ILFORD PHOTO
HARMAN technology Ltd
SAFETY DATA SHEET
Ilfosol 3 Film Developer

1. IDENTIFICATION

Product Name Ilfosol 3 Film Developer
Product No. 1176108
Internal Id 10559
Container Size 500ml
Identified uses Developer Solution
Supplier
Distributors
USA: WYNIT Inc, 5801 East Taft Road, North Syracuse, NY 13212. Tel: 1 800 GO WYNIT (469 9648) or 1 315 437 4167, Fax: 1 315 437 0432
Canada: Amplis Foto Inc, 22 Telson Road, Markham, Ontario L3R 1E5, Tel: 905 477 4111, Fax: 905 477 2502
Contact Person
USA: ilfordhelp@wynit.com; Canada: phil.nielsen@amplis.com
Emergency Telephone
USA/Canada: For medical emergency, call 1 800 842 9660 (Product Misuse).

2. HAZARD(S) IDENTIFICATION

Appearance Coloured liquid.
Color Light (or pale), Yellow, Orange, Brown.
Odor No characteristic odor.

Signal Word Warning

Hazard Statements
H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer.

Precautionary Statements
P101 If medical advice is needed, have product container or label at hand.
P280 Wear protective gloves, eye and face protection.
P302+352 IF ON SKIN: Wash with plenty of soap and water.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local regulations.

GHS Classification
Physical and Chemical Hazards Not classified.
Human health Skin Sens. 1 - H317, Carc. 2 - H351
Environment Not classified.

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM - WHMIS

1 / 7
Controlled Product Classification
D2

OSHA Regulatory Status
This Product is Hazardous under the OSHA Hazard Communication Standard.

Inhalation
May cause irritation to the respiratory system.

Ingestion
May cause discomfort if swallowed.

Skin Contact
May cause sensitization by skin contact. May cause allergic contact eczema.

Eye Contact
May cause temporary eye irritation.

Health Warnings
Spray and vapor in the eyes may cause irritation and smarting. May cause allergy. May cause hypersensitivity.

Route Of Entry
Skin and/or eye contact. Ingestion.

Medical Considerations
May aggravate existing: Skin disorders and allergies. Pre-existing eye problems.

Other Health Effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>1-Phenyl-4-methyl-4-hydroxymethyl-3-pyrazolidone</th>
<th>&lt; 1</th>
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</thead>
<tbody>
<tr>
<td>CAS No.: 13047-13-7</td>
<td>EC No.: 235-920-3</td>
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</table>

GHS Classification
Acute Tox. 4 - H302; Skin Sens. 1 - H317; Aquatic Chronic 2 - H411

<table>
<thead>
<tr>
<th>HYDROQUINONE</th>
<th>&lt; 1</th>
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<tbody>
<tr>
<td>CAS No.: 123-31-9</td>
<td>EC No.: 204-617-8</td>
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</table>

GHS Classification
Acute Tox. 4 - H302; Eye Dam. 1 - H318; Skin Sens. 1 - H317; Muta. 2 - H341; Carc. 2 - H351; Aquatic Acute 1 - H400

<table>
<thead>
<tr>
<th>SODIUM CARBONATE</th>
<th>1-5%</th>
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<tbody>
<tr>
<td>CAS No.: 497-19-8</td>
<td>EC No.: 207-838-8</td>
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</tbody>
</table>

GHS Classification
Eye Irrit. 2 - H319

4. FIRST-AID MEASURES
Ilfosol 3 Film Developer

**Description of first aid measures**

**Inhalation**
Unlikely route of exposure as the product does not contain volatile substances. Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

**Ingestion**
Remove victim immediately from source of exposure. Rinse mouth thoroughly. Drink a few glasses of water or milk. DO NOT induce vomiting. Get medical attention immediately.

**Skin Contact**
Remove affected person from source of contamination. Remove contaminated clothing. Wash the skin immediately with soap and water. Contact physician if irritation continues.

