

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Identity : **LD20 LITH DEVELOPER A**

Producer / Distributor : Jay House Ltd, Unit 6b, Park Lane Ind. Estate,
Corsham, Wiltshire SN13 9LG, UK.
Tel: +44 (0)1249 714555
email: tech@fotospeed.com

2. COMPOSITION / INGREDIENT INFORMATION

This is a liquid preparation in which organic and inorganic compounds are dissolved in water. The main ingredients are :

Chemical Name and %w/w	Symbol letter	R-Phrases	S-Phrases	EINEC No	CAS No
SODIUM FORMALDEHYDE BISULPHITE	25-30 %			212-800-9	870-72-4
HYDROQUINONE (1,4-Dihydroxybenzene)	10-15 %				
	Xi	22-43	2-24/25-37/39	204-617-8	123-31-9
TRIETHYLENEGLYCOL	20-25 %				
	-	-	-	203-953-2	112-27-6

3. HAZARD IDENTIFICATION

EC classification :
See paragraph 15
Most important hazards :

4. FIRST AID MEASURES

Inhalation : Move the victim to fresh air. Put person in half sitting position and let rest. In extreme cases seek medical advice.

Skin contact : Flush with plenty of water. Remove contaminated clothing.

Eye contact : Rinse eyes thoroughly with water until irritation stops. In all cases seek medical advice.

Ingestion : Rinse mouth with plenty of water. Give victim considerable amounts of water to drink, do not give anything to drink to an unconscious person. In extreme cases seek medical advice.

Other : Some people may develop allergic skin reaction when exposed often and for a long period to this product. Seek medical advice if this occurs.

Advice to physician :

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media Only use extinguishing media which are compatible with the surrounding materials.

Water, waterspray, Carbon dioxide, dry powder, foam, sand.

Unsuitable extinguishing media :All extinguishing media are allowed.

Special exposure hazards : When product is involved in a fire, toxic fumes and smoke will be generated. Do not breathe these fumes

Hazardous decomposition/combustion products

Protective equipment : Use approved positive pressure self-contained breathing apparatus when product is involved in a fire.

Further instructions :Contaminated extinguishing water should be disposed of in a manner approved by the EEC, national and local regulatory agencies.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions :Wear personal protective clothing. (See paragraph 8).

When vapours, aerosols or mists are formed, wear suitable respiratory protection.

Environmental precautions :In case of an accident, avoid release of product into the environment. Prevent product getting into sewerage systems or public waterways. Try to collect as much as possible in an approved container for later disposal

Methods for cleaning up :Action may only be taken when fully protected. Contain the area of spillage. Stop the source of leak. Large amounts should be pumped into a container. Small amounts can be collected with absorbing materials. Small remaining leftovers may be washed away with large amounts of water

7. HANDLING AND STORAGE

Handling : Working areas and methods should be organised in such a way that direct contact is avoided.Wear protective clothing. Emergency shower and eye rinse facilities must be accessible. When handling chemicals, do not eat, drink or smoke.

Fire and explosion prevention :This preparation contains a lot of water and does not show any flammable or explosive properties. No special fire and explosion prevention procedures are necessary.

Storage requirements :Store in a dry cool, well ventilated place away from all sources of ignition and heating. Keep the package closed if not in use. Storage temperature should be greater than 5 deg C. Keep away from acids and oxidants.

Other information : Always store in the original container. Do not use the empty contaminated container for any other purposes

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering controls : Ensure good ventilation and local exhaustion of the working area.

Exposure limits :

Personal protection :

Inhalation : Normally a local ventilation is sufficient to keep airborne concentration of chemicals at a low level. No special breathing protection is necessary

Skin contact : Wear impervious gloves.

Eye contact : Wear close fitting safety goggles.

Ingestion : When handling chemicals do not eat, drink or smoke.

Other information : Always follow the mixing instructions strictly when water or other solutions have to be added to the preparation. Avoid breathing mist or vapour. Avoid contact with eyes and skin. Handle with care.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Liquid
Colour	: -
Odour	: -
Boiling point/range	: Not determined
Melting point/range	: Not relevant
Flash point	: Not relevant
Flammability	: Not relevant
Autoignition temperature	: Not relevant
Explosive limits lower	: Not relevant
Oxidising properties	: Not determined
Vapour pressure (20deg C)	: Not determined
Density (20deg C)	: 1.28
Solubility in water (25deg C)	: Completely
Solubility in other solvents (25deg C)	: Not determined
pH value (25deg C)	: 7.1
pH solution in water	: Not determined
Partition coefficient n-octanol/water	: Not determined
Viscosity	: As water
Other information	: -

10. STABILITY AND REACTIVITY

Stability : The product is stable under normal storage conditions

Conditions to avoid : This is a slightly alkaline solution. Do not mix with acid products. Contains chemical reducing compounds and is incompatible with oxidising products

Materials to avoid : Not dangerous for various materials.

