

Material Safety Data Sheet

According to Regulation No 1907/2006/EC – REACH, No. 2020/878 and No 1272/2008/EC - CLP

Version No: 8.0
Date of revision: 07/13/2022
Replaced version No: 7.1

SECTION 1	Identification of the substance/mixture	e and of the company/undertaking			
1.1	Product identifier	FOMATOL LQN			
	Other name or labelling of product:	Not specified			
	#UFI	J710-W061-4003-2MX0			
1.2	Relevant identified uses of the substa	nce or mixture and uses advised against			
	Concentrate of positive developer for processing of black and white photomaterials				
1.3	Details of the supplier of the safety data sheet				
1.5	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	EU Poison Information Centres – see section 16			

SECTION 2	Hazards identification
2.1	Classification of the substance or mixture
	(according to Regulation No 1272/2008 – CLP)
	Carc.2;H351
	Muta2;H341
	Eye Dam.1;H318
	Skin Irrit.2;H315
	SkinSens.1;H317
	Aquatic Acute 1;H400
	Aquatic Chronic2;H411
	Classification and full text of H-statements, see section 16
	The most important adverse physicochemical, human health and environmental effects:
	Suspected of causing cancer and genetic defects by long term exposure. Upon contact with the
	eyes can cause serious damage. Causes skin irritation. May cause an allergic skin reaction. Acute
	toxicity to aquatic organisms with long lasting effects.

2.2	Label elements (according to Regulation No 1272/2008/EC- CLP)		
hazard pictogram			
signal word		Danger	

hazard	H351	Suspected of causing cancer		
statement(s) (H-,	H341	Suspected of causing genetic defects		
phrases)	H315	Causes skin irritation.		
	H318	Causes serious eye damage.		
	H317	May cause an allergic skin reaction		
	H410	Very toxic to aquatic life with long lasting effects		
precautionary	P102	Keep out of reach of children		
statement	P262	Do not get in eyes, on skin, or on clothing.		
(P- phrases)	P305+P351+P338	IF IN EYES: Rinse continuously with water for several minutes. Remove		
		contact lenses if present and easy to do. Continue rinsing		
	P308+P313	IF exposed or concerned: Get medical advice/attention.		
	P273	Avoid release to the environment		
	P501	Dispose of contents/container to collecting place for dangerous waste in		
		accordance with national regulations.		
		Contain: hydroquinone, sodium hydroxide		

2.3	Other hazards
	#The substance does not belong to the category of PBT, vPvB and are not included in the list
	drawn up in accordance with Article 59 (1) of REACH

SECTION 3	Composition/ir	Composition/information on ingredients #Mixtures					
3.2	#Mixtures						
Folder name	Identification number		Content % mass in the solution	Classification	SCL, M, ATE, note		
Potassium carbonate	CAS number ES number Index number Registration number	584-06-7 209-529-3 Not available 01-2119532646-36- xxxx	< 12	Eye Irrit.2;H319 Skin Irrit.2;H315 STOT SE 3;H335	For substance there are Union workplace exposure limits – see to 8.1		
Hydroquinone	CAS number ES number Index number Registration number	123-31-9 204-617-8 604-005-00-4 01-2119524016-51- xxxx	< 5	Carc.2;H351 Muta.2;H341 AcuteTox.4;H302 EyeDam.1;H318 Skin Sens.1;H317 Aquatic Acute1;H400 Aquatic Chronic1; H410	M acute=10 For substance there are Union workplace exposure limits – see to 8.1		
Sodium hydroxide	CAS number ES number Index number Registration number	1310-73-2 215-185-5 011-002-00-6 01-2119457892-27	< 1,5	SkinCorr.1A;H314 Met.Corr.1;H290	Eye Irrit. 2; H319: 0,5 % \leq C < 2 % Skin Corr. 1A; H314: C \geq 5 % Skin Corr. 1B; H314: 2 % \leq C < 5 % Skin Irrit. 2; H315: 0,5 % \leq C < 2 % For substance there are Union workplace exposure limits – see to 8.1		

