

Material Safety Data Sheet

According to Regulation No 1907/2006/EC – REACH, No. 453/2010 and No 1272/2008/EC - CLP

Version No: 6.1

Date of revision: 01/23/2015 Replaced version No: 6.0

SECTION 1	Identification of the substance/mixture and of the company/undertaking		
1.1	Product identifier	FOMADON LQN	
	Other name or labeling of product:		
1.2	Relevant identified uses of the substance or mixture and uses advised against		
	Concentrate of negative developer for processing of black and white films		
1.3	Details of the supplier of the safety data sheet		
	Supplier : Downstream User (Producer Mixture)	FOMA BOHEMIA spol. s r.o.(Ltd.) J. Krušinky 1737/6, 500 02 Hradec Králové tel: 495 733 111	
	E-mail address and phone number	ilona.spackova@foma.cz +420495733368	
1.4	Emergency telephone number (Czech)	Toxicologic institute (TIS) Na Bojišti 1, 128 21 Praha 2 Tel. 224919293, 224915402 (continuous telephone information service)	

SECTION 2	Hazards identification
2.1	Classification (according to Regulation No 1272/2008 – CLP) Aquatic Chronic3;H412
	Classification (according to Directive No 1999/45/ES – (DPD) The mixture is not classified - shows no hazardous properties
	The most important adverse physicochemical, human health and environmental effects: Upon contact with the eyes can cause moderate irritation. Harmful to aquatic life with long lasting effects.

2.2 Label elements (according to Regulation No 1272/2008/EC- CLP)				
Identification of product		FOMADON LQN		
hazard pictogram				
signal word				
hazard H 412 statement(s) (H-, EUH 208 EUH - phrases) EUH 210 precautionary P273 statement P501 (P- phrases)		Harmful to aquatic life with long lasting effects. Contains Hydroquinone, Dimezone S. May produce an allergic reaction. Safety data sheet available on regest. Avoid release to the environment Dispose of contents/container to collecting place for dangerous waste in accordance with national regulations.		
		FOMA BOHEMIA spol. s r.o. , J. Krušinky 1737/6, 500 02 Hradec Králové tel: 495 733 111		

2.3	Other hazards
	The substance does not belong to the category of PBT, vPvB, SVHC

SECTION 3	Composition/information on ingredients						
3.2	Mixtures						
Folder name	Registration number	Index number	CAS number	ES number	Content % in the solution	Classification	
Sodium carbonate	01- 2119485498 -19	011-005- 00-2	497-19-8	207-838- 8	< 5	Eye Irrit.2;H319	Xi;R36
Dissolvine D-88	01- 2119474445 -33-0003	mixture	Not available	Not available	< 1	Repr.2;H361 AcuteTox.4;H332 EyeIrrit.2;H319 SkinIrrit.2;H315	Repr.Cat.3;R63 Xn;R20 Xi;R36/38
Hydroquinone	01- 2119524016 -51-xxxx	604-005- 00-4	123-31-9	204-617- 8	< 0,5	Carc.2;H351 Muta.2;H341 AcuteTox.4;H302 EyeDam.1;H318 SkinSens.1;H317 Aquatic Acute 1; H400 Aquatic Chronic1; H410 M(acute)=10 M(chronic)=1	Carc.Cat.3;R40 Muta.Cat.3;R68 Xn;R22 Xi;R41,R43 N;R50
Dimezone S (4- (hydroxymethyl)- 4-methyl-1- phenyl-3- pyrazolidon)	Not available	Not available	13047- 13-7	235-920- 3	< 0,2	Acute Tox.4;H302 SkinSens.1;H317 Aquatic Chronic 2; H411	Xn;R22 Xn;R43 N;R51/53

Solution

*Dissolvine D-88 (mix dietylen-triamin-pentaacetide pentanatrium with cca 1% caustic potash)

(Full text R, H-phrases... section 16)

