



Specialty Master Batches for Plastics

High Performance Materials and Equipment

Rodent Repellent (C) Master Batch

TECHNICAL SUPPORT DOCUMENT

- Smelling sense of Rodents is very superior to humans
- Rodents are attracted to plastic products due to presence of plasticizers, aromatic odors, bright colors and the texture of polymer products.
- They have the constant urge to bite something to polish their incisors (front teeth).
- As a result, rodents chew several products like power cables, plastic doors, wires, sidings, benches, molded plastic parts, drip irrigation pipes etc.
- Chewed and exposed electrical cables by rodent attack cause short circuits/fire which can be fatal.
- Rodent control is a big challenge.
- Current rodent control products are various types of pesticides, lead naphthanate etc.
- They are poisonous, expensive as well as ecologically risky.
- Rodents develop resistance to these products, over some time.
- They also easily get trained to avoid the poisons even if these are disguised.

- **Master Batch based on odoriferous, organoleptic compounds & predator urine extract.**
- Used for repelling rodents from attacking polymers.

Product Description	
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Technical Data	Value/Unit
Base	Micro-porous polymer filled with odoriferous & organoleptic compounds, converted to plastic master batch in LLDPE, PS, PBT or other polymers
Appearance	Cylindrical Pellets
Colour	Light Cream
Odour	Thiol odour
Granule Size	2 – 3 mm
Bulk Density	0.56 - 60 gm/cc
Solubility	Insoluble in water & solvents
Stability	Stable at ambient temperature, under normal conditions of use

Unique Features	<ul style="list-style-type: none"> • Micro-porous polymer base is manufactured by patented process • Dissuades rodents from attacking polymers • Effective at low addition levels (3%) • Easy dispersion in final product due to high surface area without affecting polymer properties • Human safe, Ecologically safe • Compatible with respective polymers
Testing & Certification	<ul style="list-style-type: none"> • Tested in process at CAZRI as per Choice & No-choice Tests for Rodents • Complies with European Safety Standard EN 71 Part 3 for Extractable Heavy Metals • RoHS compliant
Areas of Application	<p>Plastic/Polymer Industry:</p> <ul style="list-style-type: none"> • Used in domestic/industrial cables, drip irrigation pipes, automobile cables, garbage bags, grain bags, warning tape for underground utilities etc.
Mechanism of Action	<ul style="list-style-type: none"> • Rodent Repellent (C) Master Batch contains extracts of predator urine. This odor is unacceptable by rodents. • This objectionable odour dissuades rodents from biting the polymers containing this additive. • Even if they bite the polymer once, they get dissuaded from biting it again due to the strong odor.
Recommended Dosage	<ul style="list-style-type: none"> • 3 % master batch in finished product in LLDPE, PS, PBT or other polymers
Processing Stability	Stable up to processing temperature of polymers
Hazards	None
Ecological & Toxicological Properties	Eco-toxicity-None Toxicological data unavailable, however none of the components used have shown chronic toxicity. There is no evidence of any carcinogenic, mutagenic or teratogenic effects
Shelf Life	24 months from the date of manufacture when stored in dry place at room temperature
Packaging	25 kgs inner plastic liner paper bags
HS Code	3206 1190
Please refer product MSDS for more details	

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