

Material Safety Data Sheet

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

Date of revision : 02/01/2022

Version No: 9.1 Replaced version No: 9.0

SECTION	Identification of the substance/mixture and of the company/undertaking		
1.1	Product identifier	FOMADON EXCEL (W27) Velký díl/Big part	
	#Other name or labelling of product:	FOMADON EXCEL Velký díl/Big part	
		(W27) Velký díl/Big part	
	UFI	RK20-007D-1001-P381	
1.2	Relevant identified uses of the substance or mixture and uses advised against		
	Two-piece powder negative developer for processing of black and white films		
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) Eye Irrit 2;H319		
Classification and full text of H-statements, see section 16			
The most important adverse physicochemical, human health and environmental effects May irritate eyes			

2.2	Label elements (according to Regulation No 1272/2008/EC- CLP)	
hazard pictogra	am	()
signal word		Warning
hazard statement(s) (F	H319 <i>I-,</i>	Causes serious eye irritation
EUH phrases)	EUH031	Contact with acids liberates toxic gas.

precautionary	P102	Keep out of reach of children	
statement	P280	Wear eye protection	
(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.	
	P337+P313	If eye irritation persists: Get medical advice/attention.	
	P501	Dispose of contents/container to collecting place for dangerous waste in	
		accordance with national regulations	
		Contains: sodium pyrosulfite	

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	Composition/information on ingredients				
3.2						
Folder name	Identifica	ation number	Content % mass in the solution	Classification	SCL, M, ATE, note	
Sodium pyrosulfite	CAS number ES number Index number Registration number	7681-57-4 231-673-0 016-063-00-2 01-2119531326- 45-0000	< 3	Acute Tox 4;H302 Eye Dam.1;H318	For substance there are Union workplace exposure limits – see to 8.1	
Potassium bromide	CAS number ES number Index number Registration number	7758-02-3 231-830-3 Not available 01-2119962195- 33-xxxx	< 10	Eye Irrit2;H319	Not available	
Sodium carbonate	CAS number ES number Index number Registration number	497-19-8 207-838-8 011-005-00-2 Not available	< 1	Eye Irrit2;H319	For substance there are Union workplace exposure limits – see to 8.1	

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

SECTION 4	First aid measures
4.1	Description of first aid measures Immediate help is needed in case of eye contact After contact with skin: Remove contaminated clothing. Rinse the 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 advice if symptoms persist
	 Exposure by inhalation: Remove patient to fresh air, seek medical advice if symptoms persist Ingestion: Soothe the affected person, rinse the mouth with clean water. If conscious, give 0.25-0.5 liters of lukewarm water. Do not induce vomiting. If the affected person vomits spontaneously, check to avoid inhalation of vomit. Do not administer activated charcoal or any neutralizing agent. Seek medical attention if symptoms persist. Personal protection for first aid providers: If exposure to first aid is possible, use protective equipment listed in section 8.

4.2	Most important symptoms and effects, both acute and delayed	
	Irritant - Irritating to eyes in direct contact. Vomiting, diarrhea, enamel damage, dermatitis, see section	
	11 for more detailed information on adverse reactions.	
4.3	Indication of any immediate medical attention and special treatment needed	
	There are no specific instructions, treatment symptomatically	

SECTION 5	Firefighting measures
5.1	Extinguishing media The product (liquid) is not flammable. Extinguishing agents must be adapted to burning substances in surrounding.
	Inappropriate extinguishing media: N.a.
5.2	Special hazards arising from the substance or mixture
5.2	No known non-flammable aqueous solution. In case of fire after evaporation of water, dangerous decomposition products may be formed - sulfur dioxide!
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		
	The spilled product by mechanical collection. According to the extent of leakage select the appropriate tools: broom, dustpan, vacuum equipment, etc. Minimize dust. Gather into a suitable labeled container for further processing or disposal. Spill site with water. Contaminated washing water contain and remove.		
6.4	Reference to other sections		
	See section 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 container 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

