

1. Identification of the product and the company

- 1.1 Commercial name of the product: **FOMAFIX – P, (U 5)**
1.2 Identification of the company: FOMA Bohemia Ltd
J.Krušinky
501 04 Hradec Králové (ČZ)
Telephone: 495 733 111
Telefax: 495 733 384
Company ID: 62024078
Emergency telephone number: Toxicological information centre
Na bojišti 1, 128 08 Prague
Telephone: 224 919 293

2. Composition

The product (small and great part) contains these substances:

Chemical name	Classification R-phrases	S-phrases	Content in %	CAS-No.	ES No. (EINECS)
Sodium thiosulfate cryst.	Xi R: 36/37/38	S: 26-36	70-90	7772-98-7	231-867-5
Ammonium chloride	Xn R: 22-36	S: 2-22	10-20	12125-02-9	235-186-4
Sodium pyrosulfite	Xn R: 22-31-37-41	S: 26-39	5-10	7681-57-4	231-673-0

Part A contains: Sodium thiosulfate (x 5 H₂O) Content in (%): 100
Part B contains: Ammonium chloride Content in (%): 100
Part C contains: Sodium pyrosulfite Content in (%): 100

3. Hazards identification

The most important effects to human health when using:

- harmful if swallowed
- toxic gas is liberated by contact with acids
- irritating to skin
- risk of serious damage to eyes

4. First aid measures

General measures:

- 4.1 Inhalation: In case of inhalation, move the involved person to fresh air. If necessary, seek medical advice.
4.2 Skin contact: Take off the contaminated clothing, wash off thoroughly the involved spots with plenty of water. If necessary, seek medical advice.
4.3 Eye contact: Rinse thoroughly with plenty of water for at least 15 minutes, if necessary, seek medical advice.
4.4 Ingestion: If conscious, drink plenty of water. Do not ever give a drink to an unconscious person. Induce vomiting. Seek medical advice.

5. Fire-fighting measures

Suitable extinguishers: water – dry chemicals – CO₂
Special risk: The product in itself is not flammable. In case of fire sulfur dioxide can arise. After extinguishment measure with appropriate equipment.

24 hour transportation emergency telephone number: Chemtrec 800-424-9300

6. Accidental release measures

- 6.1 Personal precautions: Avoid skin and eye contact. Use personal protective equipment (eye and skin protection)
- 6.2 Environmental precautions: Avoid release to surface and ground water and drainage.
- 6.3 Recommended methods for clearing up and disposal: Gather up mechanically to appropriate containers, dispose through entitled firm.

7. Handling and storage

- 7.1 Handling advice: Use proper means not to damage packaging. Avoid close contact with this chemical. Make the operation solution according to instruction.
- 7.2 Storage: Store in dry, cool, well ventilated room in original packaging, away from food.
- 7.3 Further information: Packing material: PE bag, shrink film, paper box

8. Exposure control and personal protection

- 8.1 Technical measures:
- 8.2 Control parameters: *Sodium pyrosulfite*: M.P.C. – G = 5 mg/m³
- 8.3 Personal protective equipment:
 Respiratory system protection: not required
 Eye protection: safe glass or protective glasses
 Hand protection: rubber or plastic gloves
 Skin protection: proper working suit
- 8.4 Further information: Keep away from food and drink. When using, do not smoke. Avoid close contact with skin. Wash hands before break and at the end of workshift.

9. Physical and chemical properties

	Sodium thiosulfate	Ammonium chloride	Sodium pyrosulfite
Form:	solid substance	solid substance	solid substance
pH value:	6,5-9 (10 % solution, 25 °C)		3,5-5 (5 % solution, 20 °C)
Boiling point (°C):	-	520	-
Melting point (°C):	48	340	100
Flammability:	non-flammable	non-flammable	non-flammable
Self-ignition:	-	-	-
Explosion limits			
– upper limit: (Vol. %):	no	no	no
– lower limit: (Vol. %):	no	no	no
Density (at 20 °C, g/cm ³):	1,74	1,53	1,68
Water solubility (at 20 °C, g/100 g):	70,1	37,2	47,0

10. Stability and reactivity

- Stability conditions: the product is stable under common conditions
- Substances and materials to avoid: strong acids, bases and oxidants
- Hazardous products of decomposition: under common conditions no, sulphur dioxide is liberated by contact with acids

11. Toxicological information

- Acute toxicity: *Sodium pyrosulfite*: LD₅₀/ingestion/test rat: 1540 mg/kg
 Risk of serious damage to eyes.
- Ammonium chloride*: LD₅₀/ingestion/test rat: 1650 mg/kg

Irritating to eyes and skin. Irritating to respiratory system by contact with acid.
No sensitising effect is known.

12. Ecological information

Sodium pyrosulfite: Acute ecotoxicity: LC₅₀/96 h/fish: 150-220 mg/l DIN 38412/15
EC₅₀ (daphnia)/48 h: 89 mg/l OECD 202
EC₅₀ (algae)/72 h: 48 mg/l
COS mg/g: 165

Effect to the environment: The product has not been yet tested in practice that way. But toxicological information about its components is available. The product is middle acid.

13. Disposal information

Remains of the concentrate dispose in a safe manner in accordance with local regulations.
Empty paper container can be recycled.
PE and tapaten containers without chemicals (rinsed) can be recycled.

14. Transport information

The product is subject no regulations concerning transport.

15. Regulatory information

Classification:

Symbol of danger:

Xn - harmful

R phrase:

22 – harmful if swallowed

31 – contact with acids liberates toxic gas

38 – irritating to skin

41 – risk of serious damage to eyes

S phrase:

22 – do not breathe dust

26 - in case of contact with eyes, rinse immediately with plenty of water and seek medical advice

39 – wear eye/face protection

16. Further information

Use: Three-piece powder rapid fixer for processing of RTG films

Packing: **FOMAFIX P for 9 l**

2610 g = 2160 g of the part A + 270 g of the part B + 180 g of the part C (for 9 l of fixer working solution)

group packing 5 x 2610 g (for 5 x 9 l of fixer working solution)