



Material Safety Data Sheet

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


Date of revision : 01/23/2015

Version No: 3.1

Replaced version No: 3.0

SECTION 1	Identification of the substance/mixture and of the company/undertaking	
1.1	Product identifier	WR 50; part B
	Other name or labeling of product:	
1.2	Relevant identified uses of the substance or mixture and uses advised against	
	Concentrate developer for processing for medical X-ray 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)	
	Acute Tox.4;H302 AquaChronic3;H412	
	Classification (according to Directive No 1999/45/ES – (DPD)	
	Xn;R22 N;R52/53	
	<u>The most important adverse physicochemical, human health and environmental effects:</u>	
	Harmful if swallowed. Harmful to aquatic life with long lasting effects	

2.2	Label elements (according to Regulation No 1272/2008/EC– CLP)	
<i>Identification of product</i>		WR 50, part B
<i>hazard pictogram</i>		
<i>signal word</i>		Warning
<i>hazard statement(s) (H-, phrases)</i>	H302 H412	Harmful if swallowed Harmful to aquatic life with long lasting effects
<i>precautionary statement (P- phrases)</i>	P270 P301+P312 P273	Do not eat, drink or smoke when using this product. IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Avoid release to the environment
		Contain: fenidone, diethyleneglycole
		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	
Diethyleneglycole	01-2119457857-21	603-140-00-6	111-46-6	203-872-2	< 90	AcuteTox.4;H302	Xn;R22
Fenidon A (1-phenyl-3-pyrazolidone)	not available	606-022-00-2	92-43-3	202-155-1	< 10	AcuteTox.4;H302 AquaticChronic2;H411	Xn;R22 N;R51/53
Acetic acid	01-2119475328-30	607-002-00-6	64-19-7	200-580-7	< 8	Flam Liq.3;H226 SkinCorr.1A;H314	R10 C;R35
5-nitroindazole	not available	not available	5401-94-5	226-451-5	< 0,5	Acute Tox.4;H302 Eye Irrit.2;H319 Skin Irrit;H315	Xn;R22 Xi;36/38

Solution (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
	Suitable extinguishing media: Water, foam, dry powder, CO2
	Inappropriate extinguishing media: N.a.
5.2	Special hazards arising from the substance or mixture
	Maybe it emits toxic gases
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) Acetic acid: PEL 25 mg/m ³ NPK-P 35 mg/m ³		
	Substance is not listed in Notice. No.432/2003 Coll., Laying down limit values of biological exposure tests: not available		
	DNEL : (acetic acid)	Workers	General
	Long-Term – inhal., local effect	25 mg/m ³	25 mg/m ³
	Short-Term – inhal., local. effect	25 mg/m ³	
	PNEC : (acetic acid)		
	Freshwater	3 mg/l	
	Seawater	0.3 mg/l	
	Soil	0.47 ug/kg sediment dw	
	Mikroorganismy in Sewasge Treatment Plant	85 mg/l	
	DNEL : (diethyleneglycole)	Workers	General
	Long-Term – dermal., systemic effect	106 mg/kg bw/day	53 mg/kg bw/day
	Long-Term – dermal., local. effect	60 mg/m ³	
	Long-Term – inhal., local effect		12 mg/m ³
	PNEC : (diethyleneglycole)		
	Freshwater	10 mg/l	
	Seawater	1 mg/l	
	Soil	1.53 mg/kg sediment dw	
	Mikroorganismy in Sewasge Treatment Plant	200 mg/l	
8.2	Exposure controls		
	Individual protection measures, incl. protective 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. Recommended that any use of a respirator.		

	Hand protection: Use rubber (PE, nitril) gloves
	Eye protection: Safety glasses
	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	Yellow liquid
	Odour	Moderate, acetic
	pH	cca 3
	Melting point/freezing point	cca 0 °C
	Initial boiling point and boiling range	cca 100 °C
	Flash point	138°C (diethylenglycole)
	Evaporation rate	Flamable
	Flammability	Incombustible
	Upper/lower flammability or explosive limits	Irrelevant
	Vapour pressure	Unknown
	Vapour density	Unknown
	Oxidising properties	No
	Relative density	1.1 g/cm ³
	Solubility – watter	Solution
	Partition coefficient: n-octanol/water	Unknown
	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
	Reactions with metals, the possibility of hydrogen
10.4	Conditions to avoid
	High temperature
10.5	Incompatible materials
	Iron, light metals, strong bases
10.6	Hazardous Decomposition Products
	N.a.

SECTION 11	Toxicological informations	
11.1	Information on toxicological effects	
Acute toxicity	Harmful if swallowed	
Skin corrosion/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 mutagenicity	Based on available data, the criteria for this classification are not match up	
Carcinogenicity	Based on available data, the criteria for this classification are not match up	
Reproductive 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 hazard	Based on available data, the criteria for this classification are not match up	
LD ₅₀ oral rat:	3310 mg/kg (acetic acid)	
LD ₅₀ derm., rabbit :	1060 mg/kg (acetic acid))	
LD ₅₀ oral rat:	475 mg/kg (1-phenyl-3-pyrazolidone)	
LC ₅₀ fish, 24 hour	> 5000 mg/l (diethyleneglycole)	
<u>Likely routes of exposure and symptoms related to the physical, chemical and toxicological characteristics:</u>		
Toxicity oral. (ingestion / swallowing): diethyleneglycole: harmful		
Toxicity inhal. (inhalation): Diethyleneglycole: Inhalation of vapors may cause irritation of the upper respiratory tract. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea		
Toxicity dermal. May cause irritation (redness) of skin		
Eye Contact: Causes serious eye irritation (pH cca 3)		
Immediate, delayed and chronic effects of short and long term exposure:		

N.a.

SECTION	Ecological information
12	
12.1	Toxicity
	Low toxicity to the environment
12.2	Persistence and degradability
	<i>Acetic acid</i> : well biodegradable <i>Diethylenglycole</i> : well biodegradable <i>Fenidon A</i> : poorly biodegradable
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
	N.a.

SECTION	Disposal considerations
13	
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).
	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, 56 th Edition	
15.2	Chemical safety assessment	
	The chemical safety assessment for the product was'n made.	

SECTION 16	Abbreviations, symbols	
Flam Liq.3	Flammable liquid (Category 3)	
AcuteTox.4	Acute Toxicity (Category 4)	
Skin Corr.1A	Skin Corrosion (Category 1A)	
Skin Irrit.2	Skin Irritation (Category 2)	
Eye Irrit.2	Serious eye irritation (Category 2)	
AquaticChronic 2,3	Hazardous to the aquatic environment, chronic (Category 2,3)	
C	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 high concerns
DNEL	Derivated No-Effect Level
PNEC	Prediction No-Effect Concentration

Materials used for the processing of safety data sheet	
Information provided by the producer Material Safety Data Sheets (MSDS) for chemical substances	
R, H-phrases :	
H226	Flammable liquid and vapour
H302	Harmful if swallowed
H315	Causes skin irritation
H314	Causes severe skin burns and eye damage
H319	Causes serious eye irritation
H412	Harmful to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects
R10	Flammable
R22	Harmful if swallowed
R35	Causes severe burns
R36/38	Irritating to eyes and skin
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

<p>Guidance regarding the training of workers:</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>Revised safety data sheet: version 3.1 – changes in section 1.3 and 2.2– address of supplier</p>