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

SECTION 4	First aid measures
4.1	Description of first aid measures
	Lead the disabled person from the contaminated area, bring him/her into a state of peace and facilitate breathing by loosening clothing, watch, and if necessary 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 wash eyes with plenty of water as soon as possible. If necessary, use force to open tightly closed eyelids. Take care not to rinse contaminated water into the non-affected eye. Do not neutralize. Seek medical help.
	Exposure by inhalation : Remove patient to fresh air, rinse eyes, mouth and nasal cavity with lukewarm water.
	Ingestion : Calm affected person, rinse his mouth with clean water. Force the affected person to drink a glass of cold water (about 0,4 dl). Do not induce vomiting. If affected person vomit spontaneously, control to prevent inhalation of vomit. Do not administer either activated charcoal or neutralizing agent. Call a physician or transport the affected person to a doctor.
	#Personal protective equipment for first aid responders : In possible exposition is recommended using of personal protective equipments in accordance with section 8
4.2	Most important symptoms and effects, both acute and delayed #Irritant - may irritate eyes in direct contact. See Section 11 for more detailed information on adverse reactions. Symptoms and effects are in line with expectations for the risks listed in section 2
4.3	Indication of any immediate medical attention and special treatment needed #In the workplace, running water and soap. Symptomatic medical treatment, seek medical attention if symptoms persist

SECTION 5	Firefighting measures
5.1	Extinguishing media The product (liquid) is not flammable. Extinguishing agents adapt burning nearby.
	Inappropriate extinguishing media: Not known
5.2	Special hazards arising from the substance or mixture
5.2	#Not known – inflammable water solution. In fire is possible development of dangerous products decomposition- sulphur oxides
5.3	Advice for firefighters: # Due to possible decomposition products see 5.2 and 10.6 it is necessary to use special breathing technique, chemical suit

SECTION 6	Accidental release measures			
6.1	Personal precautions, protective equipment and emergency procedures			
	Take persons not participating in removing the consequences of the accident out of reach. Ventilate enclosed spaces. Use the prescribed personal protective equipment when removing the consequences of the accident. Use breathing apparatus and complete protective suit when working on the disposal of the accident. Smoking and manipulation with open fire is prohibited.			
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 strongly dilute with water.			
6.4	Reference to other sections			
	#See sections 8 and 13			

SECTION 7	Handling and storage
7.1	Precautions for safe handling Follow the safety rules while working. Wear recommended personal protective equipment. Avoid contact with eyes. Eating, drinking, smoking, working with burning materials and open fire is prohibited
	while working. Equipment must contain fire extinguishers in enclosed areas, ventilation must be ensured naturally or mechanically in enclosed spaces. 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 must be prepared 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						
	International limit values for chemical agents (Occupational exposure limits, OELs):						
	Potassium carbonate Limit value - Eight hours		Limit value -	Short term			
		ppm	mg/m³	ppm	mg/m³		
	Latvia	2	0,5		•		
	Hydroquinone	Limit value - Eight hours		Limit value -	Limit value - Short term		
		ppm	mg/m³	ppm	mg/m³		
	Australia		2				
	Austria	2 inhalable as		sol	4 inhalable aerosol		
	Belgium		2				
	Canada - Ontario		1				
	Canada - Québec		2				
	Denmark		2		2		
	Finland		0,5		2 (1)		
	France		2				
	Ireland		0,5				
	People's Republic of China		1		2 (1)		
	Poland		1		2		
	Romania		1		2 (1)		
	Singapore		2				
	South Korea		2				
	Spain		2				
	Sweden		0,5		1,5 (1)		

Switzerland	2 inhalable aerosol		2 inhalable aerosol
USA - NIOSH			2 (1)
USA - OSHA	2		
United Kingdom	0,5		
	Remarks		
Finland	(1) 15 minutes average value		
People's Republic of	(1) 15 minutes average value		
China			
Romania	(1) 15 minutes average value		
Spain	sen		
Sweden	(1) 15 minutes average value		
USA - NIOSH	(1) Ceiling limit value (15 min)		
Sodium hydroxide	Limit value - Eight hours	Limit value - Short term	
	ppm mg/m³	ppm	mg/m³
Australia			2 (1)
Austria	2 inhalable aerosol		4 inhalable aerosol
Belgium	2		
Canada - Ontario	_		2 (1)
Canada - Québec			2 (1)
Denmark	2		2
Finland	-		2 (1)
France	2		2 (1)
Hungary	2		2
Ireland	2		2 (1)
Japan - JSOH	2 (1)		2 (1)
Latvia	0,5		
New Zealand	0,3		2 (1)
People's Republic of			2 (1)
China			2 (1)
Poland	0,5		1
Romania	1		3 (1)
Singapore	· ·		2
South Korea			2 (1)
Spain	2		2 (1)
Sweden	1 (1)		2 (1)(2)
Switzerland	2 inhalable aerosol		2 inhalable aerosol
USA - NIOSH	2 II II Idiable delosoi		
USA - NIOSH	2		2 (1)
United Kingdom	2		2
Officea Kingaom	Remarks		2
Australia	(1) Ceiling limit value		
Canada - Ontario	· , ·		
Canada - Ontario Canada - Québec	(1) Ceiling limit value		
Canada - Quebec Finland	(1) Ceiling limit value (1) Ceiling limit value		
Finiand Ireland	(1) Ceiling limit value (1) 15 minutes reference period		
	(1) Occupational exposure limit ceiling: Refere	ance value to the maximal o	vnocure concentration of
Japan - JSOH	the substance during a working day	ance value to the Maximal ex	Aposure concentration of
New Zealand	(1) Ceiling limit value		
People's Republic of China	(1) Ceiling limit value		
Romania	(1) 15 minutes average value		
South Korea	(1) Ceiling limit value		
Sweden	(1) Inhalable fraction (2) 15 minutes average v	value	
USA - NIOSH	(1) Ceiling limit value (15 min)	aido	
	TITO CONTINUE INTINUE VALUE (LO HIIII)		

