

MATERIAL SAFETY DATA SHEET

SAMSUNG TOTAL PETROCHEMICALS CO., LTD.

SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: SAMSUNG TOTAL PETROCHEMICALS EVA(E182L)

MANUFACTURER: SAMSUNG TOTAL PETROCHEMICALS CO. LTD

411-1, Dokgod-Ri, Daesan-Up, Seosan-Si, Chungnam,

Korea 356-711

Tel: 82-41-660-6165 Fax: 82-41-660-6169

CHEMICAL NAME: Ethylene-Vinyl acetate Copolymer

CHEMICAL FAMILY: Ethylene-based polymer

PRODUCT DESCRIPTION: Odorless white or semi-transparency pellets

EMERGENCY TELEPHONE NUMBERS:

STC R&D CENTER 82-41-660-6198

SAMSUNG TOTAL PETROCHEMICALS, CO., LTD. 82-41-660-6860

SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

CAS No.> <Contents>
Ethylene-Vinyl acetate Copolymer 24937-78-8 99-99.8%

Typical stabilizers – 0 – 1%

[POTENTIAL HEALTH EFFECTS]

EYE CONTACT: Particulates may scratch eye surfaces/cause mechanical irritation.

SKIN CONTACT: Negligible hazard at ambient temperatures

(-18~38 degrees C;0~100 degrees F)

Exposure to hot material may cause thermal burns.

INHALATION: Negligible hazard at ambient temperature

(-18~38 degrees C;0 to 100 degrees F)

Vapors and/or aerosols which may be formed at elevated temperatures

may be irritating to eyes and respiratory tract.

INGESTION: Minimal toxicity.

SECTION 4 FIRST AID MEASURES

EYE CONTACT: This product is an inert solid. If in eye, remove it by clean water etc.

SKIN CONTACT: For hot product, immediately immerse in or flush the affected area with large amounts of cold water to dissipate heat. Cover with clean cotton sheeting or gauze and get prompt medical attention. No attempt should be made to remove material from skin or to remove contaminated clothing, as the damaged flesh can be easily torn.

INHALATION: In case of adverse exposure to vapors and/or aerosols formed at elevated temperatures, immediately remove the affected victim from exposure.

Administer artificial respiration if breathing is stopped. Keep at rest.

Call for prompt medical attention.

INGESTION: First aid is normally not required.

SECTION 5 FIRE-FIGHTING MEASURES

FLASHPOINT: no data available NOTE: Estimated Minimum

FLAMMABLE LIMITS: NOTE: Not applicable

AUTO-IGNITION TEMPERATURE: No Data NOTE: Estimated Minimum

GENERAL HAZARD: Solid material, may burn at or above the flashpoint, and airborne dust may explode if ignited. Toxic gases will form upon combustion.

Static Discharge, material can accumulate static charges which can cause an incendiary electrical discharge.

FIRE FIGHTING: Use water spray to cool fire exposed surfaces, protest personel, and extinguish the fire. Respiratory and eye protection required for fire fighting personel.

DECOMPOSITION PRODUCTS UNDER FIRE CONDITIONS:

Oxygen-lean conditions may produce carbon monoxide, vinyl acetate and Irritating smoke.

SECTION 6 ACCIDENTAL RELEASE MEASURES

LAND SPILL: Recover spilled material and place in suitable containers for recycle or disposal. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

WATER SPILL: Plastic pellets are defined by US EPA under the Clean Water

Act(40CFR122.26) as a "significant material" which requires any industrial

plant that may expose pellets to storm water to secure a storm water permit.

Violations of the rule carry the same penalties as other Clean Water Act violations. Pellets found in storm water runoff are subject to EPA regulations with the potential for substantial fines and penalties. Skim from surface. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations. Recover the spilled material and place in suitable containers for recycle or disposal.

SECTION 7 STORAGE AND HANDLING

ELECTROSTATIC ACCUMULATION HAZARD: Yes, use proper grounding procedure.

STORAGE TEMPERATURE, C: Ambient

STORAGE/TRANSPORT PRESSURE, mmHg: Atmospheric

LOADING/UNLOADING TEMPERATURE, C: Ambient

LOADING/UNLOADING VISCOSITY, cSt: Solid

STORAGE AND HANDLING:

Keep container closed. Handle and open containers with care. Store in a cool, well ventilated place away from incompatible materials. Do NOT handle or store near an open flame, heat or other sources of ignition. Protect material from direct sunlight. Material will accumulate static charges which may cause a electrical spark (ignition source).

Use proper grounding procedures.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE CONTROLS

Local exhaust ventilation of process equipment may be needed to control particulate exposures to below the recommended exposure limit. See personal protection recommendation.

