



## Material Safety Data Sheet

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

Date of revision : 02/17/2016

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	<b>Black and white reversal film set, part C</b>
	Other name or labeling of product:	
1.2	Relevant identified uses of the substance or mixture and uses advised against	
	Concentrate of cleaning 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	<b>Classification (according to Regulation No 1272/2008, 790/2009 – CLP)</b>	
	AcuteTox.4;H302 Eye Dam.1;H318	
	<u>The most important adverse physicochemical, human health and environmental effects:</u> Harmful if swallowed. Causes serious eye damage	

2.2	Label elements (according to Regulation No 1272/2008/EC, 790/2009/EC – CLP)	
<i>Identification of product</i>		<b>Black and white reversal film set, part C</b>
<i>hazard pictogram</i>		
<i>signal word</i>		Danger
<i>hazard statement(s) (H-, phrases)</i>	H302 H318 EUH031	Harmful if swallowed Causes serious eye damage Contact with acids liberates toxic gas.
<i>precautionary statement (P- phrases)</i>	P102 P301+P310 P305+P351+P338  P280 P501	Keep out of reach of children. IF SWALLOWED: Immediately call a POISON CENTER/doctor. IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing Wear eye protection/face protection. Dispose of contents/container to collecting place for dangerous waste in accordance with national regulations.
		Contain: sodium pyrosulfite
		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
sodium pyrosulfite	01-2119531326-45-0000	016-063-00-2	7681-57-4	231-673-0	< 40	Acute Tox.4;H302 Eye Dam.1;H318

(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
	Exposure by inhalation: cough, breathlessness, sore throat Eye Contact: ache in eye Ingestion: nausea, vomiting
4.3	Indication of any immediate medical attention and special treatment needed
	In the workplace running water and soap.

<b>SECTION 5</b>	<b>Firefighting measures</b>
5.1	Extinguishing media
	The product is not flammable. Extinguishing agents adapt burning nearby.
	Inappropriate extinguishing media: N.a.
5.2	Special hazards arising from the substance or mixture
	Maybe it emits toxic gases – oxides of sulphur
5.3	Advice for firefighters: Breathing apparatus, workwear

<b>SECTION 6</b>	<b>Accidental release measures</b>
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

<b>SECTION 7</b>	<b>Handling and storage</b>
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. Apparatus, which works with the substance must be tight, equipped with emergency escape in case of space (emergency baths, catch pits) and to prevent leakage into the environment. Electrical equipments must be installed in non explosion proof (including lighting). 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

<b>SECTION 8</b>	<b>Exposure controls/personal protection</b>
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) Sulphur dioxide: PEL 1,5 mg/m <sup>3</sup> NPK-P 5 mg/m <sup>3</sup>
	Substance is not listed in Notice. No.432/2003 Coll., Laying down limit values of biological exposure tests: not available <i>Sodium pyrosulfite</i>
	DNEL :
	Workers
	General
	Long-Term – inhal 225 mg/m <sup>3</sup>
	Long-Term – oral 66 mg/m <sup>3</sup> 8.6 mg/kg bw/day
	PNEC :
	Freshwater 1 mg/l
	Marine water 0.1 mg/l
	Mikroorganisms in Sewasge Treatment Plant (STP) 75.4 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. In sensitive people (due to possible respiratory irritation) is recommended when mixing solution respirator use
	Hand protection: Use rubber (PE, nitril) gloves
	Eye protection: Safety glasses or face protection
	Skin protection: Workwear
	Environmental exposure: Secure the spaces against the leakage into watercourses, soil and sewage system.

<b>SECTION 9</b>	<b>Physical and chemical properties</b>
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9.1	Information on basic physical and chemical properties	
	Appearance	yellowish liquide
	Odour	nonspecific
	pH	3 - 4
	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	<20 mbar
	Vapour density	Unknown
	Oxidising properties	No
	Relative density	1.29.-1,31 g/cm <sup>3</sup>
	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	
	Strong minerale acids	
10.4	Conditions to avoid	
	High temperature	
10.5	Incompatible materials	
	Not available	

10.6	Hazardous Decomposition Products
	Possible development of sulfur dioxide at elevated temperatures and reaction with acids

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	Causes serious eye damage	
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	
Likely routes of exposure and symptoms related to the physical, chemical and toxicological characteristics:		
Toxicity oral. (ingestion / swallowing): If swallowed: strong acid burning of esofagus <i>sodium pyrosulfite</i> LD <sub>50</sub> , oral, rat: 1540 mg/kg (OECD 401 - Acute Oral Toxicity) LD <sub>50</sub> , dermal, rat: >2000 mg/kg (OECD 402 - Acute Dermal Toxicity) LC <sub>50</sub> , inhal, rat/4 h > 5,5 mg/l (OECD 403 - Acute Inhalation Toxicity)		
Toxicity inhal. (inhalation): The product is not dangerous		
Toxicity dermal. The product is not dangerous		
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	
	<i>Sodium pyrosulfite</i> EC <sub>50</sub> /17 h 56 mg/l (germs) <i>Pseudomonas putida</i> EC <sub>50</sub> /48 h 89 mg/l (dafnie) <i>Daphnia magna</i> EC <sub>50</sub> /72 h 43.8 mg/l (algae) (OECD 201 - Alga, Growth Inhibition Test) <i>Scenedesmus subspicatus</i>	

	LC <sub>50</sub> /96 h 177.,8 mg/l (fish) (DIN 38412)Onchorhynchus mykiss NOEC/21 d > 10 mg/l (dafnie) (OECD 211 - Daphnia magna Reproduction Test)Daphnia magna
12.2	Persistence and degradability
	Inorganic substances- Irrelevant
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
	No

<b>SECTION</b> 13	<b>Disposal considerations</b>	
13.1	Waste treatment methods	
	Code and type of waste	09 01 05* – bleaching solutions and solutions of bleaching fixers 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 pass to the authorized person
	Waste legislation	Directive No. 2008/98/ES

<b>SECTION</b> 14	<b>Transport information</b>	
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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).

<b>14.1</b>	UN number	Not applicable
<b>14.2</b>	UN proper shipping name	Not applicable
<b>14.3</b>	Transport hazard class(es)	Not applicable
<b>14.4</b>	Packing group	Not applicable
	Labels	
<b>14.5</b>	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	Other information
Abbreviations, symbols	
Eye Dam.1	Serious eye damage (Category 1)
Acute Tox.4	Acute toxicity (oral), Hazard (Category 4)
<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  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)</p>	



<b>Materials used for the processing of safety data sheet</b>	
Information provided by the producer Material Safety Data Sheets (MSDS) for chemical substances	
<b>Classification (according to Regulation No 1272/2008 – CLP):</b> calculation method	
H-phrases :	
H302	Harmful if swallowed
H318	Causes serious eye damage
EUH 031	Contact with acids liberates toxic gas.
Guidance regarding the training of workers:	
<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 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.</p>	
Revised safety data sheet:	
Version 5.0 – new format MSDS ( Regulation 2015/830)	