Hydroquinone DNELs: Workers Consumers Route of Chronic effects local Chronic effects systemic Chronic effects local Chronic effects systemic exposure Inhalatio 1 mg/m³ 7 mg/m³ 0,5mg/m³ 1,74 mg/m³ Dermal Not available 128 mg/kg bw/day Not available 64 mg/kg bw/day **PNECs** Environmental protection target **PNEC** Fresh water $0.114 \mu g/L$ Intermittent release 1.34 µg/L Freshwater sediments 0.98 µg/kg sediment dw Marine water 0.0114 mg/L Marine sediments 0.097 µg /kg sediment dw Microorganisms in sewage treatment 0.71mg/L*

0.64 µg/kg sediment dw*

Potassium carbonate

Soil (agricultural)

DNELs:

	Workers	Consumers
Route of exposure	Chronic effects local	Chronic effects local
Inhalation	10 mg/m ³	10 mg/m ³
Dermal	16 mg/cm ²	8 mg/cm ²

PNECs - Not available

Sodium hydroxide

DNELs

	Workers	Consumers
Route of exposure	Chronic effects local	Chronic effects local
Inhalation	1 mg/m ³	1 mg/m ³

PNECs - Not available

8.2 Exposure controls

Individual protection measures, incl. protective equipment

Technical measures: Working place must be equipped with a local suction and a source of running water if the eyes irrigation and washing of hands or affected parts of skin is needed. Tightly closed containers and equipment, natural and mechanical ventilation. Avoid contact with eyes and mouth, avoid inhalation and skin staining. Eating, drinking and smoking is prohibited while working. Avoid contact with food substances and drinks. After work wash hands with soap and water. Take off polluted clothes if needed.

Respiratory protection: During normal handling is not required.

#Hand protection: : If contact with hand is pissible, there is recommended using of work glowes (EN 374 and EN 420), for examples KCL740/741 Dermatril- nitrile rubber, layer thickness 0,11 mm, breakthroug-time >480 min, KCL lapren 706-natural rubber, layer thickness 0,6 mm, breakthroug-time >480 min

#Eye protection: Safety glasses/ safety shield (EN166)

#Skin protection: long- sleeved protective work clothing

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 Slightly yellow liquid	
	Odour Moderate, nonspecific	

^{*}source : substance Brief Profile: http://echa.europa.eu/

pH (20 ° C)	10.5-11.0
Melting point/freezing point	< 0 ° C
Initial boiling point and boiling range	> 100 ° C
#Flash point	Non-flammable - aqueous solution; hydroquinone 165 ° C
Flammability	Inflammable
Upper/lower flammability or explosive limits	Irrelevant- non-flammable liquid
Vapour pressure	<20 mbar
#Relative vapour density	Information is not available.
#Absolute density	1.27 g/cm ³
Solubility – water	Water solution- full blended
Partition coefficient: n-octanol/water	Water solution- no self -ignition
Auto-ignition temperature	Irrelevant
Decomposition temperature	Not determined for the mixture
Kinematic viscosity:	Information is not available.
Explosive properties	No explosive properties
#Particle characteristics:	Irrelevant
9.2 Other information	#Not specified

