Version: 1.0
Effective Date: 22/04/2013
Product name: Topadd®-MBS impact modifier

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: MBS impact modifier
Product Use:Used as the impact modifer in the production of PVC profile/pipe/fittings/panel ,PVC foam products,WPC products Etc.

2. COMPOSITION INFORMATION ON INGREDIENTS

Component.	CAS-No	Concentration
Methyl methacrylate-1,3-Butadiene-Styrene Copolymer	25053-09-2	99.0%-100%
Individual residual monomers	Not Required	＜0.1%

3. HAZARDS IDENTIFICATION

- Emergency Overview

A free-flowing, white powder
In limited circumstances dust may from explosive mixtures in air, minimize dust generation.
If heated, fumes irritating to eye and respiratory tract may develop.

- Potential Health Effects

Inhalation: The monomer vapors given off at higher temperature may cause irritation, resulting in nauseas, headache and dizziness.
Eyes contact: Fine dust produced when handling and monomer’ s vapor generated may irritate the eyes and as with any solid, may cause mechanical irritation eyes to tear.
Skin contact: Fine dust and monomer’s vapor may irritate the skin, resulting in persons who are allergic eruption and irritation rarely.
Ingestion: Ingestion of large quantities may result in stomach and abdominal pain, nausea and vomiting, diarrhea and convulsions.

4. FIRST AID MEASURES

Inhalation: Move to fresh air.
Skin contact: Wash off immediately with soap and plenty of water. If skin irritation persists, call a physician.
Eye contact: Rinse immediately with plenty of water at least 15minutes and consult a physician. If eye irritation persists, consult a specialist.
Ingestion: Drink 1 or 2 glasses of water. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

Flash point N.A.
Decomposition temperature 280℃
Ignition temperature Greater than 390℃
Lower explosion limit N.A.
Upper explosion limit N.A.
Lower dust explosion limit 0.07kg/m3
Fire extinguishment media Dry chemical foam, carbon dioxide and water fog

- Fire extinguishment procedure

The persons taking part in fire fighting should wear the self contained breathing apparatus. Spray water to cool the product containers. For avoiding the dust cloud be created, straight water stream should not be used. If possible, the product bags should be removed from fire area if possible to prevent the product from degradation at higher temperature.

- Usual fire and explosion hazard

The vigorous burning of product will produce intense heat. Polymer dust ignites or explodes at its concentration reaching the certain limit.

- Substances released during fire

When the material is adequately burned, it will form moisture and carbon dioxide, on the contrary, when material is heated, irritating fumes may develop, these fumes may contain hydrocarbon with different molecular weight (monomers).

6. ACCIDENTIAL RELEASE MESURES

Personal precautions: use personal protective equipment. Avoid breathing dust. Material can create slippery conditions. Remove all sources of ignition.
Methods for cleaning: Sweet up and shovel containers for disposal. Use water spray to keep dusting to a minimum.

7. HANDING AND STORAGE

Handling: Possibility of explosion exists under dusty conditions. Avoid dusting when handling and avoid all possible sources of ignition. Use only in area provided with appropriate exhaust ventilation.
Provide for appropriate exhaust ventilation and dust collection at machinery.
Storage: Store at room temperature in the original container. Keep away from heat and sources of ignition. Material can burn; limit indoor storage to approved areas equipped with automatic sprinklers. Avoid all ignition sources.
This material is not hazardous under normal storage conditions. However, all

materials of this type release some monomer vapors or gases when stored for prolonged periods at elevated temperatures.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Eye protection: Safety glasses.
Hand protection: Cotton or canvas gloves.
Respiratory protection: When workers are facing concentrations above the exposure limit(acrylic monomer: 410mg/m3) they must use appropriate certified respirators.
Hygiene measures: Use explosion-proof local exhaust ventilation with a minimum capture velocity of 0.75 m/sec at the point of dust or mist evolution.
Ventilation: Provide for appropriate exhaust ventilation and dust collection at machinery.
Protective measures: Facilities storing or utilizing this material should be equipped with an eyewash facility.

9.PHYSICAL AND CHEMICAL PROPERTIES

Appearance White free-flowing granules with slight odor
Viscosity N.A
Freezing point N.A
Boiling point N.A
PH Value N.A
Solubility in water Insoluble
Percentage volatile ≤1.3%
Bulk density 0.45±0.10 g/cm3
Evaporation rate N.A
Melting point N.A

10.STABILITY AND REACTIVITY

Thermal decomposition: decomposition starts from 200℃ .
Hazardous decomposition product: when burning or during thermal decomposition, smoke and CO2 may result.
Materials to avoid : acids, bases and oxidizing agents.

11. TOXICOLOGICAL INFORMATION

No published toxicity data on this product is known to exist. The product has been produced without using such toxic organic metallic materials as Chromium (Cr), Lead (Pb), Cadmium (Cd), Mercury (Hg), Tin(Sn), and Arsenic(As) compound. Also, such plasticizers as DOP (n-Di-Octyl phthalate), DOA (D-Di-Octyl Adipate) and polyester plasticizers were not used as raw materials for these products.

12. ECOLOGICAL INFORMATION

● Environment & Partitioning: No. bioconcentration is expected because of high molecular weight. In the terrestrial environment, this material will sink and remain in the sediment.

- Degradation & Transformation: This water-insoluble acrylic copolymer solid is expected to be inserted in the environment. Surface phodegradation is expected.
- Ecotoxicity data are not available.
- Avoid spill on ground, vegetation and water.

13. DISPOSAL CONSIDERATIONS

Place powder in air-tight bags. For disposal incinerate or landfill at a permitted facility in accordance with local and national regulations.

14. TRANSPORT INFORMATION

Not classified as dangerous or hazardous for transporting.

15. REGULATORY INFORMATION

All intentional components are listed on the inventory, are exempt, or are supplier certified.

16. OTHER INFORMATION

All information given by or on behalf of NOVISTA as to properties,specifications,use,etc. of the products is based on research, including literature and is believed reliable.All information is based on our present state of knowledge and is intended to provide general notes on our products and their uses.All information is supplied upon the condition that the persons receiving same will make their own determination as to its safety and suitability for their purposes prior to use.

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