

**DELTRIN® acetal resin**

Ref. 150000000569  
Version 3.6 (replaces: Version 3.5)

Revision Date 01.03.2019  
Issue Date 01.03.2019

This Product Safety Information Sheet is provided as general information for health and safety guidance.

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****Product identifier**

Product name : DELTRIN® acetal resin

Types : 23P, 45P, 100CP, 100P, 111DP, 111P, 111PA, 500CP, 500P, 500BFG, 511DP, 511P, 588P, 900P, 911DP, 911P, 1700CP, 1700P, 1700SL, 127UV, 327UVE, 527UV, 927UV, 1727UV, 142CM, 300CP, 311DP, 390PM, 500LM, 542CM, 988PA, DE20130, DE20199, DE20321, DE20343, DE20427, DE20434, DE20479, DE20308, DE20480, HG900P, M509, M590 (1); DE20323 (2); 300AT (3) RA500P

Recycling code : 1) ISO 11469 : >POM<; 2) ISO 11469 : >POM-S<, 3) ISO 11469 : >POM-ICD<

**Relevant identified uses of the substance or mixture and uses advised against**

Use of the Substance/Mixture : Resin for moulding and/or extrusion

**Details of the supplier**

Company : DuPont Iberica S.L.  
Avda. Diagonal, 571  
ES-08029 Barcelona  
Spain

Telephone : +34-98-512-4000

Telefax : +34-98-512-4090

E-mail address : sds-support@che.dupont.com

**Emergency telephone number**

+(44)-870-8200418 (CHEMTREC)

**SECTION 2: Hazards identification****Classification of the substance or mixture**

Not a classified substance or mixture according to Regulation (EC) No. 1272/2008.

**Label elements**

Not a classified substance or mixture according to Regulation (EC) No. 1272/2008.

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**Other hazards**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Hazardous decomposition products

Formaldehyde

The EU classifies formaldehyde as a substance with possible risk of irreversible effect.

**SECTION 3: Composition/information on ingredients**

Chemical nature of the substance/mixture : Polyoxymethylene homopolymer  
: Additives

No dangerous components to be mentioned according to Regulations (EC) No. 1907/2006 and (EC) No. 453/2010.

The above products are compliant to REACH registration obligations; Registration number(s) may not be provided because substance(s) are exempted, not yet registered under REACH or are registered under another regulatory process (biocide uses, plant protection products), etc.

**SECTION 4: First aid measures****Description of first aid measures**

General advice : Remove from exposure, lie down. Never give anything by mouth to an unconscious person. No hazards which require special first aid measures. If a person vomits when lying on his back, place him in the recovery position.

Inhalation : Move to fresh air in case of accidental inhalation of fumes from overheating or combustion. Consult a physician after significant exposure.

Skin contact : Cool skin rapidly with cold water after contact with molten material. Do not peel polymer from the skin. Obtain medical attention.

Eye contact : Flush eyes with water as a precaution. Obtain medical attention.

Ingestion : No hazards which require special first aid measures. Drink water as a precaution.

**SECTION 5: Firefighting measures****Extinguishing media**

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Suitable extinguishing media : Carbon dioxide (CO<sub>2</sub>), Dry powder, Foam, Water

**Special hazards arising from the substance or mixture**

Specific hazards during firefighting : Large molten masses may ignite spontaneously in air. Water quenching is good practice. Under conditions giving incomplete combustion, hazardous gases produced may consist of: Carbon monoxide Carbon dioxide (CO<sub>2</sub>) (see also section 10)

**Advice for firefighters**

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus. Wear suitable protective equipment.

Further information : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Do not allow run-off from fire fighting to enter drains or water courses. Burns after ignition without external heat source (IEC 60695-11-10 : HB). Burns with colourless flame.

**SECTION 6: Accidental release measures****Personal precautions, protective equipment and emergency procedures**

Personal precautions : Ventilate the area. Refer to protective measures listed in sections 7 and 8.

**Environmental precautions**

Environmental precautions : Try to prevent the material from entering drains or water courses. Do not contaminate surface water.

**Methods and materials for containment and cleaning up**

Methods for cleaning up : Clean up promptly by sweeping or vacuum. Sweep up or vacuum up spillage and collect in suitable container for disposal.

Other information : Use mechanical handling equipment.