SECTION 4	First aid measures
4.1	Description of first aid measures
	Disabled person to lead from the contaminated area, bringing it into a state of peace and to facilitate breathing by loosening clothing, watch, and if necessary to maintain its vital functions. If you are experiencing symptoms of acute injury (shortness of breath, persistent cough, chest pain, nausea, impaired sensory perception, fainting, etc.), call a physician or transport the injured person to a doctor.
	After contact with skin: Wash affected area thoroughly with water.
	Eye Contact: Remove any contact lenses and eye as soon as possible wash with plenty water. If necessary, open up violence cramped eyelids. Avoid contamination not contaminated eye wash liquid Do not neutralize. Seek medical help.
	Exposure by inhalation: Remove patient to fresh air, lukewarm water rinse eyes, mouth and nasal cavity.
	Ingestion: Affected person calm, clear water rinse. Place to drink a glass (about 0.4 dl) of cold water. Do not induce vomiting. If affected persone vomit spontaneously, control to prevent inhalation of vomit. Do not administer activated charcoal, and no neutralizing agent. Call a physician or transport the affected person to a doctor.
4.2	Most important symptoms and effects, both acute and delayed
	Not known
4.3	Indication of any immediate medical attention and special treatment needed
	In the workplace, running water and soap.

SECTION 5	Firefighting measures
5.1	Extinguishing media
	The product (liquid) is not flammable. Extinguishing agents adapt burning nearby.
	Inappropriate extinguishing media: N.a.
5.2	Special hazards arising from the substance or mixture
	At elevated temperatures or by contact with acid can release sulfur dioxide
5.3	Advice for firefighters: Breathing apparatus,

SECTION 6	Accidental release measures		
6.1	Personal precautions, protective equipment and emergency procedures		
	Zoom out persons not participating in the elimination of consequences of the accident out of reach. Ventilate enclosed spaces. When removing the consequences of the accident using the prescribed personal protective equipment. When working on the disposal of the accident contained breathing apparatus and full protective suit. No smoking and treatment with an open fire.		
6.2	Environmental precautions		

	Do not allow substance to enter soil, sewage system, surface and groundwater.		
6.3	Methods and material for containment and cleaning up		
	Let soak it to inert absorption products. Rinse the affected area thoroughly with water. Small leak at least strongly dilute with water.		
6.4	Reference to other sections		
	See section 13		

SECTION 7	Handling and storage
7.1	Precautions for safe handling While working to comply with basic requirements of safe work. Wear recommended personal protective equipment. Avoid contact with eyes. By manipulation prohibits eating, drinking and smoking, working with hot materials and open flame. Equipment must be equipped with means of extinguishing in enclosed areas, ventilation should be provided, either naturally or forced. Workplaces must be kept clean and escape routes must remain free.
7.2	Conditions for safe storage, including any incompatibilities Store in original containers in a cool, dry and well ventilated place. Containers should be stored separately from food. The working solution prepare according to the instructions.
7.3	Specific end use(s) See in 1.2., Other uses – not available

SECTION 8	Exposure controls/personal protection			
8.1	Control parameters Government Regulation No 361/2007 Coll Conditions for health workers at work and occupational exposure limits in the air of workplaces and ways of measuring and evaluating. (Czech) Hydroquinone: PEL 2 mg/m³ NPK-P 4 mg/m³ Sodium carbonate PEL 5 mg/m³ NPK-P 10 mg/m³ Substance is not listed in Notice. No.432/2003 Coll., Laying down limit values of biological exposure tests: not available			
	DNEL: (hydroquinone) Long-Term – derm., systemic. effect Long-Term – inhal., systemic. effect Long-Term – inhal., local. effect DNEL: (sodium hydroxide) Long-Term – inhal., local. effect	Workers 128 mg/kg bw/day 7 mg/m ³ 1 mg/m ³	General 64 mg/kg bw/day 1.74 mg/m ³ 0,5 mg/m ³	
	PNEC : (hydroquinone) Freshwater Seawater Soil Mikroorganisms in Sewasge Treatment Plant	0.114mg/l 0.0114 mg/l 0.129 ug/kg sedin 0.71mg/l	nent dw	
8.2	Exposure controls Individual protection measures, incl. protective of	equipment		

Technical measures: Working with a local source of suction and running water for the irrigation needs of the eyes, wash your hands or contaminated parts of the skin.
Tightly closed containers and equipment, natural and mechanical ventilation. Do not allow product to the eyes, mouth, inhalation, skin contact. Do not eat, drink or smoke. Avoid contact with food substances and drinks. After work wash hands with soap and water. Alternatively, take off contaminated clothing.
Respiratory protection: During normal handling is not required.
Hand protection: Use rubber (PE) gloves
Eye protection: Safety glasses -recommended
Skin protection: Workwear
Environmental exposure: Provide preventing spill into waterways, soil and drainage.

