



INTRODUCTION

OTA 480 is a trifunctional oligoacrylate which polymerizes when exposed to sources of free radicals. The combination of good flexibility with trifunctionality in this diluting oligomer offers new formulating possibilities. Cured films containing OTA 480 provide more flexibility than TMPTA while retaining hardness, high gloss properties and a good crosslinking density.

PERFORMANCE DATA

OTA 480 is characterized by:

- Low viscosity
- Light colour
- Low irritancy

UV/EB cured products based on OTA 480 are characterized by the following performance properties:

- Good flexibility
- Fast cure response

The actual properties of UV/EB cured products also depend on the selection of the other formulation components, such as reactive diluent(s), additives and photo initiators.

SPECIFICATIONS

Acid value, mg KOH/g	max. 0.4
Appearance	Clear liquid
Color, Apha	max. 60
Residual solvent, wt. %	max. 0.09
Viscosity, 25°C, mPa.s	70 - 110
Water, wt. %	max. 0.1

TYPICAL PHYSICAL PROPERTIES

Density, g/cm ³ at 25°C	1.08
Flash point, Setflash, °C	> 100
Formula weight	~456
Melting point, °C	< 0
Vapor pressure, mm Hg at 20°C	< 0.01

SUGGESTED APPLICATIONS

OTA 480 finds its application in UV/EB cured inks and coating systems. It makes an ideal reactive diluent for a variety of applications where monomers must be avoided or minimized. In radiation cured coatings, OTA 480 produces a highly crosslinked, flexible yet tough finish on a variety of substrates such as: plastics, paper, or other coated or printed substrates. OTA 480 is mainly recommended as diluent for lithographic ink binders.

STORAGE AND HANDLING

Care should be taken not to expose radiation curable products to temperatures exceeding 40°C for prolonged periods or to direct sunlight. This might cause uncontrollable polymerization of the product with generation of heat.

Storage and handling should be in stainless steel, amber glass, amber polyethylene or baked phenolic lined containers. Do not store this material under an oxygen free atmosphere. Use dry air to displace material removed from the container. This material should not be stored for more than 2 years.

PRECAUTION

The following is a summary of the precautions to be taken when handling this product. Please refer to the Safety Data Sheet for further details.

The toxicological properties of this material have not been fully determined. Products of this type can be expected to be eye and skin irritant and have the potential to cause sensitization or other allergic responses. Appropriate precautions should be taken to avoid eye and skin contact and to avoid inhalation of the aerosols or vapours. Consult the relevant Safety Data Sheet for appropriate handling procedures and protective equipment prior to using this or any other material referred to in this bulletin.

See Safety Data Sheet for emergency and first aid procedures.

STATUTORY LABELING

For Statutory Labeling information, please refer to Safety Data Sheet.