PERSONAL PROTECTION

For open systems at ambient temperature (-18 to 38 degrees C) where contact is likely, wear safety glasses with side shields.

Where contact may occur with hot material, wear thermal resistant gloves, arm protection, and a face shield.

WORKPLACE EXPOSURE GUIDELINES

OSHA REGULATION 29CFR1910.1000 REQUIRES THE FOLLOWING

PERMISSIBLE

EXPOSURE LIMITS: 5 mg/m3(respirable dust), and 15 mg/m3(total dust)

based on the OSHA PEL for nuisance dust. The recommended permissible exposure levels indicated above reflect the levels revised by OSHA in 1989 levels have since been vacated by the 11th Circuit Court of Appeals. Samsung General Chemicals recommends that the lower exposure levels be observed as reasonable worker protection.

THE ACGIH RECOMMENDS THE FOLLOWING THRESHOLD LIMIT VALUES:

A TWA OF 10mg/m3 for inhalable particulate (total dust) and a TWA of 3 mg/m3 for respirable particulate (total dust) for Particulates.

Not Otherwise Classified (PNOC).

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

SPECIFIC GRAVITY, at 23°C: 0.920 - 0.945 MELTING POINT, °C: 90 ~ 105

SOLUBILITY IN WATER, wt.% at \mathbb{C} : Insoluble VAPOR PRESSURE,mmHg at \mathbb{C} : Not applicable

VISCOSITY OF LIQUID, cSt at C: Not applicable BOILING POINT, C: Not applicable

SP. GRAV. OF VAPOR, at 1 atm(AIR=1): Not applicable EVAPORATION RATE, n-Bu Acetate-1: Not applicable

SECTION 10 STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID INSTABILITY:

Temperatures over 240°C may cause resin degradation.

HAZARDOUS POLYMERIZATION: Will not occur

CONDITIONS TO AVOID HAZARDOUS POLYMERIZATION: Not applicable

MATERIALS AND CONDITIONS TO AVOID INCOMPATIBILITY:

Fluorine, Strong Oxidizing agents

HAZARDOUS DECOMPOSITION PRODUCTS: Not applicable

SECTION 11 TOXICOLOGICAL INFORMATION

Please refer to Section 3 for available information on potential heath effects.

SECTION 12 ECOLOGICAL INFORMATION

No specific ecological data are available for this product. Please refer to Section 6 for information regarding accidental releases and Section 15 for regulatory reporting information.

SECTION 13 DISPOSAL CONSIDERATIONS

Please refer to Sections 5,6 and 15 for disposal and regulatory information.

SECTION 14 TRANSPORT INFORMATION

DEPARTMENT OF TRANSPORTATION(DOT): This product is not DOT regulated.

SECTION 15 REGULATORY INFORMATION

TSCA: This product is listed on the TSCA Inventory.

CERCLA

If this product is accidentally spilled, it is not subject to any special reporting under the requirements of the Comprehensive Environmental Response. Compensation, and Liability Act(CERCLA). We recommend you contact local authorities to determine if there may be other local reporting requirements.

SARA TITLE III

Under the provisions of Title III. Sections 311/312 of the Superfund Amendments and Reauthorization Act, this product is classified into the following hazard categories:

Not Hazardous. This product does not contain Section 313 Reportable Ingredients.

SECTION 16 OTHER INFORMATION

NOTES:

National Fire Protection Association standards NFPA 654 and 68 indicate possible explosion hazard of dust particles. Conform accordingly. Avoid accumulation of dust or dust clouds; operate handling and storage systems leak free, practice good housekeeping. Keep from sources of ignition, Do not store near heat, flame, or strong oxidants.

Assure proper electrical grounding of all handling equipment.

Product may also contain varying levels of additives, such as slip and antiblocking agents, antioxidants, stabilizers, and corrosion inhibitors.

SPECIAL PRECAUTIONS:

Should significant vapors/fumes be generated during thermal processing of this product, it is recommended that work stations be monitored for the presence of thermal degradation by-products which may evolve at elevated temperatures. It is recommended that the current ACGIH-TLVs for these materials be observed.

Contact your Samsung representative for further information.

HAZARD RATING SYSTEMS: This information is for people trained in:

National Paint & Coatings Association's (NPCA)

Hazardous materials Identification System(HMIS) National Fire Protection Association(NFPA 704) Identification of the fire Hazards of Materials

	NCPA-HMIS	NFPA 704	KEY
HEALTH	1	1	4 = Severe
FLAMMABILITY 1		1	3 = Serious
REACTIVITY	0	0	2 = Moderate
			1 = Slight
			0 = Minimal

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