	Exposure controls/personal protection				
<u>8</u> 8.1	Control parameter	rs			
			al agents (Occupa	ational exposure limit	ts, OELs):
	Disodium disulphite	Limit value - Eight I	nours	Limit value - Sho	ort term
	(Sodium pyrosulfite	-			
	Australia	ppm	mg/m³ 5	ppm	mg/m³
	Belgium		5		
	Canada - Ontario		5		
	Canada - Québec		5		
	Denmark		5		10
	France		5		
	Ireland		5		
	New Zealand		5		
	Singapore		5		
	South Korea		5		
	Spain		5		
	Switzerland		5 inhalable aero	sol	
	USA - NIOSH		5		
			5		
		al exposure limit: Ir	5 n case of using(pH -	< 7)- the danger of sulph	ur dioxide generation SO_2 (CAS 74
	Additional occupation 09-5) International limit values	for chemical agents	n case of using (pH ·	, , , , , , , , , , , , , , , , , , , ,	
	Additional occupation	s for chemical agents Limit value - Eight I	n case of using (pH o (Occupational exposi- nours	ure limits, OELs) Limit value - Sho	ort term
	Additional occupation 09-5) International limit values Sulphur dioxide	s for chemical agents Limit value - Eight I ppm	n case of using (pH o (Occupational expose nours mg/m ³	ure limits, OELs) Limit value - Sho ppm	ort term mg/m³
	Additional occupation 09-5) International limit values Sulphur dioxide	s for chemical agents Limit value - Eight I ppm 2	n case of using (pH o (Occupational expose nours mg/m ³ 5,2	ure limits, OELs) Limit value - Sho ppm 5	ort term mg/m³ 13
	Additional occupation 09-5) International limit values Sulphur dioxide Australia Austria	s for chemical agents Limit value - Eight h ppm 2 2	n case of using (pH o (Occupational expose nours mg/m ³ 5,2 5	ure limits, OELs) Limit value - Sho ppm 5 4	ort term mg/m³ 13 10
	Additional occupation 09-5) International limit values Sulphur dioxide Australia Austria Belgium	s for chemical agents Limit value - Eight h ppm 2 2 2 2	n case of using (pH o (Occupational expose nours mg/m ³ 5,2 5 5,3	ure limits, OELs) Limit value - Sho ppm 5 4 5	ort term mg/m³ 13 10 13
	Additional occupation 09-5) International limit values Sulphur dioxide Australia Austria Belgium Canada - Ontario	s for chemical agents Limit value - Eight h ppm 2 2 2 2 2	n case of using (pH o (Occupational expose nours mg/m ³ 5,2 5 5,3 5,3 5,2	ure limits, OELs) Limit value - Sho ppm 5 4 5 5 5	ort term mg/m³ 13 10 13 10,4
	Additional occupation 09-5) International limit values Sulphur dioxide Australia Austria Belgium Canada - Ontario Canada - Québec	s for chemical agents Limit value - Eight h ppm 2 2 2 2 2 2 2 2	n case of using (pH o (Occupational expose nours mg/m ³ 5,2 5 5,3 5,3 5,2 5,2 5,2	ure limits, OELs) Limit value - Sho ppm 5 4 5 5 5 5 5	ort term mg/m³ 13 10 13 10,4 13
	Additional occupation 09-5) International limit values Sulphur dioxide Australia Austria Belgium Canada - Ontario Canada - Québec Denmark	5 for chemical agents Limit value - Eight f ppm 2 2 2 2 2 2 2 2 2 0,5	n case of using (pH o (Occupational expose nours mg/m ³ 5,2 5 5,3 5,3 5,2 5,2 5,2 1,3	ure limits, OELs) Limit value - Sho ppm 5 4 5 5 5 5 5 1	ort term mg/m³ 13 10 13 10,4 13 2,6
	Additional occupation 09-5) International limit values Sulphur dioxide Australia Austria Belgium Canada - Ontario Canada - Québec Denmark European Union	s for chemical agents Limit value - Eight f ppm 2 2 2 2 2 2 2 2 0,5 0,5	n case of using (pH o (Occupational expose nours mg/m ³ 5,2 5 5,3 5,2 5,3 5,2 5,2 5,2 1,3 1,3	ure limits, OELs) Limit value - Sho ppm 5 4 5 5 5 5 1 1 1 (1)	ort term mg/m ³ 13 10 13 10,4 13 2,6 2,7 (1)
	Additional occupation 09-5) International limit values Sulphur dioxide Australia Austria Belgium Canada - Ontario Canada - Québec Denmark European Union Finland	5 for chemical agents Limit value - Eight f ppm 2 2 2 2 2 2 2 2 2 0,5	n case of using (pH o (Occupational expose nours mg/m ³ 5,2 5 5,3 5,3 5,2 5,2 5,2 1,3	ure limits, OELs) Limit value - Sho ppm 5 4 5 5 5 5 5 1	ort term mg/m³ 13 10 13 10,4 13 2,6