SECTION 9	Physical and chemical properties	
9.1	Information on basic physical and chemical properties	
	Appearance	Sightly yellow liquid
	Odour	Moderate, nonspecific
	pH (20°C)	cca 9,8
	Melting point/freezing point	cca 0 ° C
	Initial boiling point and boiling range	cca 100 ° C
	Flash point	Fireproof
	Evaporation rate	N.a.
	Flammability	Incombustible
	Upper/lower flammability or explosive limits	Irrelevant
	Vapour pressure	<20 mbar
	Vapour density	N.a.
	Oxidising properties	No
	Relative density	1.15g/cm ³
	Solubility – watter	Solution
	Partition coefficient: n-octanol/water	N.a.
	Auto-ignition temperature	Irrelevant
	Decomposition temperature	N.a.
	Viscosity;	N.a.
	Explosive properties	No
9.2	Other information	
	Fat solubility	N.a.
	Conductivity	N.a.

SECTION 10	Stability and reactivity
10.1	Reactivity
	Under normal conditions the product is stable
10.2	Chemical stability
	Under normal conditions the product is stable
10.3	Possibility of hazardous reactions
	Strong minerale acids
10.4	Conditions to avoid
	High temperature
10.5	Incompatible materials
	N.a.
10.6	Hazardous Decomposition Products
	Possible development of sulfur dioxide at elevated temperatures and reaction with acids

SECTION 11	Toxicological informations		
11.1 lı	nformation on toxicological effects		
Acute toxicit	ty	Based on available data, the criteria for this classification are not match up	
Skin corrosi	ion/irritation	Based on available data, the criteria for this classification are not match up	
Serious eye	damage/eye irritation	Based on available data, the criteria for this classification are not match up	
Respiratory	or skin sensitisation	Based on available data, the criteria for this classification are not match up	
Germ cell m	nutagenicity	Based on available data, the criteria for this classification are not match up	
Carcinogeni	icity	Based on available data, the criteria for this classification are not match up	
Reproductiv	e toxicity	Based on available data, the criteria for this classification are not match up	
Specific target organ toxicity — single exposure		Based on available data, the criteria for this classification are not match up	
Specific target organ toxicity — repeated exposure		Based on available data, the criteria for this classification are not match up	
Aspiration h		Based on available data, the criteria for this classification are not match up	
LDL _o oral, human: > 29 mg/kg (hydroquinone) LD ₅₀ oral rat: > 320 mg/kg (hydroquinone)			
LD ₅₀ derm.,	LD ₅₀ derm., rat : > 9000 mg/kg (hydroquinone)		
Likely routes of exposure and symptoms related to the physical, chemical and toxicological characteristics:			
Toxicity oral. (ingestion / swallowing):			
Ingestion may cause irritation or burns to the digestive tract. It causes nausea.			
Toxicity inhal. (inhalation):			
The product (solution) is not dangerous.			
Toxicity dermal.			

The product (solution) is not dangerous.

Eye Contact:
Causes serious eye irritation

Immediate, delayed and chronic effects of short and long term exposure:
N.a.

SECTION	Ecological information	
12		
12.1	Toxicity	
	LC_{50} (fish)/96hour: 0.15 mg/l (hydroquinone) EC_{50} (daphnia)/24hour: 0.11 mg/l (hydroquinone) EC_{50} (water algae)/72hour: 0.33 mg/l (hydroquinone) LC_{50} (pimephales promelas)/96hour: 0.044mg/l (hydroquinone)	
12.2	Persistence and degradability	
	Hydroquinone is considered to be biologically degradable (test OECD 301 C)	
12.3	Bioaccumulative potential	
	It is not expected	
12.4	Mobility in soil	
	N.a., the product is soluble in water	
12.5	Results of PBT and vPvB assessment	
	Not available. Substances are not identified as a PBT or vPvB	
12.6	Other adverse effects	
	WGK = 1	

SECTION 13	Disposal considerations	
13.1	Waste treatment methods	
	Code and type of waste	09 01 01* – aqueous developer solutions
		15 01 10 * - packaging containing residues of hazardous substances
	The recommended method of disposal of the substance/ preparation:	Spilled product let soak up with inert absorbent material and pass the person authorized to remove. Must not be disposed of with household or other waste. Do not wash into sewers.
	The recommended method of disposal of contaminated product packaging:	Emptied containers (after thorough flushing) can be reused, or to defer to container, designated for separate collection (plastics). Possible slight residuals of hydrochinone in the empty, rinsed container, transform into harmless chinone form. (oxidation process)
	Waste legislation	Directive No. 2008/98/ES

SECTION 14	Transport information
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Land transport (road / rail) ADR/RID , Maritime transport IMDG, Air transport ICAO-TI and IATA-DGR:

For the transport of the product **is not** classified as a dangerous thing (goods).