**SECTION 7: Handling and storage****Precautions for safe handling**

Advice on safe handling : Protect from contamination. When opening containers, avoid breathing vapours that may be emanating. Open container only in well-ventilated area. Provide appropriate exhaust ventilation at dryers, machinery and at places where dust or volatiles can be generated. General precaution for all plastics and elastomers: For personal protection see section 8. In case of insufficient ventilation, wear suitable respiratory equipment. No special handling advice required.

Advice on protection against fire and explosion : Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours).

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Dust explosion class : no data available

**Conditions for safe storage, including any incompatibilities**

Requirements for storage areas and containers : No special storage conditions required. Keep container tightly closed in a dry and well-ventilated place. Protect from contamination.

Further information on storage conditions : none

Advice on common storage : No special restrictions on storage with other products.

Other data : No decomposition if stored and applied as directed.

**SECTION 8: Exposure controls/personal protection****Control parameters**

If sub-section is empty then no values are applicable. For further information on any control parameters provided, please refer to the relevant regulation.

**Components with workplace control parameters**

| Type<br>Form of exposure | Control parameters<br>(Expressed as) | Update | Regulatory basis |
|--------------------------|--------------------------------------|--------|------------------|
|--------------------------|--------------------------------------|--------|------------------|

**Dust (inhalable and respirable fraction)**

|                                                                      |                      |            |                                          |
|----------------------------------------------------------------------|----------------------|------------|------------------------------------------|
| Long-term exposure limit (8-hour TWA reference period)<br>Inhalable  | 10 mg/m <sup>3</sup> | 2011-12-01 | UK. EH40 WEL - Workplace Exposure Limits |
| Long-term exposure limit (8-hour TWA reference period)<br>Respirable | 4 mg/m <sup>3</sup>  | 2011-12-01 | UK. EH40 WEL - Workplace Exposure Limits |

**Formaldehyde (CAS-No. 50-00-0)**

|                                                        |                                |            |                                          |
|--------------------------------------------------------|--------------------------------|------------|------------------------------------------|
| Long-term exposure limit (8-hour TWA reference period) | 2.5 mg/m <sup>3</sup><br>2 ppm | 2005-04-06 | UK. EH40 WEL - Workplace Exposure Limits |
| Short-term exposure limit (15-minute reference period) | 2.5 mg/m <sup>3</sup><br>2 ppm | 2005-04-06 | UK. EH40 WEL - Workplace Exposure Limits |

**Exposure controls**

Engineering measures : When hot processing this material, use local and/or general exhaust ventilation to maintain the concentration of vapors and fumes below exposure limits.

Eye protection : Safety glasses with side-shields Wear tightly fitting chemical splash goggles and face shield when possibility exists for eye and face contact due to spattering or splashing of molten material.

Hand protection : Material: Heat insulating gloves  
Protective gloves (Type : Kevlar<sup>®</sup> - heat resistant, use possible until worn out)

Skin and body protection : If there is a potential for contact with hot/molten material wear heat resistant

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- clothing and footwear. Regular cleaning of equipment, work area and clothing.
- Hygiene measures : Wash hands before breaks and at the end of workday. General precaution for all plastics and elastomers: Do not breathe fumes evolved from hot polymer.
- Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Suitable respiratory equipment: Half mask with a particle filter FFP2/FFP3 (EN149)

**SECTION 9: Physical and chemical properties****Information on basic physical and chemical properties**

- Form : pellets
- Colour : various
- Odour : formaldehyde-like
- pH : Not applicable
- Melting point/range : 172 - 184 °C
- Flash point : Not applicable
- Ignition temperature : 375 °C
- Thermal decomposition : > 230 °C
- Density : 1.35 - 1.45 g/cm<sup>3</sup> , Method: ISO 1183
- Water solubility : insoluble

**Other information**

No other data to be specially mentioned.

**SECTION 10: Stability and reactivity**

- Possibility of hazardous reactions** : None. Further information : During drying, cleaning and moulding, small amounts of hazardous gases and/or particulate matter may be released. These may irritate eyes, nose and throat. Large molten masses may give off hazardous gases. Water quenching is good practice. Stable under normal conditions.
- Conditions to avoid** : Avoid heating for prolonged periods above the recommended upper processing limit.
- Incompatible materials** : Strong acids and oxidizing agents  
Strong bases  
halogenated compounds, except those already present in the formulation as

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supplied

**Hazardous decomposition products** : Formaldehyde

**SECTION 11: Toxicological information**

The product contains no substances which at their given concentration, are considered to be hazardous to health.

**SECTION 12: Ecological information**

The product contains no substances classified as hazardous to the environment in concentrations which should be taken into account.

