
CHEMICAL PRODUCT AND COMPANY IDENTIFICATION
ACETAL

Date of MSDS: 2007/02/28

IDENTIFICATION OF THE PRODUCT: Acetal

TYPE: WHITE AND PINK SHADES

CHEMICAL FAMILY: Acetal Resin

PRODUCT DESCRIPTION: Pellets in various white and pink shades.

PRODUCT USE: Fabrication of dental prosthesis

Company Name: **PERFLEX LTD**

10 SMILANSKY ST. 4th FL. SUITE 54
NETANYA 42432, ISRAEL

General Information Telephone: Emergency Telephone: Not required by regulations.

COMPOSITION / INFORMATION ON INGREDIENTS
ACETAL

Chemical Composition: Poly-oxy-methylene, pigments.

HAZARDS IDENTIFICATION
ACETAL

MAJOR HAZARDS : Hazardous decomposition products: formaldehyde
The European Community classifies formaldehyde among the substances which may cause not reversible effects.

FIRST AID MEASURES
ACETAL

INHALATION:

Take the victim, if any, to fresh air in case of accidental exposure to fumes caused by overheating or Combustion. In case of prolonged contact, seek medical advice.

SKIN CONTACT:

In case of contact with melted polymer, quickly cool the skin with cold water.
No attempt should be made to tear off polymer from the skin. Seek medical advice.

EYE CONTACT

In case of contact with eyes rinse immediately with plenty of water and seek medical advice.

INGESTION:

First aid is normally not required. Drink water.

FIRE-FIGHTING MEASURES
ACETAL

EXTINGUISHING SUITABLE MEDIA

Carbon dioxide (CO₂), fire extinguishing powder, foam, water.

SPECIAL FIRE PRECAUTIONS:

Respiratory and dress protection required for fire fighting personnel.

ADDITIONAL INFORMATION:

It burns upon being flamed, without external heat source /IEC60695-11-10:HB)

It burns with colourless flame. Quick cooling with water is good practice.

Dispose of residues and contaminated water strictly in conformity to norms.

ACCIDENTAL RELEASE MEASURES
ACETAL

PERSONAL PRECAUTIONS: Ventilate the place. Refer to Protection Norms as indicated in Sections 7 and 8

ENVIRONMENT PRECAUTIONS: Avoid material to contaminate superficial waters.

METHODS FOR CLEANING UP: Immediately sweep disks away from the floor to avoid slip hazard.

ADDITIONAL INFORMATION: Use mechanical movement equipment

HANDLING AND STORAGE
ACETAL

HANDLING

Technical cautions : None during working

- **precautions :** General precautions as for all plastic materials and elastomers:

Ensure adequate vapour ventilation next to exicators and machinery and wherever Powders or volatile substances may be generated.

Avoid breathing vapours which may be freed upon opening packaging.

Avoid discharge of static electricity (which might cause ignition of organic vapours)

- **Advices for a safe use :** Protect from contamination

STORAGE;

Technical cautions : None

- **Warehousing cautions :** None

- **Incompatible products :** None

- **Packaging material :** None

EXPOSURE CONTROLS/PERSONAL PROTECTION
ACETAL

Components with exposure limits

Components CAS No. Type Control Parameters Revision Base

Formaldehyde 50-00-0 CEIL 2000 OEL (IT)

PERSONAL PROTECTION

Eye Protection: Where contacts may occur, wear safety glasses.

Hand Protection: Where contact may occur with hot material, wear thermal resistant gloves.

Respiratory Protection: Where overexposure by inhalation may occur, use of suitable protection means is compulsory.

Skin and Body Protection: wear clothes and shoes resistant to heat in case of contact risk with hot melted material

General precautions for any plastic materials and elastomers: avoid breathing vapors or fumes exhaled by the melted polymer

Hygiene : Wash your hands before any work pause and at the end of the working day.

**PHYSICAL AND CHEMICAL PROPERTIES
ACETAL**

PHYSICAL STATE: Solid
FORM/COLOUR: Pellets
(in various tooth shades)
ODOR: Formaldehyde
Safety Data:
PH (DegC) : Not Applicable
MELTING POINT/RANGE: 172-184 DegC
DECOMPOSITION POINT: >230 DegC
IGNITION POINT: 325 DegC
SELF IGNITION POINT 375 DegC
DENSITY: 1.40-1.45 g/cm³
Method : ISO 1183
SOLUBILITY IN WATER: Insoluble

**STABILITY AND REACTIVITY
ACETAL**

CONDITIONS TO AVOID:
Avoid resin to remain in fusion at temperatures above 230 DegC for too long
MATERIALS TO AVOID
Heavy acids, bases and oxidant agents; halogenated compounds except the included
HAZARDOUS DECOMPOSITION PRODUCTS:
Formaldehyde
ADDITIONAL INFORMATION:
Small quantities of hazardous gases and/or dusts may be released during drying, discharging and moulding. They may irritate eyes, nose and throat. No decomposition occurs if used correctly.

**TOXICOLOGICAL INFORMATION
ACETAL**

ADDITIONAL INFORMATION : None

**ECOLOGICAL INFORMATION
ACETAL**

Effects bound to ecotoxicity

**DISPOSAL CONSIDERATIONS
ACETAL**

Product can be recycled as most of the thermoplastic materials.
Recycling is advisable as compared to normal disposal.
Do not contaminate ponds, canals, water flows with the product and/or the container.
If recycling not possible please attend local laws.
It can be disposed of if local laws allows it.
Contaminated containers : contaminated containers must be given to authorized local companies for recycling and/or disposal.

TRANSPORT INFORMATION
ACETAL

Non-dangerous material according to transportation regulations

REGULATORY INFORMATION
ACETAL

INFORMATION AS PER EEC DIRECTIVE

Non-hazardous substance or preparation, as per EEC Directive 67/548/EEC or 99/45/EEC
According to EEC Directives and/or local laws, the product needs not to be labelled

RUNNING DIRECTIVE : 93/42/EEC – Class IIa.

OTHER INFORMATION
ACETAL

FINAL USE : Fabrication of dental prostheses like: clasps, provisional bridges, space maintainers, partial prostheses, orthodontic devices, abutments. Do not use for Medical Devices forecasting permanent implantology in humans.

Note 1 * Always ensure adequate ventilation of the workplace.

* Local exhaust ventilation of process equipment may be needed.

* Avoid breathing vapors or fumes

Note 2 * Incorrect operation of processing equipment may cause thermal degradation of the polymer and a potential danger through inclusion of bubbles of air or other gases in material with subsequent production of high temperatures. To avoid this the following temperatures are recommended:

Injection moulding: 220 DegC

Note 3 * Carefully read user's manual and safety data sheet before use.

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