combustion: CO₂, H₂O, NO_x. Incomplete combustion: CO, soot, aldehydes, ketones, hydrocarbons and volatile fatty acids.

Special measures: NP

Special hazards: Melted product may propagate fire. Fire may produce irritating gases.

Protective equipment: Heat-resistant suit and gloves. Self-contained breathing apparatus because heavy fumes are produced.

6. ACCIDENTAL RELEASE MEASURES	
Environmental precautions: Isolate discharged material and keep away from water sources. Avoid dispersion.	Personal precautions: Avoid contact with melted product and inhalation of vapours. Keep unnecessary people away.
Cleanup methods: The spillages should be shovelled into suitable containers to avoid slides.	Personal protection: Wear goggles and appropriate gloves to avoid contact with melted product. In presence of vapours from melted product, respiratory protective mask is recommended.

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7. HANDLING AND STORAGE

Handling:

General precautions: Wear appropriate protective clothing. Do not smoke, drink, or eat during handling. Eliminate all ignition sources from areas where the material is handled or used, specially in presence of powdery atmosphere. Pneumatic transport equipment should be properly earthed (static charge accumulation by friction).

Specific conditions: Good local exhaust ventilation. Protective mask in presence of vapours from melted product.

Specific Use: Consult technical information. The product complies with all current Spanish regulations for use in contact with foodstuffs.

Storage:

Temperature and decomposition products: Not applicable in standard storage conditions.

Dangerous reactions: NP

Storage conditions: Storage at room temperature and protect it from sunlight in cool and well ventilated places. Containers properly labelled and sealed. The copolymer has a marked tendency to build up static charge when transferred by pipelines or pneumatic transport, therefore should be properly earthed. Never weld in storage areas without suitable precautions. The product without protection may undergo slow degradation in presence of oxygen and ultraviolet light.

Incompatible materials: Oxidant materials, aromatic and aliphatic hydrocarbons, chloride solvents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protection:

Eye protection: Safety goggles to avoid contact with splashes from melted product.

Respiratory protection: In presence of vapours, use suitable

respiratory protective mask.

Skin protection: Gloves and appropriate protective clothing.

Other protective equipment: Eyes washers and showers in working area.

General precautions: Local exhaust ventilation. Avoid contact with the melted product.

Specific hygiene measures: Good work practices and the adoption of good personal hygiene measures reduce unnecessary exposures. Washing/Showering facilities with a non-solvent based skin cleaner, hot water and soap must be provided and used.

Exposure controls: NP

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9. PHYSICAL AND CHEMICAL PROPERTIES		
Appearance: Solid (granules)	pH: NP	
Colour: Transparent	Odour: Acetic acid	
Boiling point: NP	Melting/Freezing point: 65 - 70 °C	
Flash point: NP	Autoignition temperature: NP	
Explosive properties: NP	Oxidizing properties: NP	
Vapour pressure: NP	Density: 950 Kg/m ³	
Surface tension: NP	Viscosity:	
Vapour density: NP	Partition coefficient (n-octanol/water):	
Water solubility: Insoluble	Solubility: Aromatic and halogenated organic solvents	
Other data:		

10. STABILITY AND REACTIVITY	
Stability: Stable material at room temperature. The powder polymer may explode.	Conditions to avoid: Avoid direct flames and high temperatures.
Materials to avoid: Oxidant materials, aromatic and aliphatic hydrocarbons, chloride solvents.	
Hazardous decomposition/combustion products: At temperatures higher than 220-230 °C the product decomposes liberating acetic acid. Total combustion: CO ₂ , H ₂ O, NO _x . Incomplete combustion: CO, soot, aldehydes, ketones, hydrocarbons and volatile fatty acids.	
Polymerization risk: NP	Conditions to avoid: NP

11. TOXICOLOGICAL INFORMATION	
Routes of exposure: Inhalation of vapours from melted product and powder polymer. Ingestion is not probable.	
Acute and chronic effects: Exposure to melted product causes burns. Vapours from melted product may cause irritation to the respiratory tract.	
Carcinogenicity: There is no data available.	
Reproductive toxicity: There is no data available.	
Medical conditions which increase hazard to exposure: Respiratory and dermatological problems.	