	Additional occupation 09-5) International limit values Sulphur dioxide Australia Austria Belgium Canada - Ontario Canada - Québec Denmark European Union Finland France	s for chemical agents Limit value - Eight f ppm 2 2 2 2 2 2 2 2 0,5 0,5	n case of using (pH o (Occupational expose nours mg/m ³ 5,2 5 5,3 5,2 5,3 5,2 5,2 5,2 1,3 1,3	ure limits, OELs) Limit value - Sho ppm 5 4 5 5 5 5 1 1 (1) 1 (1) 5	mg/m ³ 13 10 13 10,4 13 2,6 2,7 (1) 2,7 (1) 10
	Additional occupation 09-5) International limit values Sulphur dioxide Australia Austria Belgium Canada - Ontario Canada - Québec Denmark European Union Finland	s for chemical agents Limit value - Eight f ppm 2 2 2 2 2 2 2 0,5 0,5 0,5	n case of using (pH o (Occupational expose nours mg/m ³ 5,2 5 5,3 5,2 5,2 5,2 1,3 1,3 1,3 1,3 1,3 5 2,5	ure limits, OELs) Limit value - Sho ppm 5 4 5 5 5 5 1 1 (1) 5 1 (1) 5 1 (1)	mg/m ³ 13 10 13 10,4 13 2,6 2,7 (1) 2,7 (1) 10 2,5 (1)
	Additional occupation 09-5) International limit values Sulphur dioxide Australia Austria Belgium Canada - Ontario Canada - Québec Denmark European Union Finland France	s for chemical agents Limit value - Eight f ppm 2 2 2 2 2 2 0,5 0,5 0,5 0,5 2	n case of using (pH of (Occupational exposed nours mg/m ³ 5,2 5 5,3 5,2 5,2 5,2 1,3 1,3 1,3 1,3 5	ure limits, OELs) Limit value - Sho ppm 5 4 5 5 5 5 1 1 (1) 1 (1) 5	mg/m ³ 13 10 13 10,4 13 2,6 2,7 (1) 2,7 (1) 10
	Additional occupation 09-5) International limit values Sulphur dioxide Australia Austria Belgium Canada - Ontario Canada - Québec Denmark European Union Finland France Germany (AGS)	s for chemical agents Limit value - Eight f ppm 2 2 2 2 2 2 2 0,5 0,5 0,5 0,5 2 1	n case of using (pH o (Occupational expose nours mg/m ³ 5,2 5 5,3 5,2 5,2 5,2 1,3 1,3 1,3 1,3 1,3 5 2,5	ure limits, OELs) Limit value - Sho ppm 5 4 5 5 5 5 1 1 (1) 5 1 (1) 5 1 (1)	mg/m ³ 13 10 13 10,4 13 2,6 2,7 (1) 2,7 (1) 10 2,5 (1)
	Additional occupation 09-5) International limit values Sulphur dioxide Australia Austria Belgium Canada - Ontario Canada - Québec Denmark European Union Finland France Germany (AGS) Germany (DFG)	s for chemical agents Limit value - Eight f ppm 2 2 2 2 2 2 2 0,5 0,5 0,5 0,5 2 1	n case of using (pH - (Occupational expose nours mg/m ³ 5,2 5 5,3 5,2 5,2 1,3 1,3 1,3 1,3 5 2,5 2,7	ure limits, OELs) Limit value - Sho ppm 5 4 5 5 5 1 1 (1) 1 (1) 5 1 (1) 1 (1)(2)	mg/m ³ 13 10 13 10,4 13 2,6 2,7 (1) 2,7 (1) 10 2,5 (1) 2,7 (1)(2)
	Additional occupation 09-5) International limit values Sulphur dioxide Australia Austria Belgium Canada - Ontario Canada - Québec Denmark European Union Finland France Germany (AGS) Germany (DFG) Hungary	s for chemical agents Limit value - Eight f ppm 2 2 2 2 2 0,5 0,5 0,5 0,5 2 1 1	n case of using (pH o (Occupational expose nours mg/m ³ 5,2 5 5,3 5,2 5,2 1,3 1,3 1,3 1,3 5 2,5 2,7 5	ure limits, OELs) Limit value - Sho ppm 5 4 5 5 5 5 1 1 (1) 5 1 (1) 5 1 (1)	mg/m ³ 13 10 13 10,4 13 2,6 2,7 (1) 2,7 (1) 10 2,5 (1) 2,7 (1)(2) 5
	Additional occupation 09-5) International limit values Sulphur dioxide Australia Austria Belgium Canada - Ontario Canada - Québec Denmark European Union Finland France Germany (AGS) Germany (DFG) Hungary Ireland Latvia	s for chemical agents Limit value - Eight f ppm 2 2 2 2 2 2 0,5 0,5 0,5 0,5 0,5 2 1 1 1 0,5	n case of using (pH - (Occupational expose nours mg/m ³ 5,2 5 5,3 5,2 5,2 1,3 1,3 1,3 1,3 5 2,5 2,7 5 1,3 6	ure limits, OELs) Limit value - Sho ppm 5 4 5 5 5 1 1 (1) 1 (1) 5 1 (1) 1 (1)(2) 1 (1)	bort term mg/m^3 13 10 13 10,4 13 2,6 2,7 (1) 2,7 (1) 10 2,5 (1) 2,7 (1)(2) 5 2,6 (1)
	Additional occupation 09-5) International limit values Sulphur dioxide Australia Austria Belgium Canada - Ontario Canada - Québec Denmark European Union Finland France Germany (AGS) Germany (DFG) Hungary Ireland	s for chemical agents Limit value - Eight f ppm 2 2 2 2 2 0,5 0,5 0,5 0,5 2 1 1	n case of using (pH - (Occupational expose nours mg/m ³ 5,2 5 5,3 5,2 5,2 1,3 1,3 1,3 1,3 5 2,5 2,7 5 1,3	ure limits, OELs) Limit value - Sho ppm 5 4 5 5 5 1 1 (1) 1 (1) 5 1 (1) 1 (1)(2)	mg/m ³ 13 10 13 10,4 13 2,6 2,7 (1) 2,7 (1) 10 2,5 (1) 2,7 (1)(2) 5

