

Material Safety Data Sheet

Product Identity: **77/78 SERIES BASE AND PROCESS COLORS:** 7701, 7702, 7703, 7704, 7705, 7706, 7707, 7708, 7710, 7711, 7720, 7721, 7730, 7731, 7740, 7741, 7750, 7751, 7755, 7760, 7770, 7780, 7790, 7795, 77011, 77012, 77021, 77032, 77072, 7801, 7802, 7803, 7804, 7805, 7806, 7807, 7808, 7810, 7811, 7820, 7821, 7830, 7831, 7840, 7841, 7850, 7851, 7855, 7860, 7870, 7880, 7890, 7895, 78011, 78012, 78021, 78032, 78072 and 7706/7806 Ultra Opaque White, 7707/7807 Ultra Dense Black.
This MSDS includes all inks blended with 77/78 Series bases with the exception of Metallics & Fluorescents.

SECTION 1

MANUFACTURER

Zeller+Gmelin Corporation
4725 Jefferson Davis Highway
Richmond, Virginia 23234 USA
(800) 84UV INK (800-848-8465)

For Help in a Chemical Emergency, Please Contact:

CHEMTREC: + (800) 424-9300
Outside the US: + (703) 527-3887

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Regulatory Affairs Manager

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SECTION 2

HAZARDOUS IDENTITY INFORMATION

CAS#:	Chemical Name	%
Trade Secret	Acrylated Oligomers	50 – 80
Trade Secret	Acrylated Monomers	1 – 15
Trade Secret	Photoinitiators	5 – 10
4986-89-4	Pentaerythritol Tetraacrylate	1 – 15

VOC: < 1%
ACGIH TLV: N/A
Other limits: N/A
OSHA PEL: N/A
CAS NO.: Upon Request
OSHA CLASS: III.B

NOTE: Specific composition and formulation of Zeller+Gmelin products are considered trade secrets; however, upon request, specific information may be provided to medical facilities and industrial hygienists.

SECTION 3

PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point:	N/A	Vapor Density (Air = 1)	>1
Melting Point:	N/A	Appearance/Odor:	Paste/Mild
Vapor Pressure (mm Hg):	N/D	Specific Gravity (H ₂ O = 1)	1.1-2.0
Evaporation Rate (Bu. Ac. = 1) <1 (i.e., slower than Bu. Ac.)		Solubility in Water:	N/A

SECTION 4

FIRE AND EXPLOSION HAZARD DATA

Flash Point:	>212° F (>100° C)	LEL:	N/A
Flammable Limits:	N/A	UEL:	N/A
Extinguishing Media:	Foam, CO ₂ , Dry Chemical	Method Used:	Closed Cup
Special Firefighting Procedures	None		
Unusual Fire/Explosion Hazards:	None		

SECTION 5

REACTIVITY DATA

Stability:	Stable under normal storage conditions.
Conditions to Avoid:	Temperatures above 120° F (49° C). Exposure to sunlight or other sources of UV radiation, exposure to ionizing radiation.
Incompatibility: (Materials to Avoid)	Avoid mixing with vigorous oxidizing materials, peroxides, strong bases and alkalis.
Hazardous Decomposition of Byproducts:	N/A
Hazardous Polymerization:	High temperatures and/or fire conditions may cause rapid and uncontrolled polymerization.
Conditions to Avoid:	Avoid conditions inducing polymerization and exposure

SECTION 6

HEALTH HAZARD DATA

Routes of Entry:		
	Inhalation	Low VOC content makes inhalation problems unlikely at room temperature, however, elevated temperatures and/or aerosol formation may lead to irritation of the lungs.
	Skin	Contains materials that may cause moderate skin injury (reddening and swelling). Prolonged contact may cause blister formation and in some cases skin sensitization may occur.
	Ingestion	Contains materials that may be slightly toxic.
	Eyes	May cause severe pain and irritation.

SECTION 6 (cont.)

Chronic Effects of Overexposure: Acrylated materials have exhibited both positive and negative responses in standard tests for genetic changes.
Carcinogenicity: This product and its components are not listed as carcinogenic under IARC, NTP, OSHA, and ACGIH.

Signs and Symptoms of Exposure: Irritation of skin, eyes. Ingestion may cause burns of mouth, esophagus and possibly the stomach. Liquid splashed in the eye can result in discomfort, pain and irritation.

FIRST AID MEASURES

Inhalation	Remove to fresh air, if breathing is difficult, call a physician.
Skin	Wash affected areas with soap and warm water. Do not continue to wear contaminated clothing.
Ingestion	Consult physician promptly.
Eyes	Flush eyes with water thoroughly and consult physician promptly. Contains materials that may cause chemical burn to the eye - Potential for irreversible damage.

SECTION 7

PRECAUTIONS FOR SAFE HANDLING AND USE

In the event of material release or spillage:	Pick up any material with liquid binding material. Advise environmental authorities if spillage has entered waterways or drainage system.
Waste Disposal Method:	Do not allow product to enter drainage system. Dispose of in accordance with local, state and Federal regulations. Contact a professional environmental disposal company in your area.
Handling and Storage Precautions:	Store in closed containers away from heat and open flame. Avoid breathing mist. Avoid exposure to personnel as indicated. Use in a ventilated area. Wear protective clothing. Decontaminate area as required.
Other Precautions:	N/A

SECTION 8

CONTROL MEASURES

Respiratory Protection:	(Specify Type):	No special precautions needed
Ventilation:	Local Exhaust:	Required
	Mechanical (General):	Preferable
	Special:	None Required
	Other:	None Required
Protective Gloves:		Solvent-resistant protective gloves if contact is likely
Eye Protection:		Safety glasses
Other protective clothing and/or equipment:		Avoid contact with skin and eyes.
Work/Hygienic Practices:		Wash hands before handling food

SECTION 9

REGULATORY INFORMATION

	Health	Fire	Reactivity	Additional information
Suggested HMIS Rating:	2	1	2	B

Hazard Rating System: 0 = Minimal, 1 = Slight, 2 = Moderate, 3 = Serious, 4 = Severe

SARA Hazard Notification:

Hazard categories under Title III Rules (40 CFR 370)	Immediate Delayed Reactive
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Section 302 Extremely Hazardous substances: Not applicable

Section 313 Toxic Chemical(s): None

All components of this product are listed on TSCA.

These Products may contain trace level quantities of California Proposition 65 materials.

NOTE: The information herein is given in good faith and is believed to be accurate as of the date prepared. No warranty, expressed or implied, is made. It is the responsibility of the user to determine if Zeller+Gmelin Corporation products are suitable for their applications.