

MATERIAL SAFETY DATA SHEET

SECTION 1 : IDENTIFICATION OF THE COMPANY AND THE PRODUCT

SUPPLIER :

PRODUCT NAME : HT Series

CHEMICAL FORMULA : $\text{HO}(\text{CH}_2)_2\text{O}\{\text{OC}-\text{C}_6\text{H}_4-\text{COO}(\text{CH}_2)_2\}_n\text{OH}$
+ Aluminum + Isobutylated urea-melamine formaldehyde resin + Dye

SECTION 2 : COMPOSITION/INFORMATION ON INGREDIENT

Component	Amount	CAS No.
Polyethylene Terephthalate	94-95%	25038-59-9
Isobutylated urea-melamine formaldehyde resin	4-5%	68002-21-1
Aluminum	< 0.02%	07429-90-5
Dye	< 2%	

SECTION 3 : PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Glitter
Colour	: Colored
Odour	: Odourless
Solubility (in water)	: Insoluble
Boiling Point	: Not applicable
Melting Point (°C)	: 255~260°C
Vapour Pressure (mm of Hg at 25°C)	: Not applicable
Percentage Volatiles	: Not applicable
Evaporation Rate	: Not applicable
Vapour Density	: Not applicable
Specific Gravity	: 1.40~1.48
Flash point (°C)	: 440°C
Autoignition temperature	: None
Flammable limit (%) and other properties if applicable	: Not applicable

SECTION 4 : HAZARD IDENTIFICATION

Health hazard

Inhalation : Combustion products may be irritant.

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Skin contact	: No evidence of irritant effects from normal handling and use. Sharp edges may cause cuts.
Eye Contact	: Sharp off-cuts may cause eye damage.
Ingestion	: Not applicable
Long Term Exposure	: This material has been in use for many years with no evidence of adverse effects.

SECTION 5 : FIRST AID MEASURES

Ingestion	: Unlikely to be required but, if necessary, treat symptomatically.
Eye contact	: Irrigate with eyewash solution or clean water, holding the eyelids apart.
Skin contact	: If symptoms develop, obtain medical attention.
Inhalation	: Remove patient from exposure.
Notes to physician	: Only normally needed for thermal burns and following inhalation of smoke from burning material. Treat in the same way as other thermal burns and wood smoke inhalation.

SECTION 6 : FIRE FIGHTING MEASURES

Extinguishing media	: Normal extinguishing media.
Fire fighting instruction	: Combustible but not readily ignited. Thin glitter (<23 micron) will shrink away from a heat source or flame. Persistent application of a flame will ignite the material. Burning is accompanied by melting and dripping which may cause the fire to spread. Combustion will evolve irritant vapours.
Special Hazards	: At complete combustion, the major products formed are carbon dioxide water and aluminum oxides. Some of the products of decomposition will also be present but at a concentration considerably less than carbon dioxide water and aluminum oxides. During incomplete combustion a range of products will be formed but mainly carbon dioxide, water, carbon monoxide and aluminum oxides. (Eg. Explosion properties and explosion hazards in the presence of various chemicals.)

SECTION 7 : ACCIDENTAL, RELEASE MEASURES

Scrap glitter generated through processing, eg, slitting/shredding, should be swept up and disposed of in drums or plastic bags.

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SECTION 8 : HANDLING AND STORAGE

HANDLING

Thick gauges of glitter have very sharp edges, which can easily cause cuts.

Process Hazards :

Static

In most processes in which there is movement of glitter (of any kind) over metal or other rollers, surface electrical charges develop on the glitter. Static charges should be eliminated or reduced as much as possible, since they provide a source of ignition for flammable vapours and gases or may give electrical shock to operators. Use either passive or active static eliminators to reduce the charges.

Reeling

Machine design and work practices should be organized to remove the danger of trapping parts of the body, or clothing, in reeled materials and between the glitter and machinery parts.

Dusts

Operations which produce dusts (eg, stamping, tape slitting, cutting and grinding) should be controlled so that the appropriate standard for dusts is not exceeded.

Suitable respiratory equipment should be used in cases of insufficient ventilation or where operational procedures demand it.

Heating during processing

Extra care should be taken to prevent burns from contact with material.

All polymers degrade to some extent at their processing temperature, an effect, which increases with increasing temperature. Glitter has a relatively high melting point, if in more high temperature, glitter shrinkage will occur-the degree of shrinkage being time/temperature and grade related.

The exact quantity and nature of the degradation products varies with temperature, oxygen supply and process conditions. It is therefore impossible to be precise about which substances may be evolved. However, it is only the minor components, which vary substantially. The major components are given in section 10. Appropriate control measures, such as ventilation, should be applied.

Storage :

Keep away from heat and sources of ignition.

Storage temperature : Ambient.

Exposure to extremes of heat and cold should be avoided.

Avoid extremes of humidity.

SECTION 9 : EXPOSURE CONTROL AND PERSONAL PROTECTION

Unlikely to cause harmful effects under normal conditions of handling and use.

The following values apply to nuisance dust, which may be formed during cold processing (eg, cutting, grinding, stamping) .

Personal protection : Wear suitable gloves to avoid cuts from the sharp edges of glitter > 125 micron thickness. Wear suitable eye protection when using the material in cold

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processes (eg, cutting, stamping, grinding) .

SECTION 10 : STABILITY AND REACTIVITY

Stability	: Stable under normal conditions
Incompatibility (Materials to avoid)	: Strong oxidizing agent
Combustion products	: Carbon dioxide, Carbon monoxide, Aluminum oxides
Thermal decomposition	: Acetaldehyde, Ethylene
Hazardous polymerization	: Will not occur

SECTION 11 : TOXICOLOGICAL INFORMATION

Toxicity Data	: None
Carcinogenicity	: None
Reproductive Effect	: None
Effects of overexposure	: None
Chronic effects	: None
Target organs	: None
Medical Conditions Generally Aggravated by exposure	: None

SECTION 12 : ECOLOGICAL INFORMATION

Mobility &	: Will slowly degrade with exposure to UV light.
Bioaccumulation	: No data available
Biodegradability	: No data available
Aquatic toxicity	: No data available

SECTION 13 : DISPOSAL INFORMATION

WASTE DISPOSAL :

Waste material should be burned in a smokeless incinerator of high temperatures and long residence times, to enable complete combustion. To achieve this, the incinerator must have an afterburner, which maintains the gases at a suitable temperature for 3 or 4 seconds.

SECTION 14 : TRANSPORT INFORMATION

Any international and national regulatory requirements	: None
Packaging information	: Using the cartons, pallet and paper core.
Any other special requirements	: None
Transportation	: By land transport and sea transport.

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SECTION 15 : REGULATORY INFORMATION

USER : Not classified as hazardous to users

TRANSPORT : Not classified as hazardous for transport

SECTION 16 : OTHER INFORMATION

For other technical information contact the address in Section 1.

Workers using Glitter should read and understand this MSDS and be trained in the proper use of this material.