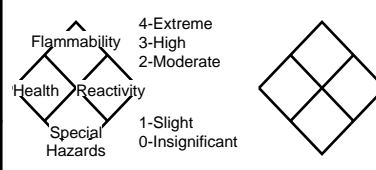


MATERIAL SAFETY DATA SHEET

POLAROID CORPORATION
OFFICE OF HEALTH, SAFETY, & ENVIRONMENTAL AFFAIRS
1265 MAIN STREET - WALTHAM, MA 02254
(781) 386-0879

Data Sheet No. M-0845	Revision IV	NFPA FIRE HAZARD SYMBOL 
Compiled by: E. Karger Issue Date: 07-JUL-1998		

SECTION I - PRODUCT AND COMPANY IDENTIFICATION

COMMON NAMES: DEVELOPER FLUID CONTAINED IN FILM TYPE 679; 579; STUDIO

SECTION II - COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL FAMILY: MIXTURE

INGREDIENTS

Please note that chemicals present in the mixture in concentrations below 1% which are considered not to be a hazard may not be included in the list of ingredients

Material	%	MSDS#	CAS#	PL# /Comments
POTASSIUM HYDROXIDE 45% AQUEOUS SOLUTION	5-10			
1-ETHYL-2,3-CYCLOHEXENOPYRIDINIUM TOSYLATE	1-5		000000-00-0	
NATROSOL PLUS; ALL TYPES AND GRADES	1-5			
HYPOXANTHINE	0.10-1		000068-94-0	
80%-AMINO-1-PENTANOL SOLUTION IN WATER	1-5		000000-00-0	
BORIC ACID	0.10-1		010043-35-3	
WATER	80-85		007732-18-5	

SECTION III - HAZARDS IDENTIFICATION

Hazard Signal Word

WARNING

Hazards

CONTAINS ALKALI

Eye Contact May Cause Permanent Eye Damage.

Skin and Mouth Contact May Cause Irritation or Burns.

Precautionary Measures

Do not get in eyes, on skin, mouth or clothing.

Wash thoroughly after handling

INGREDIENT EXPOSURE LIMITS

POTASSIUM HYDROXIDE 45% AQUEOUS SOLUTION

OSHA Permissible Exposure Limit:	STEL	2	mg/m3	ceiling
ACGIH	STEL	2	mg/m3	ceiling

1-ETHYL-2,3-CYCLOHEXENOPYRIDINIUM TOSYLATE

OSHA Permissible Exposure Limit:	PEL/TWA	None established
ACGIH	TLV/TWA	Not listed

NATROSOL PLUS; ALL TYPES AND GRADES

OSHA Permissible Exposure Limit:	PEL/TWA	None established
ACGIH	TLV/TWA	Not listed

HYPOXANTHINE

OSHA Permissible Exposure Limit:	PEL/TWA	None established
ACGIH	TLV/TWA	Not listed

BORIC ACID

OSHA Permissible Exposure Limit:	PEL/TWA	None established
ACGIH	TLV/TWA	Not listed

EMISSION EXPOSURE LIMITS

ACROLEIN

OSHA Permissible Exposure Limit:	PEL/TWA	0.10	ppm
ACGIH	TLV/TWA	0.10	ppm
	STEL	0.30	ppm
IDLH	IDLH	2	ppm

EMISSION EXPOSURE LIMITS (CONT.)

FORMALDEHYDE

OSHA Permissible Exposure Limit:	PEL/TWA	0.75	ppm	
	STEL	2	ppm	
ACGIH	TLV/TWA	0.30	ppm	ceiling
IDLH	IDLH	30	ppm	

ACETALDEHYDE

OSHA Permissible Exposure Limit:	PEL/TWA	200	ppm	
ACGIH	TLV/TWA	25	ppm	
IDLH	IDLH	2000	ppm	

SECTION IV - FIRST AID MEASURES

EYE CONTACT:

In case of eye contact, immediately flush eyes with plenty of water for at least fifteen minutes. Remove contact lenses if worn. Seek Medical attention immediately.

SKIN CONTACT:

In case of skin contact, flush affected area with plenty of water.

ORAL CONTACT:

In case of oral contact rinse mouth immediately with plenty of water. Drink water or citrus juices to dilute or neutralize any alkali that may have been swallowed. Do NOT induce vomiting. Seek Medical attention immediately.

INGESTION:

Get Medical attention immediately. If swallowed, do NOT induce vomiting unless directed to do so by Medical personnel. Never give anything by mouth to an unconscious person.

NOTES TO PHYSICIAN

Prolonged contact with skin may produce alkali burns.

SECTION V - FIRE FIGHTING MEASURES

Flash Point: (Tag Closed Cup): Mixture will not burn.

SECTION VI - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Handle film so as not to break developer pods prior to film development. Small quantities of developer fluid may be wiped up with a damp paper towel using care to avoid any skin or eye contact.