14.1	UN number	
14.2	UN proper shipping name	
14.3	Transport hazard class(es)	
14.4	Packing group	
	Classification code	
	Kemmler code	
	Labels	
14.5	Environmental hazards	see SECTION 12
14.6	Special precautions for user	
14.7	Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	

SECTION 15	Regulatory information
15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture
	Regulation (EC) No 1907/2006, registration, evaluation, autorisation, restriction chemicals (REACH) Regulation (EC) No 453/2010 Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures Direction No 67/548/EHS (DSD), 1999/45/ES (DPD) Act No. 350/2011 Coll. On chemical substances and mixtures Decree No. 381/2001 Coll. Establishing the Waste Catalogue. Government Regulation No. 361/2007 Coll. On the health conditions of workers at work
	European Agreement concerning the international carriage of dangerous goods (ADR) applicable as from 1. January 2015
	IMDG Code,MSC 93/22/Add.2 IATA Dangerous Goods Regulations, 56th Edition
15.2	Chemical safety assessment
	The chemical safety assessment for the product was 'n made.

SECTION 16	
Abbreviations, symbols	
Carc.2	Carcinigenity (Category 2)
Muta 2	Mutagenity (Category 2)
Eye Dam.1	Serious eye damage (Category 1)
Skin Sens.1	Skin sensibilisation (Category 1)
Acute Tox.4	Hazardous to the aquatic environment, acute (Category 4)
Eye Irrit.2	Serious eye irritation (Cat. 2)

Aquatic Acute 1	Hazardous to the aquatic environment, acute (Category 1)
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic (Category 2)
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic (Category 3)
Carc. cat.3	Carcinogenity (Category 3)
Muta cat.3	Mutagenity (Category 3)
С	caustic
Xn	harmfull
Xi	irritation
N	hazardous to the aquatic environment
CLP	Regulation (ES) č.1272/2008
DPD	Direction (ES) 1999/45/ES
PBT	Persistent, bioaccumulation, toxic
vPvB	High persistent, high bioaccumulation
SVHC	Substance of very hight concerns
DNEL	Derivated No-Effect Level
PNEC	Prediction No-Effect Concentration

Materials used for the	processing of safety data sheet	
Information provided by		
Material Safety Data Sheets (MSDS) for chemical substances		
R, H-phrases:		
H351	Suspected of causing cancer	
H341	Suspected of causing genetic defects	
H302	Harmful if swallowed	
H318	Causes serious eye damage	
H317	May cause an allergic skin reaction	
H400	Very toxic to aquatic life	
H411	Toxic to aquatic life with long lasting effects	
H412	Harmful to aquatic life with long lasting effects	
H319	Causes serious eye irritation	
H315	Causes skin irritation	
R40	Limited evidence of a carcinogenic effect	
R68	Possible risk of irreversible effects	
R36	Causes serious eye irritation	
R22	Harmful if swallowed	
R41	Risk of serious damage to eyes	
R43	May cause sensitisation by skin contact	
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment	
R50	Very toxic to aquatic organisms	

Guidance regarding the training of workers:

Workers coming into contact with hazardous chemicals or products must have access to data which are presented in this MSDS and be familiar with them clearly. Person transporting hazardous chemicals and preparations must be familiar with guidelines for emergency response in accordance with regulations on hazardous goods within the meaning of ADR / RID.

The information contained in this MSDS are currently valid data and best practices for use and handling of this substance under normal conditions. Any other use or handling of this substance, which is not consistent with those of MSDS, excludes liability for defects, respectively damage, which would otherwise meet the producter, importer or retailer.

Revised safety data sheet:

version 6.1 - changes in section 1.3 and 2.2- address of supplier