



MATERIAL SAFETY DATA SHEET

ILFOTEC LC29

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

TRADE NAME:	ILFOTEC LC29
SYNONYMS:	A12
PART No.:	IP86LC
UN/NA (PIN) No.:	0
EMERGENCY TELEPHONE:	FOR MEDICAL EMERGENCY IN THE UNITED STATES AND CANADA CALL 1-800-842-9660 (PRODUCT MISUSE). FOR TRANSPORTATION EMERGENCY CALL CHEMTREC 1-800-424-9300.
SUPPLIER:	ILFORD Imaging USA Inc West 70 Century Road, Paramus, NJ 07653 Tel: 201-265-6000
CONTACT PERSON:	Bryan Sammartino

2. COMPOSITION, INFORMATION ON INGREDIENTS

INGREDIENT NAME:	CAS No.:	CONTENTS :	EPA RQ:	TPQ:
DIETHYLENEGLYCOL	111-46-6	5-10 %		
HYDROQUINONE	123-31-9	5-10 %		
DIETHANOLAMINE BISULFITE	63149-47-3	30-60 %		
DIETHANOLAMINE	111-42-2	1-5 %		
1-PHENYL-4-METHYL-3-PYRAZOLIDONE	2654-57-1	0-1 %		
DIETHYLENETRIAMINE PENTAACETIC ACID-NA5	67-43-6	1-5 %		
DIETHANOLAMINE HYDROBROMIDE		1-5 %		

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

Colorless or pale yellow, odorless, weakly alkaline, water-based, non-flammable liquid. Contains hydroquinone.

Harmful in contact with skin and if swallowed. Irritating to eyes and skin. May cause sensitisation by skin contact.

ACUTE EFFECTS:

INHALATION: May cause irritation to the respiratory system.

INGESTION: Harmful if swallowed. May cause discomfort if swallowed. Liquid irritates mucous membranes and may cause abdominal pain if swallowed.

SKIN: Irritating to skin. May cause sensitisation by skin contact. May cause allergic contact eczema.

EYES: Irritation of eyes and mucous membranes. Repeated exposure may cause chronic eye irritation.

**CHRONIC EFFECTS:
HEALTH WARNINGS:**

Prolonged or repeated exposure may cause severe irritation. May cause sensitisation by skin contact. May cause skin irritation/eczema. May cause allergy. May cause hypersensitivity.

ROUTE OF ENTRY:

Ingestion. Skin and/or eye contact.

MEDICAL INFORMATION:

May aggravate existing: Skin disorders and allergies.

4. FIRST AID MEASURES

INHALATION: Move the exposed person to fresh air at once. Provide rest, warmth and fresh air. Get medical attention if any discomfort continues.

INGESTION: DO NOT INDUCE VOMITING! Remove victim immediately from source of exposure. Rinse mouth thoroughly. Immediately give a couple of glasses of water, provided the victim is fully conscious. Get medical attention immediately!

SKIN: Remove affected person from source of contamination. Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention immediately.

EYES: Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with lots of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA:

This material is not flammable. Use extinguishing media appropriate for surrounding fire.

HAZARDOUS COMBUSTION PRODUCTS:

Sulfur dioxide.

6. ACCIDENTAL RELEASE MEASURES

SPILL CLEAN-UP PROCEDURES:

Use appropriate protective clothing. Do not contaminate drainage or waterways. Absorb spill with non-reactive absorbent and place in non-reactive containers for disposal. Contain Spill. Use large quantities of water to flush small spills to sanitary sewer if local regulations permit. Do not flush to septic tank. See Section 13 for disposal considerations. Flush with plenty of water to clean spillage area. Do not let washing down water contaminate ponds or waterways. Inform Authorities if large amounts are involved.

7. HANDLING AND STORAGE

HANDLING PRECAUTIONS:

Avoid spilling, skin and eye contact. Provide good ventilation. Individuals liable to allergic reactions should not handle the product. Read and follow manufacturer's recommendations.

STORAGE PRECAUTIONS:

Keep in cool, dry, ventilated storage and closed containers. Store below 75°F. Keep in original container. Keep containers closed tightly.

STORAGE CRITERIA:

Chemical storage.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

INGREDIENT NAME:	CAS No.:	OSHA PEL: TWA: STEL:	ACGIH TLV: TWA: STEL:	OTHER: TWA: STEL:	UNITS:
DIETHANOLAMINE	111-42-2		2 mg/m3		mg/m3

PROTECTIVE EQUIPMENT:**ENGINEERING CONTROLS:**

Provide eyewash station and safety shower.

VENTILATION: Provide adequate general and local exhaust ventilation. Must not be handled in confined spaces without adequate ventilation. General room ventilation should provide for 10 - 15 room air changes per hour.

RESPIRATORS: Respiratory protection must be used if air concentration exceeds acceptable level. An acid gas/organic vapor cartridge should be used.

PROTECTIVE GLOVES:

Use protective gloves made of: Rubber (natural, latex). Neoprene. Polyethylene.

EYE PROTECTION:

Wear approved safety goggles.