Hazardous decomposition products Only when the product is involved in a fire, or when it is handled incorrectly, is there a possibility that decomposition products will be generated. (See paragraph 5)

11. TOXICOLOGICAL INFORMATION

Acute toxicity :

SODIUM FORMALDEHYDE BISULPHITE LD50 (Oral Rat) =>5000 mg / kg

HYDROQUINONE LD50 (Oral Rat) = 320 mg / kg

TRIETHYLENEGLYCOL LD50 (Oral Rat) = 1700 mg / kg

Different routes of exposure, health warnings

Inhalation : Avoid breathing mist, vapour or aerosols. Ventilate as required to keep concentrations low. Always handle with care.

Skin contact : Avoid contact with skin. Prolonged contact can cause allergic reaction or injury.

Eye contact : Can cause severe injury.

Ingestion : No specific exposure limits determined for this preparation. None of the ingredients shows a high risk when ingested

Other information :

Experience with humans :

12. ECOLOGICAL INFORMATION

Information about elimination

Information about environmental compartments :

Ecotoxicity :

SODIUM FORMALDEHYDE BISULPHITE	LC50 (96 hours)	= 100 mg/l
HYDROQUINONE	LC50 (96 hours)	= 0.1 mg/l
TRIETHYLENEGLYCOL	LC50 (96 hours)	= -

Other information :

13. DISPOSAL CONSIDERATIONS

Product or contaminated product Dispose of leftovers, waste or contaminated products in accordance with local and national regulations.

Contaminated package : Contaminated package should be disposed of in accordance with local and national regulations.

Other information : We recommend the separation of any waste resulting from this product. It can be dangerous when different photographic products are mixed together

14. TRANSPORT INFORMATION

UN No.	:			
Description	:	NON HAZARDOUS LIQUID		
Containing	:			
ADR/RID	Class :	Item :	TREMCARD:	
IMDG/ADNR	Class :	Page :	EmS :	
	Pack.gr:		MFAG :	
ICAO/IATA	Class :	Pass< :	Instr. :	
	Pack.gr:	Cargo< :	Instr.	

15. REGULATORY INFORMATION

Chemical identity : HYDROQUINONE

Warning sign EC :

Symbol(s) : Xi

R(isk) phrase(s) :

R22	Harmful if swallowec
R43	May cause sensitisation by skin contact

S(afety) phrase(s) :

S2	Keep out of reach of children
S24/25	Avoid contact with skin and eyes.
S37/39	Wear suitable gloves and eye face protection.

Exposure limits :

Other information :

16. OTHER INFORMATION

The above mentioned information corresponds to our present knowledge and therefore does not guarantee certain properties. The safety data sheet serves as a description of product in regards to necessary safety measures. Recipients of our product must take responsibility for observing existing laws and regulations.

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Identity : **LD20 LITH DEVELOPER B**

Producer / Distributor : Jay House Ltd, Unit 6b, Park Lane Ind. Estate, Corsham, Wiltshire SN13 9LG, UK.
 Tel: +44 (0)1249 714555
 email: tech@fotospeed.com

2. COMPOSITION / INGREDIENT INFORMATION

This is a liquid preparation in which mainly inorganic compounds are dissolved in water.

The main ingredients are :

Chemical Name and Symbol letter	%w/w	R-Phrases	S-Phrases	EINEC No	CAS No
POTASSIUM HYDROXIDE	5-10 %				
C	35		2-26-37/39-45	215-181-3	1310-58-3
POTASSIUM CARBONATE	20-25 %			209-529-3	6381-79-9

3. HAZARD IDENTIFICATION

EC classification :

See paragraph 15

Most important hazards :

4. FIRST AID MEASURES

Inhalation : Move the victim to fresh air. Put person in half sitting position and let rest. In extreme cases seek medical advice.

Skin contact : Flush with plenty of water. Remove contaminated clothing. Wash afterwards with water and soap. In extreme cases seek medical advice

Eye contact : Rinse eyes thoroughly with water until irritation stops. In all cases seek medical advice.

Ingestion : Rinse mouth with plenty of water. Give victim considerable amounts of water to drink. Do not induce vomiting. Do not give anything to drink to an unconscious person in extreme cases seek medical advice.

Other : No typical symptoms and effects known.

Advice to physician :

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media Only use extinguishing media which are compatible with the surrounding materials. Water, waterspray, Carbon dioxide, dry powder, foam, sand.

Unsuitable extinguishing media :All extinguishing media are allowed.

Special exposure hazards : When product is involved in a fire, toxic fumes and smoke will be generated. Do not breathe these fumes

Hazardous decomposition/combustion products :Formation of CO₂ and CO fumes possible.

Protective equipment : Use approved positive pressure self-contained breathing apparatus when product is involved in a fire.

Further instructions :Contaminated extinguishing water should be disposed of in a manner approved by the EEC, national and local regulatory agencies.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions :Wear personal protective clothing. (See paragraph 8).

When vapours, aerosols or mists are formed, wear suitable respiratory protection.