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
	Not known
10.4	Conditions to avoid
	#The conditions under which dangerous reactions could occur are not known. Protect from direct long-term exposure to heat and sunlight - the product may be degraded.
10.5	Incompatible materials
	#Acids
10.6	Hazardous Decomposition Products
	#They do not form under normal conditions. In case of fire, sulfur dioxide is formed - see section 5. Possible evolution of sulfur dioxide at higher temperatures and reactions with acids

SECTION 11	Toxicological information
11.1	#Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity	#ATE _{mix} (oral)=7500 mg/kg (calculation)- Based on available data, the criteria
Acute toxicity	for this classification are not match up. No direct toxic effects are expected

	under normal use Hydroquinone LD50/ oral/ rat: > 375 mg/kg LD50/ dermal/ rabbit: > 2000 mg/kg
	Sodium hydroxide LD50/ oral/ rat : > 300 mg/kg LD50/ Interperitoneal/mouse: 40 mg/kg LDLo/ oral/ rabbit: 500 mg/kg LD50/ dermal/ rabbit: 1350 mg/kg
	Potassium hydroxide LD50/ oral/ rat : 273 mg/kg
Skin corrosion/irritation	Causes serious skin irritation
Serious eye damage/eye irritation	Causes serious eye damage
Respiratory or skin sensitisation	May cause an allergic skin reaction
Germ cell mutagenicity	Suspected of causing genetic defects
Carcinogenicity	Suspected of causing cancer
Reproductive toxicity	#Based on available data, the criteria for this classification are not match up. The components have no potential for reproductive toxicity
Specific target organ toxicity — single exposure	#Based on available data, the criteria for this classification are not match up. There is no presumption of toxic effects on specific target organs
Specific target organ toxicity —	#Based on available data, the criteria for this classification are not match up
repeated exposure	There is no presumption of toxic effects on specific target organs
Aspiration hazard	#Based on available data, the criteria for this classification are not match up. In normal use, inhalation hazard is not expected.
Lileaberra of average and average	ama related to the abygical abamical and toyical giral abaracteristics.

Likely routes of exposure and symptoms related to the physical, chemical and toxicological characteristics:

#No adverse health effects are to be expected under normal use in accordance with the instructions and in accordance with generally applicable hygiene principles

#Oral toxicity (ingestion / swallowing): If swallowed, may cause irritation of the upper respiratory tract and gastrointestinal disorders - abdominal pain, vomiting, diarrhea. It can also cause burns to the esophagus.

#Toxicity inhal. (inhalation):

Not expected under normal use. Possibility of mucosal irritation, cough, dyspnoea with strong heating

Toxicity dermal.

May cause irritation (redness) of skin

Eye Contact:

#Causes serious eye damage on direct contact

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

#Data are not available for the mixture - the mixture is classified as suspected of causing cancer or genetic damage based on a calculation

11.2 Information on other hazards

Information not available

SECTIO	N	N Ecological information	
12			
12.1	Toxicity		
	#Not determined for the mixture. Based on the calculation, it is classified as highly toxic to aquatic organisms, with long-term effects		
	Hydroquinone LC50(fish)/96hr: 0.638 mg/L EC50(daphnia)/48hr: 0.134 mg/L		

EC50(water algae)/72hr: 0.33 mg/L NOEC(daphnia) /21d:0.0057mg/L NOEC(algae)/72 hr.: 0.019 mg/L Sodium hydroxide Acute toxicity for fish:C50(Carassius auratus)/24 hr: 160 mg/L LC50(Gambusia affinis)/96 hr: 125 mg/L LC100(Cyprinus carpio)/24 hr: 180 mg/L EC50(Daphnia sp)/48 hr: 40.4 mg/L Chronic toxicity Toxicity for fish: > 25 mg/L Toxicity for invertebrates: Not available Potassium carbonate Toxicity for fish LC50 (Oncorhynchus mykis)/96 hr: 68 mg/L; NOEC (Oncorhynchus mykis)/96 hr: 33 mg/L Toxicity for invertebrates EC50 (Daphnia Pulex)/48 hr: 200 mg/l; NOEC (Daphnia Pulex)/48 hr: 120 mg Toxicity for algae- not available 12.2 Persistence and degradability # information available for the mixture (hydroquinone is considered readily biodegradable). 12.3 Bioaccumulative potential #Information for the mixture is not available. Ingredients have no bioaccumulation potential bioaccumulation potential is not expected. 12.4 Mobility in soil #Information for the mixture is not available. The mixture is soluble in water. (hydroquinone -log Koc: 0.97 - 1.7) 12.5 Results of PBT and vPvB assessment #Information for mixture isn't available. Substances are not identified as a PBT or vPvB 12.6. #Endocrine disrupting properties The mixture doesn't contein endocrine disrupting substances 12.7 Other adverse effects #Not known.