Additional occupationa	al exposure limit: In c	ase of using (pH < 7)-	the danger of sulphur diox	ide generation SO ₂ (CAS 7446-
	for chemical agents (C Limit value - Eight hor	occupational exposure lin	iits, OELs) Limit value - Short term	
Sulphur dioxide	-			
A	ppm	mg/m³	ppm	mg/m³
Australia	2	5,2	5	13
Austria	2	5	4	10
Belgium	2	5,3	5	13
Canada - Ontario	2	5,2	5	10,4
Canada - Québec	2	5,2	5	13
Denmark	0,5	1,3	1	2,6
European Union	0,5	1,3	1 (1)	2,7 (1)
Finland	0,5	1,3	1 (1)	2,7 (1)
France	2	5	5	10
Germany (AGS)	1	2,5	1 (1)	2,5 (1)
Germany (DFG)	1	2,7	1 (1)(2)	2,7 (1)(2)
Hungary		5		5
Ireland	0,5	1,3	1 (1)	2,6 (1)
Latvia	-,-	6	• (•)	_,~ ()
New Zealand	2	5,2	5	13
	۷		5	
People's Republic of China		5		10 (1)
Poland		1.2		27
	0	1,3 5	A (A)	2,7
Romania	2	5	4 (1)	10 (1)
Singapore	2	5,2	5	13
South Korea	2	5	5	10
Spain	1	2,64	2	5,28
Sweden	2	5	5 (1)	13 (1)
Switzerland	0,5	1,3	0,5 (1)	1,3 (1)
The Netherlands				0,7
USA - NIOSH	2	5	5 (1)	10 (1)
USA - OSHA	5	13		- ()
United Kingdom	[2]	[5,3]	[5]	[13]
	[-]	[-,-]	[-]	[]
	Remarks			
European Union		upational Exposure Limit	nit Values and Limit Value Value - BOELV ~ (1) 15 m	
Finland	(1) 15 minutes average	e value		
Germany (AGS)	(1) 15 minutes average			2)
Germany (DFG)	(1) 15 minutes average exceeded.	e value (2) a momentary	value of 1 ml/m³ (2,7 mg/m	n°) should not be
Ireland	(1) 15 minutes referen	ce period		
People's Republic of China	(1) 15 minutes average	•		
Romania	(1) 15 minutes average	e value		
Sweden	(1) 15 minutes average			
Switzerland	(1) Ceiling limit value			
USA - NIOSH	(1) 15 minutes average	avalue		
United Kingdom	()		ces has expressed concerr	that for the OELs
United Kingdom	shown in parentheses, was not soundly-based	health may not be adeq	uately protected because o uded in the published UK 2	of doubts that the limit
Sodium carbonate International limit values	for chemical agents (C	occupational exposure lin	nits, OELs)	
Limit value - Eight hours	6	Limit valu	ie - Short term	
	ppm	mg/m³	ppm	mg/m³
People's Republic of	r (****	3	FF	6 (1)
China		-		- \ ' /
Romania		1		3 (1)
	Remarks	-		- \ ' /
People's Republic of China	(1) 15 minutes averag	e value		
Romania	(1) 15 minutos ovores	o valuo		
Nomania	(1) 15 minutes averag			

