



Material Safety Data Sheet

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


Date of revision : 02/16/2016

Version No: 5.0

Replaced version No: 4.1

SECTION 1	Identification of the substance/mixture and of the company/undertaking	
1.1	Product identifier	Black and white reversal film set, part B₂
	Other name or labeling of product:	
1.2	Relevant identified uses of the substance or mixture and uses advised against	
	Concentrate of bleaching bath for processing of black and white reversal film Fomapan R100	
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)	
	Skin Irrit 2;H315 Eye Irrit 2;H319 Aquatic Chronic 3: H412	
	<u>The most important adverse physicochemical, human health and environmental effects:</u> May cause irritation skin and eye. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment	

2.2	Label elements (according to Regulation No 1272/2008/EC– CLP)	
<i>Identification of product</i>		Black and white reversal film set, part B₂
<i>hazard pictogram</i>		
<i>signal word</i>		Warning
<i>hazard statement(s) (H- phrases)</i>	H315 H319 H412	Causes skin irritation Causes serious eye irritation Harmful to aquatic life with long lasting effects.
<i>precautionary statement (P- phrases)</i>	P102 P280 P305+P351+P338 P302+P352 P273 P501	Keep out of reach of children Wear protective gloves/protective clothing/eye protection/face protection. IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing IF ON SKIN: Wash with plenty of water/soap Avoid release to the environment Dispose of contents/container to collecting place for dangerous waste in accordance with national regulations.
		Contains: Potassium permanganate
		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
Potassium permanganate	Not available	025-002-00-9	7722-64-7	231-760-3	< 2	Ox.Sol.2;H272 Acute Tox.4;H302 Skin Corr1B;H314 Aquatic Acute1;H400 (*M acute=10) Aquatic Chronic1; H410

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
	Potassium permanganate is substance supporting burning. The product- solution is incombustible.
5.3	Advice for firefighters: Breathing apparatus, workwear

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
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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	
	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) <i>Mangan- its compounds as Mn</i> PEL 1 mg/m ³ NPK-P 2 mg/m ³	
	Substance is not listed in Notice. No.432/2003 Coll., Laying down limit values of biological exposure tests: 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: During normal handling is not required.	
	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	Light- violet liquid
	Odour	no
	pH	7-9
	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	N.a
	Vapour density	N.a
	Oxidising properties	N.a
	Relative density	1.24-1.25 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	No
	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
	N.a.
10.4	Conditions to avoid
	Light, intensive heating.
10.5	Incompatible materials
	Inorganic acids, peroxides, strong oxidation agents, alkali metals, flammable organic substances
10.6	Hazardous Decomposition Products
	Not available

SECTION 11	Toxicological informations
11.1	Information on toxicological effects

Acute toxicity	<i>Potassium permanganate</i> : LD ₅₀ , oral, rat (mg.kg ⁻¹). 1090
Skin corrosion/irritation	Causes skin irritation
Serious eye damage/eye irritation	Causes serious eye irritation
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
<u>Likely routes of exposure and symptoms related to the physical, chemical and toxicological characteristics:</u>	
Toxicity oral. (ingestion / swallowing): The product (solution) is not dangerous.	
Toxicity inhal. (inhalation): The product (solution) is not dangerous.	
Toxicity dermal. Causes skin irritation	
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
	<i>Potassium permanganate</i> : EC ₅₀ (fish)/96hour: 0.1 mg/l EC ₅₀ (daphnia)/48hour: 0.056 mg/l
12.2	Persistence and degradability
	Inorganic substances , irrelevant.
12.3	Bioaccumulative potential
	N.a.
12.4	Mobility in soil
	N.a., the product is soluble in water

12.5	Results of PBT and vPvB assessment
	Not available. Substance is not identified as a PBT or vPvB
12.6	Other adverse effects
	Toxic to aquatic life with long lasting effects.

SECTION 13	Disposal considerations	
13.1	Waste treatment methods	
	Code and type of waste	09 01 05* – bleaching solutions and solutions of bleaching fixers 20 01 17* - Photochemicals 15 01 10 * - packaging containing residues of hazardous substances
	The recommended method of disposal of the substance/preparation:	Spilled product let absorb 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 hydroquinone in the empty, rinsed container, transform into harmless quinone form. (oxidation process)
	Waste legislation	Directive No. 2008/98/ES

SECTION 14	Transport information	
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Land transport ADR/RID (cross- border), 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	See to section 12
	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	
Ox.Sol.2	Oxidising Solids,Category 2
Acute Tox.4	Acute toxicity (oral), Category 4
SkinCorr1B	Skin caustic (burns) (Cat. 1B)
Aquatic Acute1	Hazardous to the aquatic environment – AcuteHazard, Category 1
Aquatic Chronic1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard, Category 3
Eye Irrit 2	Eye irritation (Category 2)
Skin Irrit 2	Skin irritation (Category 2)
<p>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</p>	

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)
 M: multiplier factor

Materials used for the processing of safety data sheet

Information provided by the producer

Material Safety Data Sheets (MSDS) for chemical substances; List K&O;* M acute- see to section 12.1 (EC₅₀)

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

H-phrases :

H272	May intensify fire; oxidiser.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
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.
H412	Harmful to aquatic life with long lasting effects

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 5.0 – Edit new format MSDS (Regulation 2015/830), section 3.2 – changed classification substance, section 2 -change of classification and labeling , section 14 – changed information for transport