Environmental precautions :In case of an accident, avoid release of product into the environment. Prevent product getting into sewerage systems or public waterways. Try to collect as much as possible in an approved container for later disposal

Methods for cleaning up :Action may only be taken when fully protected. Contain the area of spillage. Stop the source of leak. Large amounts should be pumped into a container. Small amounts can be collected with absorbing materials. Small remaining leftovers may be washed away with large amounts of water

7. HANDLING AND STORAGE

Handling : Working areas and methods should be organised in such a way that direct contact is avoided. Wear protective clothing. Emergency shower and eye rinse facilities must be accessible. When handling chemicals, do not eat, drink or smoke.

Fire and explosion prevention :This preparation contains a lot of water and does not show any flammable or explosive properties. No special fire and explosion prevention procedures are necessary.

Storage requirements :Store in a dry cool, well ventilated place away from all sources of ignition and heating. Keep the package closed if not in use. Keep away from acids and oxidants.

Other information : Always store in the original container. Do not use the empty contaminated container for any other purposes

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering controls : Ensure good ventilation and local exhaustion of the working area.

Exposure limits :

Personal protection :

Inhalation : Normally a local ventilation is sufficient to keep airborne concentration of chemicals at a low level. No special breathing protection is necessary

Skin contact : Wear impervious gloves.

Eye contact : Wear close fitting safety goggles.

Ingestion : When handling chemicals do not eat, drink or smoke.

Other information : Always follow the mixing instructions strictly when water or other solutions have to be added to the preparation. Avoid breathing mist or vapour. Avoid contact with eyes and skin. Handle with care. Read (S)afety phrases in section 15.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Liquid
Colour	: -
Odour	: -
Boiling point/range	: Not determined
Melting point/range	: Not relevant
Flash point	: Not relevant
Flammability	: Not relevant
Autoignition temperature	: Not relevant
Explosive limits lower	: Not relevant
Oxidising properties	: Not determined
Vapour pressure (20deg C)	: Not determined
Density (20deg C)	: 1.32
Solubility in water (25deg C)	: Completely
Solubility in other solvents (25deg C)	: Not determined
pH value (25deg C)	: 13.6
pH solution in water	: Not determined
Partition coefficient n-octanol/water	: Not determined
Viscosity	: As water
Other information	: -

10. STABILITY AND REACTIVITY

Stability : The product is stable under normal storage conditions
Conditions to avoid : This is an alkaline solution. Do not mix with acid products as there will be a vigorous release of CO2 gas and the temperature of the solution will rise
Materials to avoid : Corrosive to various metals.
Hazardous decomposition products Only when the product is involved in a fire, or when it is handled incorrectly, is there a possibility that decomposition products will be generated. (See paragraph 5)

11. TOXICOLOGICAL INFORMATION

Acute toxicity :
 POTASSIUM HYDROXIDE LD50 (Oral Rat) =273 mg/kg
 POTASSIUM CARBONATE LD50 (Oral Rat) = >2000 mg/kg

Different routes of exposure, health warnings
Inhalation : Avoid breathing mist, vapour or aerosols. Ventilate as required to keep concentrations low. Inhalation can cause injury to the entire respiratory tract.
Skin contact : Can cause severe injury.
Eye contact : Eye contact rapidly causes severe damage, permanent corneal damage will occur. Risk of permanent damage or loss of vision
Ingestion : Ingestion can cause severe injury.
Other information :
Experience with humans :

12. ECOLOGICAL INFORMATION

Information about elimination

Information about environmental compartments :

Ecotoxicity :

POTASSIUM HYDROXIDE	LC50 (96 hours)	=2860 mg / l
POTASSIUM CARBONATE	LC50 (96 hours)	= -

Other information :

13. DISPOSAL CONSIDERATIONS

Product or contaminated product Dispose of leftovers, waste or contaminated products in accordance with local and national regulations.

Contaminated package : Contaminated package should be disposed of in accordance with local and national regulations.

Other information : We recommend the separation of any waste resulting from this product. It can be dangerous when different photographic products are mixed together

14. TRANSPORT INFORMATION

UN No.	:			
Description	:			
Containing	:			
ADR/RID	Class :	Item :	TREM CARD:	
IMDG/ADNR	Class :	Page :	EmS :	
	Pack.gr:		MFAG :	
ICAO/IATA	Class :	Pass< :	Instr. :	
	Pack.gr:	Cargo<:	Instr. :	

15. REGULATORY INFORMATION

Chemical identity : POTASSIUM HYDROXIDE
POTASSIUM CARBONATE

Warning sign EC :

Symbol(s) : Xn

R(isk) phrase(s) :

R22	Harmful if swallowed
R36/38	Irritating to eyes and skin

S(afety) phrase(s) :

S2	Keep out of reach of children
S26	In case of contact with eyes, rinse with plenty of water and seek medical advice
S37/39	Wear suitable gloves and eye/ face protection
S45	Ifswallowed , seek medical advice immediately and show label

Exposure limits : Because dangerous components may be released into the atmosphere only under abnormal conditions, there are no specific exposure limits determined for this product.

Other information :

16. OTHER INFORMATION

The above mentioned information corresponds to our present knowledge and therefore does not guarantee certain properties. The safety data sheet serves as a description of the product in regards to necessary safety measures. Recipients of our product must take responsibility for observing existing laws and regulations.