Potassium bromide-Internationa	l limit values fo	or chemical ager	ts (Occupationa	ıl exposure limits, OELs) – not ava	ilable
Laying down limit values of	biological e	exposure test	s: not availat	ble	
Potassium bromide DNELs					
		Consumers			
Route of exposure		Chronic effects	svstemic		
Inhalation		6.9x10 ⁻⁹ mg/m			
Dermal		1.4 mg/kg bw/			
PNECs					
Environmental protection target			PNEC		
Fresh water			0.0147 mg/L		
Freshwater sediments			0.67mg/kg sec	liment dw	
Marine water			0.0015 mg/L		
Microorganisms in sewage treat	ment		0.002mg/L		
Soil (agricultural)			0.08 mg/kg se	diment dw	
Sodium carbonate					
	Worke	-		Consumers	
Route of exposure		c effects local		Acute effect local	
Inhalation	10 mg/	/m ³		10 mg/m ³	
PNEC- Not available					
Disodium disulphite DNELs	Worke	re		Consumers	
Route of exposure		ic effects system	ic	Chronic effects systemic	
Oral	Not av			8.60 mg/kg bw/day	
Inhalation	225 m			66 mg/m ³	
PNECs	220 11	9/111		oo mg/m	
Environmental protection target			PNEC		
Fresh water				1 mg/L	
Marine water			0.1 mg/L		
Microorganisms in sewage treat	ment		75.4 mg/L		
Exposure controls					
Individual protection mea	asures, incl	. protective	equipment		
water if the eyes irrigation Tightly closed containers	ation and and equipm	washing of ent, natural a	hands or and mechani	a local suction and a source affected parts of skin cal ventilation. Avoid conta	is needed. act with eyes
Avoid contact with food supplied clothes if needed.	ibstances ai	nd drinks. Af	ter work was	and smoking is prohibited w sh hands with soap and wa	ater. Take off
respiratory respiratory prote respiratory irritation) it is re Hand protection: Not requ	commended	d to use a res	pirator when	For sensitive persons (due t handling the mixture.	to possible
Eye protection: protective	glasses / sł	nield (EN166)		
Skin protection: not require	d, long-slee	ved protectiv	e clothing re	commended	
Environmental exposures system.	Secure the	spaces agai	nst the leaka	ge into watercourses, soil a	and sewage
A					1

