

SAFETY DATA SHEET

Panadent X-Ray Fixer

1) IDENTIFICATION

Product Code: 520225

Supplier: Panadent Limited
149 Sevenoaks Way
Orpington
Kent BR5 3AQ
United Kingdom

Telephone No: + 44 (0) 1689 88 17 88

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2) COMPOSITION/INFORMATION ON INGREDIENTS

Product Description:

A single part concentrate X-Ray Fixer containing the following components:

| <u>Component</u> | <u>CAS No.</u> | <u>%^w/_w</u> |
|----------------------|----------------|-----------------------------------|
| Ammonium Thiocyanate | 1762-95-4 | 35-38 |
| Potassium Sulphite | 10117-38-1 | 2-5 |

3) HAZARDS IDENTIFICATION

Human Health Hazards:

Not classified as hazardous.

Safety Hazards:

Contact with alkalis, including photographic developer, liberates irritant gas, (ammonia). Contact with acids or strong oxidising agents liberates very toxic gases, (HCN & H₂S).

Environmental Hazards:

Will cause short term oxygen depletion if allowed to enter the aquatic environment.

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4) FIRST AID MEASURES

Eyes:

Flush immediately with eye-wash solution or clean water for at least 15 minutes holding the eyelids apart. Obtain medical attention if irritation develops.

Inhalation:

Inhalation of the product is not likely to occur. In the event of inhalation of vapour move to fresh air and obtain medical attention if symptoms occur.

Skin Contact:

Remove any contaminated clothing and wash skin thoroughly with water followed by a neutral cleanser and water. Wash contaminated clothing before re-use.

Ingestion:

Rinse mouth with water and drink two glasses of water. Do not induce vomiting. Obtain medical attention.

IN ALL CASES OF DOUBT OR IF SYMPTOMS PERSIST, SEEK MEDICAL ADVICE. SHOW THE PRODUCT LABEL AND THIS SAFETY DATA SHEET TO THE DOCTOR

5) FIRE-FIGHTING MEASURES

Not classified as flammable. If involved in a major fire, hazardous combustion products may include HCN, H₂S, NH₃

Extinguishing Media:

Suitable for the surrounding fire.

Protective Equipment:

Self-contained respiratory equipment.

6) ACCIDENTAL RELEASE MEASURES

Personal Protection:

When dealing with spillages of concentrates or working strength solution, use the personal protection specified in Section 8. Ensure spill area is well ventilated.

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Environmental Precautions:

Prevent spillages from entering drain by absorption into inert absorbent material (eg. dry sand or earth) and transfer to a container for disposal by a licensed waste contractor.

Cleaning Up:

After collecting the bulk of the spillage thoroughly wash area to drain with water.

7) HANDLING AND STORAGE

Handling:

When handling the product concentrates, avoid contact with eyes, skin and clothing. Use in a well ventilated area.

Storage:

Store in a dry, well ventilated area at a moderate temperature. Store away from incompatible substances, (see Section 10).

8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Small quantities of sulphur dioxide and acetic acid vapour may be liberated from the product and during preparation of the working strength solution.

UK Occupational Exposure Limits:

| | |
|-------------------------------|----------------------|
| STEL (15 min) Sulphur Dioxide | 13mg m ⁻³ |
| TWA (8 hour) Sulphur Dioxide | 5mg m ⁻³ |

Engineering Measures:

Ensure good ventilation or local exhaust ventilation of the whole working area.

Respiratory Protection:

Should not be required.

Skin Protection:

Wear impervious gloves when handling product concentrates. Avoid excessive contact with the working strength solution. The regular use of a neutral, (non-alkaline) skin cleanser is recommended.

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Eye Protection:

Wear safety glasses with side-shields as the minimum level of protection. Provide eye-wash bottles in the immediate working area.

9) PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Colourless or very pale yellow liquid

Odour: None

pH at 20°C: 5.3

Weight per ml at

20°C: 1.135g

Freezing Point: <0°C

Flammability: Not flammable

Solubility

in water: Completely miscible, (is an aqueous solution)

10) STABILITY AND REACTIVITY

Stability:

Stable under recommended storage conditions.

Materials to avoid:

Avoid contact with strong acids and oxidising agents, (very toxic gases may be produced). Avoid contact with alkalis, including photographic developers, (Ammonia may be produced).

Hazardous Decomposition Products:

None under normal conditions of use.

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11) TOXICOLOGICAL INFORMATION

Eye Contact:

May cause irritation.

Skin Contact:

May cause irritation on prolonged or repeated contact.

Ingestion:

The product is not classified as harmful, it does however contain ammonium thiocyanate. Symptoms following ammonium thiocyanate ingestion include nausea, vomiting, and behavioural disorders.

Inhalation:

Inhalation of vapour from concentrates or working strength solution may cause irritation; asthmatics or persons with respiratory problems may experience breathing difficulties.

12) ECOLOGICAL INFORMATION

The following summary of expected environmental effects is based on known data for the principal ingredients and on the physico-chemical properties of the preparation.

A moderate biochemical oxygen demand will result in short term oxygen depletion in the aquatic environment.

Used working strength solutions will contain varying levels of silver from processing.

As a result of the above properties, precautions should be taken to prevent the release of the product concentrates or working strength solution into the environment, (see Section 13).

13) DISPOSAL CONSIDERATIONS

Surplus Product and Working Strength Solution:

Disposal should be in accordance with current local and national legislation and only by a licensed waste contractor. Do not dispose of either concentrate or working strength solutions into drains, sewers, or waterways. Silver will be present at appreciable levels in used working strength solution and should be recovered before final disposal. Refer to Section 10 above before mixing with any other waste.

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Plastic Containers:

Rinse thoroughly with water and dispose as solid waste to land fill or re-cycle where possible.

Cardboard Cartons:

Re-cycle where possible or treat as solid waste.

14) TRANSPORT INFORMATION

Not classified as hazardous.

15) REGULATORY INFORMATION

Not classified as hazardous.

16) OTHER INFORMATION

The information contained in this Safety Data Sheet does not constitute the users own assessment of work place risk as required by other health and safety legislation, (eg. COSHH Regulations in the UK).

Document History

| | |
|----------------------------|------------------------------|
| Prepared by: | IF |
| Revision No: | 0 |
| Revision Date: | Oct 2002 |
| Reference Sources Include: | CHIP Regs and related ACOPs. |

UK HSE EH40, Occupational Exposure Limits
Croner's First Aid Guide
Raw Material MSDS

An asterisk (*) in text indicates revision since last issue.

The information contained in this Safety Data Sheet is to our best present knowledge correct and complete and is given in good faith but without warranty.