**SECTION 13: Disposal considerations****Waste treatment methods**

Product : Like most thermoplastic plastics the product can be recycled. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Can be landfilled, when in compliance with local regulations. Do not contaminate ponds, waterways or ditches with chemical or used container.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.

European Waste Catalogue number : 07 02 99: Wastes not otherwise specified.

**SECTION 14: Transport information****ADR**

14.1. UN number: Not applicable  
14.2. UN proper shipping name: Not applicable  
14.3. Transport hazard class(es): Not applicable  
14.4. Packing group: Not applicable  
14.5. Environmental hazards: none

14.6. Special precautions for user:  
Not classified as dangerous in the meaning of transport regulations.

**IATA\_C**

14.1. UN number: Not applicable  
14.2. UN proper shipping name: Not applicable  
14.3. Transport hazard class(es): Not applicable  
14.4. Packing group: Not applicable  
14.5. Environmental hazards: none

14.6. Special precautions for user:  
Not classified as dangerous in the meaning of transport regulations.

**IMDG**

14.1. UN number: Not applicable

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- |                                                                                                             |                |
|-------------------------------------------------------------------------------------------------------------|----------------|
| 14.2. UN proper shipping name:                                                                              | Not applicable |
| 14.3. Transport hazard class(es):                                                                           | Not applicable |
| 14.4. Packing group:                                                                                        | Not applicable |
| 14.5. Environmental hazards:                                                                                | none           |
| 14.6. Special precautions for user:<br>Not classified as dangerous in the meaning of transport regulations. |                |
| 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code<br>Not applicable                  |                |

**SECTION 15: Regulatory information**

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

**Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals**

Not applicable

**Major Accident Hazard Legislation**

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.  
Not applicable

**Water contaminating class (Germany)**

nwg not water endangering

**Chemical safety assessment**

A Chemical Safety Assessment is not required for this/these product(s).

**SECTION 16: Other information****Abbreviations and acronyms**

|         |                                                                                     |
|---------|-------------------------------------------------------------------------------------|
| ADR     | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| ATE     | Acute toxicity estimate                                                             |
| CAS-No. | Chemical Abstracts Service number                                                   |
| CLP     | Classification, Labelling and Packaging                                             |
| EbC50   | Concentration at which 50% reduction of biomass is observed                         |
| EC50    | Median effective concentration                                                      |
| EN      | European Norm                                                                       |
| EPA     | Environmental Protection Agency                                                     |
| ErC50   | Concentration at which a 50% inhibition of growth rate is observed                  |
| EyC50   | Concentration at which 50 % inhibition of yield is observed                         |

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|        |                                                                            |
|--------|----------------------------------------------------------------------------|
| IATA_C | International Air Transport Association (Cargo)                            |
| IBC    | International Bulk Chemical Code                                           |
| ICAO   | International Civil Aviation Organization                                  |
| ISO    | International Standard Organization                                        |
| IMDG   | International Maritime Dangerous Goods                                     |
| LC50   | Median Lethal Concentration                                                |
| LD50   | Median Lethal Dose                                                         |
| LOEC   | Lowest Observed Effect Concentration                                       |
| LOEL   | Lowest observed effect level                                               |
| MARPOL | International Convention for the Prevention of Marine Pollution from Ships |
| n.o.s. | Not Otherwise Specified                                                    |
| NOAEC  | No Observed Adverse Effect Concentration                                   |
| NOAEL  | No observed adverse effect level                                           |
| NOEC   | No Observed Effect Concentration                                           |
| NOEL   | No Observed Effect Level                                                   |
| OECD   | Organisation for Economic Co-operation and Development                     |
| OPPTS  | Office of Prevention, Pesticides and Toxic Substances                      |
| PBT    | Persistent, Bioaccumulative and Toxic                                      |
| STEL   | Short term exposure limit                                                  |
| TWA    | Time Weighted Average (TWA):                                               |
| vPvB   | very Persistent and very Bioaccumulative                                   |

**Restrictions on use**

Do not use DuPont materials in medical applications involving implantation in the human body or contact with internal body fluids or tissues unless the material has been provided from DuPont under a written contract that is consistent with DuPont policy regarding medical applications and expressly acknowledges the contemplated use. For further information, please contact your DuPont representative. You may also request a copy of the DuPont POLICY Regarding Medical Applications and DuPont CAUTION Regarding Medical Applications.

**Further information**

Before use read DuPont's safety information.

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An Exposure Scenario (ES) is not required.

Significant change from previous version is denoted with a double bar.

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