

# Rodent Repellent

plastic technology



d<sub>2</sub>p<sup>®</sup>RR (rodent repellent) masterbatch series 91300 are non-toxic and non-hazardous to humans, pets and wildlife and compliant with RoHS, REACH and FIFRA exempted.





# Rodent Repellent



Unlike conventional pesticides, they are designed to provide high-temperature stability (up to 220°C and beyond) enabling them to be extruded and dispersed in plastics.

Rodents are put off chewing the plastic by mechanisms like intense dermal irritation and an extremely bitter taste. The active ingredients do not leach out of the polymer matrix and they are effective in low dosages. Their low vapour pressure helps to avoid problems with fumes, and they have a long active life of 15-30 years.

## The Facts

- Rodents can cause dangerous damage to plastic products such as cable insulation, piping (low depth buried or buildings infrastructure), warehouse pallets, non-food packaging, boxes etc.
- Railway operators, warehouses, manufacturing plants and construction sites report that rats and mice are causing serious problems.
- Buildings are at risk of fires or explosions.
- Symphony has developed additive masterbatches to fight back with products that repel pests.
- Thermoplastic resins (PE, PP, PS, PVC, ABS, etc.) may not be the ideal tasty meal, but rodents seem to like them.
- They are attracted by the smell, colour and texture of plastics and find plasticizers particularly tasty (PVC).
- They can munch their way through plastic cable insulation and cause havoc.

Characteristics	Masterbatch Series 91300
<b>Colour</b>	Colourless
<b>Mechanism</b>	Intense dermal irritation and an extremely bitter taste
<b>Applications</b>	Masterbatch for incorporation into plastic articles for animal repellent
<b>Addition Rate</b>	The normal addition rate is 1%; special applications may require 2-3%
<b>Odour</b>	None
<b>Stability</b>	220°C
<b>Storage</b>	The product should be stored in cool, dry conditions. Storage temperatures should not exceed 30°C. Under normal storage conditions the product has a shelf-life of 12 months from date of supply

## Alternative solutions for protecting plastics

Protecting cables can involve a metallic or reinforced outer layer, but this is costly and restricts flexibility. Another option is the use of traditional pesticides, but these can raise toxicity issues for other wildlife and for humans, as well as presenting potential environmental concerns. In addition, the majority of conventional pesticides are not designed to handle the elevated temperatures of plastics processing, and therefore the most appropriate solution would be the use of d<sub>2</sub>p® Rodent Repellent.



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**Disclaimer:** The information provided is general information. For specific applications, please consult our Technical Department. It is the customer's responsibility to obtain regulatory approval for the intended purpose in the country or countries concerned.

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