

Material Safety Data Sheet

Ref: MSDS/UNICOTE/YELLOW

Date: 09-06-2005

1. IDENTIFICATION OF THE PREPARATION AND COMPANY

Product Name:	Unicote Powder Coating – Yellow
Intended Use:	Powder application by electrostatic spraying
Name, Full Address & Telephone No.	OST International, C-4/13, M.I.E., Bahadurgarh, Haryana –124507, India. 00-91-11-25930232

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients Used:	Epoxy Resin (Epikote 3003), Polyester Resin (DSM 4055), Flow Control Agent (PV 88), Benzoin, Blanc Fixe, Titanium Dioxide, Pigment Middle Chrome and Pigment Permanent Red
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Substances presenting a health hazard within the meaning of the Chemicals (Hazard Information & Packaging for Supply) Regulations – **NONE**

3. HAZARDS IDENTIFICATION

This product is **not** classified as ‘dangerous’ according to the Chemicals (Hazard Information & Packaging for Supply) Regulations and EC criteria.

Route of entry in individuals:

Inhalation:	Yes
Skin:	Yes
Ingestion:	No

Carcinogenicity in individuals:

NTP:	No
IARC:	No
OSHA:	No

Health hazards acute and chronic:

Eyes:	Irritation may occur
Skin:	Irritation may occur in susceptible individuals
Inhalation:	Irritation may occur in susceptible individuals
Ingestion:	May cause gastro-intestinal irritation

Explanation of Carcinogenicity:

Not relevant.

Signs and symptoms of overexposure:

See health hazards.

Medical conditions aggravated by exposure:

None specified by manufacturer.

4. FIRST AID MEASURES

General:

In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

Inhalation:

Remove to fresh air, keep the patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration. Give nothing by mouth. If unconscious, place in the recovery position and seek medical advice.

Eye Contact:

Contact lenses should be removed. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart, and seek medical advice.

Skin Contact:

Remove contaminated clothing. Wash skin thoroughly with soap and water or use a proprietary skin cleaner. Launder clothes before reuse. Do **NOT** use solvents or thinners. If irritation persists, get medical attention.

Ingestion:

If accidentally swallowed obtain immediate medical attention. Keep at rest. Do **NOT** induce vomiting.

5. FIRE-FIGHTING MEASURES

Extinguishing Media:

Recommended: Alcohol resistant foam, CO₂ blanket, water spray/mist.
Not to be used: High-pressure inert gas (e.g. CO₂), water jets.

Recommendations:

Fire will produce dense black smoke containing hazardous products of combustion (see Section 10). Exposure to decomposition products may be a hazard to health. Appropriate self-contained breathing apparatus may be required. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or watercourses.

Do not allow the product to be dispersed into the air while extinguishing.

CAUTION – Unusual fire/explosion hazard:

When suspended in air as a dust cloud, this product is a potential fire & explosion hazard. Decomposition & combustion products may be toxic.

6. SPILL/ACCIDENTAL RELEASE MEASURES

Exclude sources of ignition and ventilate the area. Exclude non-essential personnel. Avoid breathing dust. Refer to protective measures listed in Sections 7 and 8. Contain and collect spillages with an electrically protected explosion-proof vacuum cleaner or by wet brushing and place in a closed container for disposal in accordance with the waste regulations (see Section 13). Do not use a dry brush as dust clouds or static can be created. Do not allow to enter drains or watercourses.

If the products enter drains or sewers, the local water company should be contacted immediately; in case of contamination of streams, rivers or lakes, the relevant environment agency.

Neutralizing Agent:

None specified by manufacturer

7. HANDLING AND STORAGE**Handling:**

Skin contact constitutes the most pronounced hazard. Persons with a history of skin sensitization should only be employed in processes in which this product is used under appropriate medical supervision.

Precautions should be taken to prevent the formation of dusts in concentrations above flammable, explosive or occupational exposure limits.

Electrical equipment and lighting should be protected to appropriate standards and to prevent dust coming into contact with hot surfaces, sparks or other ignition sources.

Keep the container tightly closed. Exclude sources of heat, sparks and open flame. Dust clouds are potential fire & explosion hazard.

Avoid the inhalation of dusts and vapour from heated product during cure.

Avoid contact with acids as this may generate Hydrogen Sulphide Gas.

Smoking, eating and drinking should be prohibited in areas of storage and use.

For personal protection see Section 8.

Always keep in containers made of the same material as the supply container.

Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

The product may charge electro-statically Use earthing leads when transferring from one container to another.

Operators should wear anti-static footwear and clothing and floors should be electrically conductive. The Manual Handling Operations Regulations may apply to the handling of containers of this product. Refer to the guide weight indicated on the container when carrying out assessments.