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12. ECOLOGICAL INFORMATION

Pollutant potential:

Persistence and degradability: EVA copolymer has long hydrocarbon insoluble chains. No biodegradation process is known, although better than polyethylene or polypropylene. It is not readily removed from water or soil and has a high persistence environment.

Mobility/bioaccumulative potential: No bioaccumulative problems in living organisms or incidence in the food webs.

Ecotoxicological effects: There is no data available.

13. DISPOSAL CONSIDERATIONS

Disposal methods (surplus): Recycling and recovery of the material when possible.

Waste:

Disposal: Controlled combustion.

Handling: Labelled and sealed containers.

Provisions: Companies which recover, dispose, store, transport or handle waste should comply with Dir. 91/156/EEC on waste or other local,

national or community provisions.

14. TRANSPORT INFORMATION

Special precautions: Stable at room temperature and during transport. To avoid spilling, transport in secure containers. Use properly sealed containers.

Additional information:

UN Number: NP ADR/RID: NP

Hazard identification number: NP IATA-DGR: NP

Proper shipping name: NP IMDG: NP

15. REGULATORY INFORMATION

CLASSIFICATION LABELLING

Symbols: NP

NP

Phrases R

NP

Phrases S

NP

Other regulations: The ethylene-vinyl acetate copolymer (CAS # 24937-78-8) is listed in TSCA Chemical Inventory (EPA).

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16. OTHER INFORMATION

Data Bases consulted

R phrases shown in the document:

EINECS: European Inventory of Existing Commercial

Substances.

TSCA: Toxic Substances Control Act, US Environmental

Protection Agency

HSDB: US National Library of Medicine. RTECS: US Dept. of Health & Human Services

Legislation consulted

Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

Dir. 67/548/EEC about classification, labelling and packaging of dangerous substances (including amendments and adaptations in force).

Dir. 1999/45/EC about classification, labelling and packaging of dangerous preparations (including amendments and adaptations in force).

Dir. 91/689/EEC dangerous waste; Dir. 91/156/EEC waste management.

Dir. 2002/72/EC relating to plastics materials and articles intended to come into contact with foodstuffs.

Royal Decree 363/95: Regulation about notification of new substances and classification, packaging and labelling of dangerous substances.

Royal Decree 255/2003: Regulation about classification, packaging and labelling of dangerous preparations.

Royal Decree 2207/94 about substances used in the manufacture of plastics and coatings intended to come into contact with foodstuffs.

European Agreement concerning the international carriage of dangerous goods by road (ADR).

Regulation on the international transport of dangerous goods on the railway. (RID)

International maritime code of dangerous goods. (IMDG)

International Air Transport Association (IATA) regulation pertaining to air shipment.

Glossary CAS: Chemical Abstract Service

AS. Chemical Abstract Service

IARC: International Agency for Research on Cancer

ACGIH: American Conference of Governmental Industrial Hygienists.

TLV: Threshold Limit Value TWA: Time Weighted Average STEL: Short-term Exposure Level REL: Recommendable Exposure Limit PEL: Permissible Exposure Limit

INSHT: Instituto Nal. de Seguridad e Higiene en el Trabajo

VLA-ED: Valor Límite Ambiental – Exposición Diaria VLA-EC: Valor Límite Ambiental – Exposición Corta

LD₅₀: Lethal Dose Medium

LC₅₀: Lethal Concentration Medium EC₅₀: Effective Concentration Medium IC₅₀: Inhibitory Concentration Medium BOD: Biological Oxygen Demand.

NP: Not Pertinent

: Changes from the last revision

The information given in this document has been compiled based on the best existing information sources, latest available knowledge and according to the current requirements on classification, packaging and labelling of hazardous substances. It does not imply the information is exhaustive or accurate in all cases. It is the user's responsibility to determine the validity of the information contained in this Material Safety Data Sheet to apply depending on the case.

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