SECTION 9	Physical and chemical properties	
9.1	Information on basic physical and chem	ical properties
	Appearance	White or slightly yellow powder
	Odour	Nonspecific
	рН	about 8.0 (12 % solution after mixing small and big part)

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	Melting point/freezing point	Information not available
	Initial boiling point and boiling range	Irrelevant
	Flash point	Irrelevant
	Flammability	Incombustible
	Upper/lower flammability or explosive limits	Irrelevant
	Vapour pressure	Irrelevant
	Relative vapour density	Irrelevant
	Absolute density	Information not available
	Solubility – watter	cca 200g/l
	Partition coefficient: n-octanol/water	Irrelevant
	Auto-ignition temperature	Irrelevant
	Decomposition temperature	Irrelevant
	Kinematic viscosity;	Irrelevant
	Particle characteristics	Information not available
9.2	Other information	Not available

10	Stability and reactivity
10.1	Reactivity
	Under normal conditions, there is no danger of reactivity. Reaction with acids may release sulfur dioxide
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	N Toxicological information	
11.1	Information on hazard classes as defined in Regulation (EC) No 1272/2008
Acute toxic		ation)- Based on available data, the criteria up. No direct toxic effects are expected

		Disodium disulphite LD50/oral/rat: 1540 mg/kg bw LD50/dermal/rat: >2000 mg/kg bw LC50/inhal/rat/4 hr: > 5,5 mg/L air		
		Potassium bromide LD50 / oral /rat : >2000 mg/kg LD50 / dermal/ rabbit: >2000 mg/kg		
		Sodium carbonate LD50 /oral/rat: 2800 mg/kg bw LD50 /dermal/rabbit: >2000 mg/kg bw LC50 /inhal/rat/ 2 hr: 2.3mg/L air		
Skin corros	ion/irritation	Based on available data, the criteria for this classification are not match up		
Serious eve	e damage/eye irritation	Causes serious eye irritation on direct contact		
	or skin sensitisation	Based on available data, the criteria for this classification are not match up. The ingredients have no sensitizing effects.		
Germ cell r	nutagenicity	Based on available data, the criteria for this classification are not match up. The ingredients are not mutagenic		
Carcinoger	nicity	Based on available data, the criteria for this classification are not match up. The ingredients do not have a carcinogenic effect		
Reproducti	ve toxicity	Based on available data, the criteria for this classification are not match up. The components have no potential for reproductive toxicity		
Specific ta single expo	arget organ toxicity — osure	Based on available data, the criteria for this classification are not match up. There is no presumption of toxic effects on specific target organs		
Aspiration I		Based on available data, the criteria for this classification are not match up.		
		In normal use, inhalation hazard is not expected		
Likely route	es of exposure and sympto	oms related to the physical, chemical and toxicological characteristics:		
	e health effects are to le with generally applicable	be expected under normal use in accordance with the instructions and in hydrone principles.		
Toxicity ora	al. (ingestion / swallowing)	: If swallowed, may cause irritation of the upper respiratory tract and al pain, vomiting, diarrhea.		
		n strong heating the possibility of irritation of the mucous membranes, cough,		
Toxicity der Are not liste	rmal (skin): Not expected ed	under normal use		
Eye Contac	ct: Causes serious eye irri	tation on direct contact		
Immediate, N.a.	delayed and chronic effe	cts of short and long term exposure: data not available		
11.2	Information on other ha	azards		
	Information not available			

SECTION	Ecological information		
12			
12.1	Toxicity		
	Not determined for the mixture. Due to its composition, no adverse effects on the environment are expected under normal use.		
	Disodium disulphite LC50/freshwater fish (Onchorhynchus mykiss)/96 hr:177.8mg/L		