SECTION 13	Disposal considerations		
13.1	Waste treatment methods	I	
	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:		
	# Physical / chemical properties that may affect waste management	Labeling according to Annex III of Directive 2008/98 / EC: HP4-Irritant – skin irritation and eye damage HP7-Carcinogenic HP11-Mutagenic HP13-Sensitizing HP14 Ecotoxic	

	Emptied containers (after thorough flushing) can be reused, or to defer to container, designated for separate collection (plastics). Possible slight residuals of hydroquinone in the empty, rinsed container, transform into harmless chinone form. (oxidation process)
Waste legislation	Directive No. 2008/98/ES

SECTION	Transport information
14	

Land transport ADR/RID (cross- border), Maritime transport IMDG, Air transport ICAO-TI and IATA-DGR:

14.1	#UN number or ID number		3082
14.2	UN proper shipping name		ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,N.O.S. (HYDROQUINONE)
14.3	Transport hazard class(e	es)	9
14.4 Packing group		III	
	Labels		9 .41.
14.5	Environmental hazard		It is a dangerous goods for the environment during transport - see. Section 12
Marine pollutant			Yes
14.6	Special precautions for user		See to section 8- Avoid release to the environment
14.7	#Maritime transport in bulk according to IMO instruments		Not expected
Special provisions, remarks:		ADR: The product is carried in single or combination packaging containing a net quantity per single or inner packaging of 5 litres or less and is not subject to any other provisions of ADR provided packaging meet the general provisions of 4.1.1.1., 4.1.1.2 and 4.1.1.4 to 4.1.1.8 (according to chapter 3.3 ADR, special provisions 375)	
		IMDG: The product is packaged in single or combination packaging containing a net quantity per single or inner packaging of 5 litres or less and is not subject to any other provisions of IMDG Code relevant to marine pollutants provided the packaging meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. (according to Chapter 2.10, paragraphs 2.10.2.7 and 2.10.2.3) ICAO/IATA: The product is transported in single or combination packaging containing a net quantity per single or inner packaging of 5 litres or less and is not subject to any other provisions of the IATA Dangerous Goods Regulations provided the packaging used defined standards. (according to part 4.4, Special provisions A197)	

SECTION 15	N Regulatory information	
15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture	
	Regulation (EC) No 1907/2006, registration, evaluation, authorisation, restriction chemicals (REACH) #Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification,	
	labelling and packaging of substances and mixtures	
	Government Regulation No. 361/2007 Coll. On the health conditions of workers at work	

	The chemical safety assessment for the product was not made.	
15.2	Chemical safety assessment	
	European Agreement concerning the international carriage of dangerous goods (ADR) International Maritime Dangerous Goods Code (IMDG Code) IATA Dangerous Goods Regulations (DGR)	

SECTION 16	Other information		
Abbreviation	Abbreviations, symbols		
Carc.2		Carcinogenicity (Category 2)	
Muta.2		Mutagenicity (Category 2)	
Eye Dam.1		Serious eye damage (Category 1)	
Skin Corr. 1A		Skin corrosion	
Skin Irrit.2		Skin irritation (Category 2)	
Skin Sens.1		Skin sensibilisation (Category 1)	
Acute Tox.4	4	Acute toxicity (Category 4)	
Eye Irrit.2		Serious eye irritation (Cat. 2)	
STOT SE 3	1	Specific target organ toxicity — single exposure (cat.3)	
STOT RE 2		Specific target organ toxicity – Repeated exposure (Category 2)	
Mett.Corr.1		Substance or mixture corrosive to metals	
Aquatic Acu	ute 1	Hazardous to the aquatic environment, acute (Category 1)	
Aquatic Chronic1		Hazardous to the aquatic environment, chronic (Category 1)	
Aquatic Chronic 2 Hazardous to the aquatic environment, chronic (Category 2)		Hazardous to the aquatic environment, chronic (Category 2)	

CLP: Regulation (EC) č.1272/2008

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals

SVHC: Substance of very high concerns PBT: Persistent, bioaccumulative and toxic vPvB:(very) Persistent, (very) Bioaccumulative

