Material Safety Data Sheet

According to Regulation No 1907/2006/EC – REACH, No. 2015/830 and No 1272/2008/EC - CLP

Date of revision : 07/10/2015 Version No: 3.0

Replaced version No: 2.1

SECTION 1	Identification of the substance/mixture and of the company/undertaking	
1.1	Product identifier	**WR 50; part C**
	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)**
	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.

2.2	Label elements (according to Regulation No 1272/2008/EC– CLP)
Identification of product	**WR 50; part C**
The mixture is not labeled - shows no hazardous properties	
hazard pictogram	
signal word	

hazard statement(s) (H- , EUH- phrases)		
precautionary statement (P- phrases)		
		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	
Acetic acid	01-2119475328-30-xxxx	607-002-00-6	64-19-7	200-580-7	< 8	Flam Liq.3;H226 SkinCorr.1A;H314	R10 C;R35

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 (cca 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.
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 must be adapted to burning substances in surrounding.
	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
	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 section 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 PE 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
	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
	Acetic acid DNEL : Workers General Acute – inhal., local. effect 25 mg/m^3 25mg/m^3 Long-Term – inhal., local effect 25 mg/m^3 25mg/m^3 PNEC : Freshwater 3.058 mg/l Marine water 0.3 mg/l Sediment in freshwater 11 mg/kg sediment dw Sediment in marine water 1.1 mg/kg sediment dw Soil 0.47 mg/kg sediment dw Sewage treatment plant(STP) 85 mg/l
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 poluted clothes if needed.
	Respiratory protection: During normal handling is not required.
	Hand protection: Use rubber (PE, nitril) gloves
	Eye protection: Safety glasses
	Skin protection: Workwear
	Environmental exposure: Secure the spaces against the leakage into watercourses, soil and sewage system.

SECTION 9	Physical and chemical properties	
9.1	Information on basic physical and chemical properties	
	Appearance	Colourless or sightly yellow liquid
	Odour	Moderate, acetic
	pH	2-3
	Melting point/freezing point	cca 0 ^{o}C
	Initial boiling point and boiling range	cca 100 ^{o}C
	Flash point	Fireproof
	Evaporation rate	N.a.
	Flammability	Incombustible

	Upper/lower flammability or explosive limits	Irrelevant
	Vapour pressure	Unknown
	Vapour density	Unknown
	Oxidising properties	No
	Relative density	1.16-1.18 g/cm3
	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	Based on available data, the criteria for this classification are not match up
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

Acetic acid
LD_{50} / oral/rat: 3310 mg/kg
LD_{50} / dermal/rabbit: 1060 mg/kg
LC_{50} inhal, rat, (4h): 11,4 mg/l

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.

Toxicity inhal. (inhalation):

Inhalation of vapors may cause irritation of the upper respiratory tract..

Toxicity dermal.

May cause irritation (redness) of skin

Eye Contact:

Causes serious eye damage

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

SECTION 12	Ecological information
12.1	Toxicity
	Low toxicity to the environment *Acetic acid:* LC_{50} ,fish (96h)- Lepomis macrochirus: 75 mg/l EC_{50}-Daphnia magna, (24h): 47mg/l Algae- IC_5 , scenedesmus quaudricauda, (16h): 4000 mg/l
12.2	Persistence and degradability
	Acetic acid: well 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 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 absorp in inert absorbent material and pass it on to a person who is in charge of its removal. The product cannot be removed together with local or other waste. Do not wash away into sewers.
	The recommended method of disposal of contaminated product packaging:	Emptied containers (after thorough flushing) can be reused, or put away into a 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

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	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 applicable
	Marine pollutant	Not
14.6	Special precautions for user	See to section 8
14.7	Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable

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 2015/830, Commission Regulation (EU) 2015/830 of 28 May 2015 amending 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 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) 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´n made.

SECTION 16	

Abbreviations, symbols

Flam Liq.3	Flammable liquid
Skin Corr. 1A	Skin caustic (burns) (Cat. 1A)

CLP : Regulation (EC) č.1272/2008
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
SVHC: Substance of very hight 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
NPK-P, PEL: Hygienic limits of chemical substances for working environment (the Czech Republic

Materials used for the processing of safety data sheet

Information provided by the producter
Material Safety Data Sheets (MSDS) for chemical substances

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

H-phrases **:**

H226	Flammable liquid and vapour
H314	Causes severe skin burns and eye damage

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.
Revised safety data sheet: Version 3.0: new format MSDS (Regulation 2015/830),