SECTION VII - HANDLING AND STORAGE

Not Available

SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

RECOMMENDED VENTILATION:

Not normally required. Processing of large quantities of film or large format film should be handled with local exhaust ventilation. NOTE: See also Section XVI

RESPIRATORY PROTECTION:

Not normally required.

EYE PROTECTION:

Not normally required.

SKIN PROTECTION:

Not normally required. If processing large quantities of film or large format film wear minimum of Neoprene, Nitrile, Natural or Butyl rubber gloves.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Opaque viscous fluid, variable color.

Melting Point:	ND
Boiling Point:	100 °C (212°F) (Water)
Specific Gravity(H2O=1):	1.1
% Solubility in Water:	@ 20°C: dilutable
Vapor Density (AIR=1):	ND
% Volatiles by volume:	85 (approximate)
Vapor Pressure:	ND
Evaporation Rate:	(BUTYL ACETATE=1): <1
pH:	> 13 - Drops rapidly after processing
Pour Point:	ND
Softening Point:	ND
Viscosity:	ND
Bulk Density:	ND
Surface Tension:	ND
Log Kow:	ND

SECTION X - STABILITY AND REACTIVITY

Hazardous Reactivity:

Mixture is considered stable.

SECTION XI - TOXICOLOGICAL INFORMATION

INHALATION:

May be an irritant

SKIN CONTACT:

Corrosive

EYE:

Corrosive

DEVELOPER FLUID CONTAINED IN FILM TYPE 679; 579; STUDIO

SECTION XI - TOXICOLOGICAL INFORMATION (CONT.)

INGESTION:

Corrosive

Effects of Acute Overexposure:

Eye contact with developer may cause permanent eye damage. May cause burns to skin and mouth.

On processing large quantities of film or large format film (20x24 and Replica) low molecular weight aldehydes may be released, at concentrations below the OSHA PEL, provided processing is done with good ventilation. Such aldehydes are reported to cause mucous membrane irritation, have a disagreeable odor and may cause headaches at concentrations above their PEL's.

Effects of Chronic Overexposure:

None currently known.

Does not contain any chemicals listed as carcinogens by OSHA, IARC or NTP.

SECTION XII - ECOLOGICAL INFORMATION

Not Available

SECTION XIII - DISPOSAL CONSIDERATIONS

Product (film pack, picture and throw away part) is not classified or regulated under U.S. federal law as "RCRA Hazardous" before or after processing.

SECTION XIV - TRANSPORT INFORMATION

OTHER D.O.T. INFORMATION

Film product not regulated

SECTION XV - REGULATORY INFORMATION

All ingredients are listed on the TSCA inventory

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Product Regulations (CPR) and the MSDS contains all the information required by the CPR.

SECTION XVI - OTHER INFORMATION

NOTE: Film conforms to ASTM D-4236.

NOTE: Place throw-away portion in a closed container.

Revision Information

Revised Sections Since Last Version:

Section III - Hazards Identification

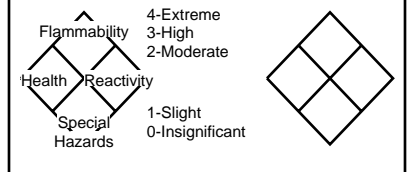
REVISION DATE: 07-JUL-1998

REPLACES SHEET DATED:

02-JUL-1998

COMPLETED BY: Polaroid Corp. Office of Health, Safety, & Environmental Affairs

This data is for guidance and is believed accurate as of the date of issue hereof. It is based upon information and tests believed to be reliable but suitability for any particular use should be confirmed by the user's own tests. The advice contained in this data sheet is given and accepted at the user's risk and Polaroid makes no guarantee of results and assumes no obligation or liability in connection herewith.

Drum Label Information**HAZARD SIGNAL WORD****WARNING****HAZARDS**

CONTAINS ALKALI

Eye Contact May Cause Permanent Eye Damage.

Skin and Mouth Contact May Cause Irritation or Burns.

PRECAUTIONARY MEASURES

Do not get in eyes, on skin, mouth or clothing.

Wash thoroughly after handling

EMERGENCY AND FIRST AID PROCEDURES

In case of eye contact, immediately flush eyes with plenty of water for at least fifteen minutes. Remove contact lenses if worn. Seek Medical attention immediately.

In case of skin contact, flush affected area with plenty of water.

In case of oral contact rinse mouth immediately with plenty of water. Drink water or citrus juices to dilute or neutralize any alkali that may have been swallowed. Do NOT induce vomiting. Seek Medical attention immediately.

Get Medical attention immediately. If swallowed, do NOT induce vomiting unless directed to do so by Medical personnel. Never give anything by mouth to an unconscious person.

SPILL CONTROL:

Handle film so as not to break developer pods prior to film development.

Small quantities of developer fluid may be wiped up with a damp paper towel using care to avoid any skin or eye contact.

OTHER D.O.T. INFORMATION

Film product not regulated