ILFORD PHOTO

HARMAN technology Ltd SAFETY DATA SHEET

ILFORD NUCLEAR EMULSION IN GEL FORM G5, K2, K5, L4

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name	ILFORD NUCLEAR EMULSION IN GEL FORM G5, K2, K5, L4		
Product No.	Reference 10581		
Internal Id	1355053, 1355062, 1355099, 1355109, 1355127, 1355136, 1355154		
Container size	50 ml or 100ml Glass bottles		

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses

Photographic Silver Halide Emulsion

1.3. Details of the supplier of the safety data sheet

Supplier	HARMAN technology Ltd
	Ilford Way
	Mobberley
	Knutsford
	Cheshire WA16 7JL
	http:/www.harmantechnology.com
	Tel: +44(0)1565 650000
	Fax: +44(0)1565 872734
Contact Person	HS&E Advisor Dr Trevor Rhodes Tel: +44(0)1565 650000, email:
	trevor.rhodes@harmantechnology.com

1.4. Emergency telephone number

Australia: 1-800-557346 UK and elsewhere: +44(0) 207 858 1228

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Classification (1999/45/EEC)

Physical and Chemical Hazards	Not classified.
Human health	Not classified.
Environment	Aquatic Acute 1 - H400;Aquatic Chronic 1 - H410
N;R50/53.	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

2.2. Label elements

Label In Accordance With (EC) No. 1272/2008



Signal Word

Warning

	H410	Very toxic to aquatic life with long lasting effects.
Precautionary Statements		
	P273	Avoid release to the environment.
	P391	Collect spillage.
	P501	Dispose of contents/container in accordance with local regulations.

2.3. Other hazards

Hazard Statements

No information available.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

ETHANOL			1-5%
CAS-No.: 64-17-5	EC No.: 200-578-6		
Classification (EC 1272/2008) Flam. Liq. 2 - H225		Classification (67/548/EEC) F;R11	
SILVER BROMIDE			10-30%
CAS-No.: 7785-23-1	EC No.: 232-076-8		
Classification (EC 1272/2008) Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410		Classification (67/548/EEC) N;R50/53.	
SILVER IODIDE			<1
CAS-No.: 7783-97-3	EC No.: 232-039-6		
Classification (EC 1272/2008) Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410		Classification (67/548/EEC) N;R50/53.	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation

Unlikely route of exposure as the product does not contain volatile substances.

Ingestion

Rinse mouth thoroughly. Get medical attention if any discomfort continues.

Skin contact

Wash skin thoroughly with soap and water. Get medical attention promptly if symptoms occur after washing.

Eye contact

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persists: Seek medical attention and bring along these instructions.

4.2. 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.

4.3. Indication of any immediate medical attention and special treatment needed

No specific first aid measures noted.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

Unusual Fire & Explosion Hazards

No unusual fire or explosion hazards noted.

5.3. Advice for firefighters

Special Fire Fighting Procedures

No specific fire fighting procedure given.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Follow precautions for safe handling described in this safety data sheet.

6.2. Environmental precautions

Prevent entry into drains.

6.3. Methods and material for containment and cleaning up

Wear necessary protective equipment. Do not contaminate water sources or sewer. Spillage should be collected for recycling.

6.4. Reference to other sections

For personal protection, see section 8. For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Read and follow manufacturer's recommendations. Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry, cool and well-ventilated place. Store at temperatures below 10°C Store above freezing. Only open in darkroom.

Storage Class

Chemical storage.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA	- 8 Hrs	STEL	- 15 Min	Notes
ETHANOL	WEL	1000 ppm	1920 mg/m3			

WEL = Workplace Exposure Limit.

8.2. Exposure controls

Protective equipment



Engineering measures

Provide adequate ventilation. Hand protection

Use suitable protective gloves if risk of skin contact.

Eye protection

Use eye protection.

Hygiene measures

Wash promptly with soap & water if skin becomes contaminated.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Solid or liquid (may vary). Jelly-like
Colour	Yellow.
Odour	Odourless.
Solubility	Miscible with water
Initial boiling point and boiling range	>100
(°C) Melting point (°C)	>30
Relative density	1.3 20
Vapour pressure	- Not Known
pH-Value, Conc. Solution	5.5

9.2. Other information

Not available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No specific reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions.

10.3. Possibility of hazardous reactions

Hazardous Polymerisation

Will not polymerise.

10.4. Conditions to avoid

Avoid excessive heat for prolonged periods of time.

10.5. Incompatible materials

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

10.6. Hazardous decomposition products

No specific hazardous decomposition products noted.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxicological information

Materials To Avoid

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.

Inhalation

Unlikely to be hazardous by inhalation because of the low vapour pressure of the substance at ambient temperature.

Skin contact

Liquid may irritate skin.

Eye contact May cause temporary eye irritation.

Health Warnings May cause discomfort if swallowed. Route of entry

Ingestion. Skin and/or eye contact.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

The product contains a substance which is very toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

12.2. Persistence and degradability

Degradability

No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential

No data available on bioaccumulation.

12.4. Mobility in soil

Mobility:

The product contains substances which are insoluble in water and which sediment in water systems.

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

Not available.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

Dispose of in accordance with local regulations.

13.1. Waste treatment methods

Recover and reclaim or recycle, if practical.

SECTION 14: TRANSPORT INFORMATION

General

These products are classifiable as environmentally hazardous (UN 3077) but under the small quantity exemption of ADR SP 375, IATA SP A197, and IMDG 2.10.2.7 they are not required to be transported as Dangerous Goods.

14.1. UN number

Not relevant

14.2. UN proper shipping name

Not relevant

14.3. Transport hazard class(es)

Not relevant

14.4. Packing group

Not relevant

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

Not relevant.

14.6. Special precautions for user

Not relevant

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Approved Code Of Practice

Classification and Labelling of Substances and Preparations Dangerous for Supply.

EU Legislation

Dangerous Preparations Directive 1999/45/EC. Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.

EU COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010.

National Regulations

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 No 716

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 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

 Material Safety Data Sheet, Misc. manufacturers. Dangerous Properties of Industrial Chemicals, 6.edition, N.Sax, 1984. European

 Photographic Chemical Industry Code of Practice For Classification And Labelling

 Issued By
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Issued by	
	trevor.rhodes@harmantechnology.com
Revision Date	05/02/2015
Revision	2
Supersedes date	15/09/2010
Risk Phrases In Full	
R11	Highly flammable
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Hazard Statements In Full	
H225	Highly flammable liquid and vapour.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.