Storage:

Observe the label precautions. Store between 5 and 25° C in a dry, well-ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers, which are opened, should be properly resealed and kept upright to prevent leakage. The principles contained in the HSE guidance note Chemical Warehousing: Storage of Packaged Dangerous Substances should be observed when storing this product.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Persons with a history of respiratory problems or allergic responses should only be exposed to, or handle, this product under appropriate medical supervision.

Engineering Measures:

Avoid the inhalation of dusts. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of dusts below the relevant occupational exposure limit, suitable respiratory protective equipment should be worn (see 'personal protection' below).

Exposure Limits:

O.E.S. 4 mg/m³ 8-hour time weighted average.

Personal Protection:

All personal protective equipment, including respiratory protective equipment, used to control exposure to hazardous substances must be selected to meet the requirements of the COSHH Regulations.

Respiratory Protection:

Almost all the particles in this material are in the respirable dust range. This should be taken into consideration when selecting suitable respiratory protective equipment for use when this product is sprayed if the exposure of the sprayer or other people nearby cannot be controlled to below the occupational exposure limit and engineering controls and methods cannot reasonably be improved.

Hand Protection:

Where skin exposure may occur, advice should be sought from glove suppliers on appropriate types. Barrier creams may help to protect exposed areas of the skin but are not substitutes for full physical protection. They should not be applied once exposure has occurred.

Eye Protection:

Eye protection designed to protect against exposure to dusts should be worn when there is a likelihood of exposure.

Skin Protection:

Cotton or cotton/synthetic overalls or coveralls are normally suitable. Care should be taken in the selection of protective clothing to ensure that inflammation and irritation of the skin at the neck and wrists through contact with the powder are avoided.

Ventilation:

Provide sufficient vent in volume/pattern to keep the total volume/level of hazardous ingredients below limits specified and to remove excess as per suppliers' data.

Other Protective Equipment:

None specified by manufacturer.

Work hygienic practices:

Launder contaminated clothes before reuse.

Supplemental safety & health:

Use vent to remove a combination of particulates & vapours from heated product. Also use vent to remove decomposition products during welding or flame cutting on surfaces coated with this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Fine powder
Specific gravity:	1.2 – 1.9
Minimum explosive concentration (LEL)	20 – 70 g/m ³
Solubility in water:	insoluble
Minimum ignition temp.:	400° C
Minimum ignition energy:	5 – 20 mJ

10. STABILITY AND REACTIVITY

Stable under the recommended storage and handling conditions (see Section 7). In a fire, hazardous decomposition products such as smoke, carbon monoxide, carbon dioxide and oxides of nitrogen may be produced.

11. TOXICOLOGICAL INFORMATION

There is no data available on the product itself.

Coating powders can cause localized skin irritation in folds of the skin or in contact with tight clothing.

12. ECOLOGICAL INFORMATION

There is no data available on the product itself.

The product should not be allowed to enter drains or watercourses or be deposited where it can affect ground or surface waters.

The AIR Pollution Control requirements of regulations made under the Environmental Protection Act may apply to the use of this product.

13. WASTE DISPOSAL CONSIDERATIONS

Do not allow into drains or watercourses or dispose of where ground or surface water may be affected. Wastes, including emptied containers are controlled wastes and should be disposed of in accordance with regulations made under the Control of Pollution Act and the Environmental Protection Act (Using information provided in this data sheet, advice should be obtained from the relevant environmental agency whether the Special Waste Regulations apply).

Do not incinerate unopened containers

14. TRANSPORT INFORMATION

Transport within the user's premises: always transport in closed containers that are upright and secure.

Ensure that persons transporting the product know what to do in the event of accident or spillage.

This product is not classified as dangerous for carriage.

15. REGULATORY INFORMATION

The product is determined as not being dangerous according to the requirements of the Chemicals (Hazard Information & Packaging for Supply) Regulations and EC criteria.

The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks as required by other health and safety legislation. The provisions of Health and safety at Work etc. Act and Control of Substances Hazardous to Health Regulations apply to the use of this product at work.

16. OTHER INFORMATION

The information in this safety data sheet is provided in accordance with the requirements of the Chemicals (Hazard Information and Packaging) Regulations and Commission Directive 2001/58/EC.

The product should not be used for purposes other than those shown in Section 1 without first referring to the supplier and obtaining written handling instructions. As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with.

The information contained in this safety data sheet is based on the present state of knowledge and current national legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular application.

Further information and relevant advice can be found in:

The Control of Substances Hazardous to Health Regulations 1999 (SI 1999:437)