RID: Regulations Concerning the International Transport of Dangerous Goods by Rail

ICAO: International Civil Aviation Organisation

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level

PNEC: Predicted No-Effect Concentration LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

EC50: Median Effective Concentration

LOAEL: Lowest observed adverse effect level NOAEL: No Observed Adverse Effect Level NOEC: No Observed Effect Concentration

M: multiplier factor N.a.: not available

Bw. Body weight ATE: Acute Toxicity Estimate

#ATE: Acute Toxicity Estimate
#SCL: Specific Concentration Limit

Materials used for the processing of safety data sheet

Information provided by the producer- Material Safety Data Sheets (MSDS) for chemical substances, GESTIS database (www.gduv.de), European Chemicals Agency http://echa.europa.eu/

Classification (according to Regulation No 1272/2008 – CLP): calculation method

H-phrases: H290 May be corrosive to metals H351 Suspected of causing cancer Suspected of causing genetic defects H341 Harmful if swallowed H302 H318 Causes serious eye damage May cause an allergic skin reaction H317 H319 Causes serious eye irritation H400 Very toxic to aquatic life H410 Very toxic to aquatic life with long lasting effects H411 Toxic to aquatic life with long lasting effects H315 Causes skin irritation. H314 Causes severe skin burns and eye damage H335 May cause respiratory irritation H373 May cause damage to organs through prolonged or repeated exposure 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 producer, importer or retailer.

Country	Poison Centre	Tel number 24hour every day/ other time
Austria	Poison Information Center/Vergiftungsinformationszentrale	+ 43 1 406 43 43
Belgium	Cente Antipoisons-Antigifcentrum center	+32 70 245 245
Bulgaria	National Toxicology Information center- Hospital for Active Medical Treatment and Emergency Medicine 'N.I.Pirigov', Sofia	+359 2 9154 409
Croatia	Poison Information Center/ Centar za kontrolu otrovanja	+385 1 2348 342
Denmark	Poison Center Hotline	+45 82 12 12 12
Estonia	Poisoning centre Hotline Mürgistusinfo	+372 16662
Finland	Poison Information Centre	+358 9 471977
France	Centre Antipoison et de Toxicovigilance de Paris	+33 1 40 05 48 48
Germany	Poison Information Centre in Berlin	+49 30 192 40
Greece	Poison Information Centre	+30 2107793777
Iceland	Poisons Information Center (Eitrunarmiðstöð)	+354 543 2222
Ireland	National Poisons Information Centre	+353 1 809 2566
Hungary	Poison Information Service (National Institute for chemical safety) Információszolgáltatás akut mérgezés eseén)	+36 80 201 199
Italy	Poisons Center CAV-Centro Antiveleni Roma	+39 06 68593726, +39 06 3054343, +39 06 49978000

Country	Poison Centre	Tel number 24hour every day/ other time
Latvia	Toksikoloģijas un sepses klīnikas Saindēšanās un zāļu	+371 67042473
	informācijas centrs	
Lithuania	Poison Information Bureau -PIB	+370 8-5 236 20 52
Luxembourg	Belgian Poison Center	+352 8002 5500
Netherlands	National Poisons Information Center (nationaal vergiftigingen Informatie centrum,NVIC)	+031 (0) 30 274 8888
Norway	Poison center (Giftinformasjonen)	+47 22 59 13 00
Poland	National Poisons Information Centre Lodz	+48 42 63 14 724
Portugal	Centro de Informação Antivenenos	+351 808 250 143
Romania	National ilstitute for Public Health (Centrum National de Informare Toxicologica)	+40 21 318 36 06
Slovakia	National Toxicological Information Centre (Národné toxikologické informačné centrum	+421 2 54 774 166
Spain	Toxicological Information Service (Servicio de Información toxicologica)	+34 91 562 04 20
Sweden	Giftinformationscentralen (Swedish poisons Information Centre)	112/
		mon-fri 9.00-17.00 +46 10 456 6700
Switzerland	The Swiss Toxicological Information Centre (STIC)	145
United Kingdom	National Poisons Information Service -NPIS(Birmingham)	England, Wales, Scotland 111
Turkey	Toxicolog Department and Poisons Centre	+ 90 0312 433 7001,+90 0800 314 7900

Revised safety data sheet:

Version 8.0 – change format safe sheet according to Regulation (EU) No. 2020/878 and a complete revision of the text and data.

Changes to the document are indicated by the symbol:#