**Eye Contact**
Remove victim immediately from source of exposure. Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Contact physician if irritation persists.

**Most important symptoms and effects, both acute and delayed**

**Inhalation**
No specific symptoms noted.

**Ingestion**
No specific symptoms noted.

**Skin Contact**
No specific symptoms noted.

**Eye Contact**
May cause temporary eye irritation.

**Indication of any immediate medical attention and special treatment needed**

**Notes To The Physician**
No specific first aid measures noted.

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**5. FIRE-FIGHTING MEASURES**

**Flammability Class**
No Uniform Fire Code noted.

**Extinguishing Media**
The product is non-combustible. Use extinguishing media appropriate for surrounding fire.

**Unusual Fire & Explosion Hazards**
No unusual fire or explosion hazards noted.

**Specific Hazards**
The product is non-combustible. If heated, harmful vapors may be formed.

**Special Fire Fighting Procedures**
Avoid breathing fire vapors.

**Protective Equipment For Fire-Fighters**
Use protective equipment appropriate for surrounding materials. Selection of respiratory protection for fire fighting: follow the general fire precautions indicated in the workplace.

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**6. ACCIDENTAL RELEASE MEASURES**

**Personal Precautions**
Avoid contact with skin and eyes. Provide adequate ventilation. For personal protection, see section 8.

**Environmental Precautions**
Do not discharge into drains, water courses or onto the ground. The product should not be dumped in nature but collected and delivered according to agreement with the local authorities.

**Spill Clean Up Methods**
For waste disposal, see section 13. Wear necessary protective equipment. Small quantities may be flushed to drains with plenty of water. Absorb in vermiculite, dry sand or earth and place into containers. Wash contaminated area with water. Prevent discharge of larger quantity to drain.

**Reference to other sections**
For personal protection, see section 8. For waste disposal, see section 13.

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**7. HANDLING AND STORAGE**

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Ilfosol 3 Film Developer

Handling
Provide good ventilation. Avoid spilling, skin and eye contact. Do not eat, drink or smoke when using the product. Read and follow manufacturer’s recommendations.

Storage
Store in closed original container in a dry place. Store above freezing. Store under well-ventilated conditions at a temperature below 25°C.

Storage Class
Chemical storage.

Specific end use(s)
The identified uses for this product are detailed in Section 1.2.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>STD</th>
<th>TWA (8-hrs)</th>
<th>STEL (15 min)</th>
<th>Notes</th>
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<tbody>
<tr>
<td>HYDROQUINONE</td>
<td>ACGIH</td>
<td>1 mg/m3</td>
<td></td>
<td>A3, Sen</td>
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<td>HYDROQUINONE</td>
<td>PEL</td>
<td>2 mg/m3</td>
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<table>
<thead>
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<th>COMPONENT</th>
<th>IDLH</th>
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</thead>
<tbody>
<tr>
<td>HYDROQUINONE</td>
<td>50 mg/m3</td>
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</tbody>
</table>

ACGIH=American Conference of Governmental Industrial Hygienists.
A3: Confirmed Animal Carcinogen with Unknown Relevance to Humans.
SEN: Sensitizer.

Protective Equipment

Engineering Measures
Provide adequate ventilation. Must not be handled in confined space without sufficient ventilation.

Respiratory Equipment
Respiratory protection not required.

Hand Protection
Use protective gloves.

Eye Protection
Use eye protection.

Other Protection
Wear suitable protective clothing as protection against splashing or contamination.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Coloured liquid.

Color

Odor
No characteristic odor.

Solubility
100% Soluble in water.

Initial boiling point and boiling range
>100° 760 mm Hg

Relative density
1.07 20

pH-Value, Conc. Solution
9.8

10. STABILITY AND REACTIVITY

Reactivity
No specific reactivity hazards associated with this product.

Stability
Stable under the prescribed storage conditions. No particular stability concerns.
Ilfosol 3 Film Developer

Hazardous Polymerisation
Will not polymerise.