PROTECTIVE CLOTHING:

Wear appropriate clothing to prevent any possibility of skin contact. Wear rubber apron.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/PHYSICAL STATE:	Liquid.
COLOR:	Yellowish.
ODOR:	No characteristic odor.
SOLUBILITY DESCRIPTION:	Soluble in water.
BOILING POINT (°F, interval):	212
DENSITY/SPECIFIC GRAVITY (g/ml):	1.07
pH-VALUE, CONC. SOLUTION:	9.4
	TEMPERATURE (°F): 68

10. STABILITY AND REACTIVITY

STABILITY: Normally stable.

CONDITIONS TO AVOID:

Avoid contact with acids and alkalis. Avoid excessive heat for prolonged periods of time.

HAZARDOUS POLYMERIZATION:

Will not polymerize.

MATERIALS TO AVOID:

Avoid contact with other photographic solutions and/or cleaning compounds.

HAZARDOUS DECOMPOSITION PRODUCTS:

Irritating gases/vapors/fumes of: Ammonia or amines. Sulfur dioxide.

11. TOXICOLOGICAL INFORMATION

TOXIC DOSE - LD 50:

hydroquinone 320; diethanolamine bisulphite 1900; diethanolamine 710;
1-phenyl-4-methyl-3-pyrazolidone 512; diethylene glycol 5500 mg/kg (oral rat)

TOXICOLOGICAL INFORMATION:

This chemical formulation has not been tested for health effects. Exposure effects listed are based on existing health data for the individual components which comprise the mixture.

12. ECOLOGICAL INFORMATION**LC 50, 96 HRS, FISH, mg/l:**

0.1 hydroquinone; 1480 diethanolamine; DTPA >300

EC 50, 48 HRS, DAPHNIA, mg/l:

55 diethanolamine; DTPA >10

IC 50, 72 HRS, ALGAE, mg/l:

1.0 hydroquinone

ECOLOGICAL INFORMATION:

Not regarded as dangerous for the environment.

13. DISPOSAL CONSIDERATIONS**DISPOSAL METHODS:**

Unused and spent solutions may be allowed to be discharged to sanitary sewer by permit IF allowed by local regulations. Consult your local authority for advice. Waste may have to be pretreated before discharge. Consult local authorities before discharging any waste to sewer. Do not discharge to septic system. Waste that cannot be discharged to sewer may have to be handled by a licensed hazardous waste contractor.

14. TRANSPORT INFORMATION**GENERAL:**

To obtain additional information on packaging for shipment refer to the Code of Federal Regulations - CFR 49 and your carrier.

U.S. DOT:**UN/NA No.:**

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U.S. DOT HAZARD LABEL:

No DOT label requirement noted

U.S. DOT CLASS:

No classification noted.

INFORMATION ON ROAD TRANSPORT: Not classified for road transport

SEA TRANSPORT:

INFORMATION ON SEA TRANSPORT: Not classified for sea transport

AIR TRANSPORT:

INFORMATION ON AIR TRANSPORT: Not classified for air transport

15. REGULATORY INFORMATION**REGULATORY STATUS OF INGREDIENTS:**

NAME:	CAS No:	TSCA:	CERCLA:	SARA 302:	SARA 313:	DSL(CAN):
DIETHYLENEGLYCOL	111-46-6	Yes	No	No	No	Yes
DIETHANOLAMINE BISULFITE	63149-47-3	Yes	No	No	No	Yes
DIETHANOLAMINE	111-42-2	Yes	Yes	No	Yes	Yes
1-PHENYL-4-METHYL-3-PYRAZOLIDONE	2654-57-1	Yes	No	No	No	Yes
DIETHYLENETRIAMINE PENTAACETIC ACID-NA5	67-43-6	Yes	No	No	No	Yes

US FEDERAL REGULATIONS:**REGULATORY STATUS:**

TSCA: The ingredients of this product are on the TSCA Inventory.

ENVIRONMENTAL LISTING:

Hydroquinone: Clean Air Act, S.111 (40 CFR 60-EPA). DOT Hazardous Mat. Transp. Act (49 CFR). NTP-Annual Plan (DHHS). NIOSH Criteria Documents. IRPTC-International Register of Potentially Toxic Chemicals (UNEP). OSHA Chemical Hazard Communic. Std. - Air Contaminants (29CFR1910). ACGIH Threshold Limit Values. EPA Reportable & Threshold Quantities. SARA Section 302, Extremely Hazardous Substances. SARA Section 313, Toxic Chemicals. SARA Title III Consolidated Chemical List (302, CERCLA, 313, RCRA).

STATE REGULATIONS:**STATE REGULATORY STATUS:**

Florida Hazardous Substance List Massachusetts Extraordinarily Hazardous Substances List Massachusetts Right-to-Know. New Jersey Right-to-Know. NJ Environmental Hazardous Substances List NJ Special Hazardous Substances List Pennsylvania Right-to-Know.

16. OTHER INFORMATION

INFORMATION SOURCES:

European Photographic Chemical Industry Code of Practice For Classification And Labelling Material Safety Data Sheet, Misc. manufacturers. Safeware Quasar Ltd USA Regulatory Information ANSI Z400.1-1998 Material Safety Data Sheets - Preparation

PREPARED BY:

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REVISION No./Repl. MSDS of:

16/5/97