

Du Pont Material Safety Data Sheet

MATERIAL IDENTIFICATION

NUMBER : OEV00007
NAME : OmniDex (TM) 352 HOLOGRAPHIC RECORDING FILM

OmniDex is a pending trademark of the DuPont Company.
MANUFACTURER/DISTRIBUTOR: E.I. du Pont de Nemours & Co., Inc.
1007 Market Street
Wilmington, De 19898

PRODUCT INFORMATION PHONE : 1-(800)441-7515
TRANSPORTATION EMERGENCY PHONE : 1-(800)424-9300
MEDICAL EMERGENCY PHONE : 1-(800)441-3637

COMPONENTS

Table with 3 columns: Material, CAS Number, and %. Rows include POLYVINYL ACETATE BEADS, ACRYLATE ESTERS, N-VINYL CARBAZOLE, PHOTOINITIATOR, and DYES AND COATING AIDS.

PHYSICAL DATA

The film product consists of a photosensitive coating between two sheets of polyester.

HAZARDOUS REACTIVITY

Instability : Stable at normal temperatures and storage conditions.
Incompatibility : None reasonably foreseeable.
Decomposition : Decomposition will not occur.
Polymerization : Polymerization can occur. Conditions leading to polymerization are exposure to UV or visible light.

FIRE AND EXPLOSION DATA

No Information Available.

FIRE AND EXPLOSION HAZARDS

Hazardous gases/vapors produced in fire are carbon monoxide, carbon dioxide, and nitrogen oxides.

EXTINGUISHING MEDIA

Use media appropriate for surrounding material.

SPECIAL FIRE FIGHTING INSTRUCTIONS

Evacuate personnel to a safe area. Keep personnel removed & upwind of

(FIRE AND EXPLOSION DATA - CONTINUED)

fire. Wear self-contained breathing apparatus. Wear full protective equipment.

HEALTH HAZARD INFORMATION

THIS PRODUCT CAN BE USED SAFELY WHEN APPLICABLE PRECAUTIONS ARE USED.

The unimaged film may cause skin and eye irritation and skin sensitization.

N-vinyl carbazole has tested positive as a mutagen by the Salmonella/Ames Gene Mutation Test and by the Mouse Micronucleus Test. The oral LD50 for N-vinyl carbazole is 1600 mg/kg in rats.

Volatile organic compounds are emitted during heat processing of the film and include the following:

Component	CAS#	~ Concentration*
2-Butanol	78-92-2	84%
N-Vinyl Carbazole	1484-13-5	6%
Phenol	108-95-2	3%
Cyclohexane	110-82-7	3%
Carbazole		1%
Acrylate		< 1%
Methylene Chloride	75-09-2	< 1%
2-Phenoxyethanol	122-99-6	< 1%

* Based on GC/MS analysis of film vapors. The quantity of vapors emitted during heat treatment is estimated to be 2 pounds/million square inches of film with cover sheet removed, and 0.5 pounds/million square inches of film when the cover sheet is left intact.

Articles made from fully processed holographic films should be adequately sealed to prevent direct and/or prolonged skin contact.

Carcinogenicity

None of the components in this chemical is listed by IARC, NTP, OSHA, or ACGIH as a carcinogen.

Exposure Limits for OmniDex (TM) 352 HOLOGRAPHIC RECORDING FILM

TLV * (ACGIH) : None Established
PEL (OSHA) : None Established

* TLV is a registered trademark.

(HEALTH HAZARD INFORMATION - CONTINUED)

Safety Precautions

Wash thoroughly after handling.

FIRST AID

INHALATION

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

SKIN CONTACT

Flush skin with water.

EYE CONTACT

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

INGESTION

Consult a physician.

PROTECTION INFORMATION

Generally Applicable Control Measures and Procedures

Use only with adequate ventilation.
During heat processing, use sufficient exhaust on Forced-air convection oven to keep exposures below recommended limits.
Oven temperature should be maintained below 125 deg C to minimize vapor generation.

Personal Protective Equipment

Eye/Face : Safety Glasses.
Protective Gloves : Should be worn while handling both the uncured and the fully processed unprotected photopolymer layer.

DISPOSAL INFORMATION

Spill, Leak, or Release

NOTE: Review FIRE AND EXPLOSION HAZARDS and SAFETY PRECAUTIONS before proceeding with clean up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean up.
Pick up and hold for proper disposal.

Waste Disposal

(DISPOSAL INFORMATION - CONTINUED)

Treatment, storage, transportation and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations.

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

Date of latest Revision : 90/03/23
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