Conditions To Avoid
Avoid excessive heat for prolonged periods of time. Avoid contact with acids.

Materials To Avoid
Strong acids. Avoid contact with other photographic solutions and/or cleaning compounds.

Hazardous Decomposition Products
Fire or high temperatures create: Sulfurous gases (SOx).

11. TOXICOLOGICAL INFORMATION

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 that comprise the mixture.

Other Health Effects

12. ECOLOGICAL INFORMATION

Toxicity
The product contains a substance that is very toxic to aquatic organisms.

Degradability
No data available.

Bioaccumulative potential
No data available on bioaccumulation.

Mobility:
The product is soluble in water.

Results of PBT and vPvB assessment
This product does not contain any PBT or vPvB Substances.

Other adverse effects
None known.

13. DISPOSAL CONSIDERATIONS

Disposal Methods
Used, diluted, 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 pre-treated 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 handled by a licensed hazardous waste contractor.

14. TRANSPORT INFORMATION

General
The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, DOT).

Road Transport Notes
Not classified for road transport

Rail Transport Notes
Not classified for rail transport

Sea Transport Notes
Not classified for sea transport

Air Transport Notes
Not classified for air transport

Transport Labels
No transport warning sign required.

Environmentally Hazardous Substance/Marine Pollutant
No.

Transport in Bulk according to Annex II of MARPOL 73/78 and the IBC Code Notes
Not applicable.
15. REGULATORY INFORMATION

Regulatory Status (US)
TSCA: The ingredients of this product are on the TSCA Inventory.

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities
The following ingredients are listed.
HYDROQUINONE; EPCRA 302 TPQ 10 000 lbs 500 lbs Tier II TPQ 500 lbs

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)
The following ingredients are listed.
HYDROQUINONE; 100 lbs (45.4 Kg)

SARA Extremely Hazardous Substances EPCRA Reportable Quantities
None of the ingredients are listed.

SARA 313 Emission Reporting
The following ingredients are listed.
HYDROQUINONE 0.84%

CAA Accidental Release Prevention
None of the ingredients are listed.

OSHA Highly Hazardous Chemicals
None of the ingredients are listed.

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins
None of the ingredients are listed.

California Air Toxics "Hot Spots" (A-I)
The following ingredients are listed.
HYDROQUINONE

California Air Toxics "Hot Spots" (A-II)
None of the ingredients are listed.

Massachusetts "Right To Know" List
The following ingredients are listed.
HYDROQUINONE

Rhode Island "Right To Know" List
The following ingredients are listed.
HYDROQUINONE

Minnesota "Right To Know" List
The following ingredients are listed.
HYDROQUINONE

New Jersey "Right To Know" List
The following ingredients are listed.
HYDROQUINONE

Pennsylvania "Right To Know" List
The following ingredients are listed.
HYDROQUINONE

International Inventories

Canada – DSL/NDSL
The following ingredients are listed.
1-Phenyl-4-methyl-4-hydroxymethyl-3-pyrazolidone
1-Phenyl-5-mercaptotetrazole
HYDROQUINONE
SODIUM CARBONATE

US - TSCA
The following ingredients are listed.
1-Phenyl-4-methyl-4-hydroxymethyl-3-pyrazolidone
1-Phenyl-5-mercaptotetrazole
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HYDROQUINONE
SODIUM CARBONATE

US – TSCA 12(b) Export Notification
None of the ingredients are listed.

16. OTHER INFORMATION

General Information
HARMAN technology Ltd believe the information and recommendations contained herein are based on correct and factual data. However, no express or implied guarantee or warranty of any kind is made with respect to this information. Use this information only to supplement other information you have gathered and then make an independent determination about the completeness and suitability of all information to ensure the proper use and disposal of this product and the health and safety of employees and customers.

Information Sources

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06/23/2015

Revision
2

Supersedes Date
09/10/2014