	EC50/freshwater invertebrates (Daphnia magna)/48 hr: 89 mg/L EC50/freshwater algae (Scenedesmus subspicatus)/72 hr : 43.8 mg/L EC50/bacterie (Pseudomonas putida)/17 hr: 56 mg/L NOEC/freshwater invertebrates (Daphnia magna)/21 d: >10 mg/L
	Potassium bromide* LC50, freshwater fish/96 hr : >440 mg/L EC50, marine algae/72 hr: >440 mg/L EC50, freshwater microorganisms/3 hr: >1g/L *source: http://echa.europa.eu/ - Brief profile
	Sodium carbonate LC50 (Fish-Lepomis macrochirus)/96 hr: 300 mg/L EC50 (freshwater invertebrates)/48 hr: 200-227 mg/L
12.2	Persistence and degradability
	No information available for the mixture. It is a mixture of mostly inorganic substances
12.3	Bioaccumulative potential
	No information available for the mixture. The ingredients have no bioaccumulation potential.
12.4	Mobility in soil
	No information available for the mixture. The mixture is soluble in water
12.5	Results of PBT and vPvB assessment
	No information available for the mixture. Substances are not identified as PBT or vPvB
12.6.	Endocrine disrupting properties
	The mixture doesn't contein endocrine disrupting substances
12.7	Other adverse effects
	Not known

SECTION	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:	The spilled product by mechanical collection. Minimize dust. Gather into a suitable labeled container for further processing or disposal. Spill site with water. Contaminated washing water and mix the solution contain and remove. 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 sewerage.		
	Physical / chemical properties that may affect waste management	Labeling according to Annex III of Directive 2008/98 / EC: For the product used containing silver compounds HP4- "Irritatint-skin irritation and eye damage"		
	The recommended method of disposal of contaminated product packaging:	Emptied containers pass to the authorized person		
	Waste legislation	Directive No. 2008/98/ES		

SECTION Transport information 14

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 or ID number	Not applicable
14.2	UN proper shipping name	Not applicable
14.3	Transport hazard class(es)	Not applicable
14.4	Packing group	Not applicable
	Labels	
14.5	Environmental hazard	Not , see to section 12
	Marine pollutant	Not
14.6	Special precautions for user	See to section 8
14.7	Maritime transport in bulk according to IMO instruments	Not applicable

SECTION 15	ION 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 Commission Decision 2014/955/EU amending Decision 2000/532/EC on the list of waste pursuant to Directive 2008/98/EC of the European Parliament and of the Council European Agreement concerning the international carriage of dangerous goods (ADR) International Maritime Dangerous Goods Code (IMDG Code) IATA Dangerous Goods Regulations (DGR)	
15.2	Chemical safety assessment	
	The chemical safety assessment for the product was not made.	

SECTION C	Other information		
Abbreviations, symbols			
Eye Dam.1		Serious eye damage (Category 1)	
Acute Tox.4		Acute toxicity (oral), Hazard (Category 4)	
Eye Irrit.2		Eye irritation(category 2)	
REACH: Reg SVHC: Subs	tance of very high concerr		
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 NPK-P, PEL: Hygienic limits of chemical substances for working environment (the Czech Republic) N.a.: not available ATE: Acute Toxicity Estimate M: M- factors- multiplying factor 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:

H302	Harmful if swallowed
H318	Causes serious eye damage
H319	Causes serious eye irritation
EUH 031	Contact with acids liberates toxic gas

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 mixture which is not consistent with those of MSDS excludes the responsibility for defects, more precisely for damage for which the producer, importer or retailer would be otherwise responsible.

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

Country	Poison Centre	Tel number 24hour every day/ other time
Estonia	Poisoning centre Hotline	+372 16662
	Mürgistusinfo	
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
Latvia	Toksikoloģijas un sepses klīnikas Saindēšanās un zāļu informācijas centrs	+371 67042473
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 9.1 – alternative names added Changes to the document are indicated by the symbol: #