SAFETY DATA SHEET VELOPEX READY TO USE FIXER



SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

<u>1.1 Product identifier</u>	
Product Name	VELOPEX READY TO USE FIXER
1.2 Relevant identified us	ses of the substance or mixture and uses advised against
Identified Uses	X-Ray Fixer, Photographic Chemical.
Uses Advised Against	
1.3 Details of the supplie	r of the safety data sheet
Supplier	Medivance Instruments Ltd. Barretts Green Road Harlesden London NW10 7AP T +44 (0) 20 8965 2913 F +44 (0) 20 8963 1270 enquiries@velopex.com
1.4 Emergency telephone	e number
	020 8965 2913

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification (EC 1272/2008)

Serious eye damage/irritation - Category 2

2.2 Label elements

Labelling

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Signal Word	Warning	
Hazard Statements		
	H319	Causes serious eye irritation
Precautionary Statements		
	P264	Washthoroughly after handling
	P280	Wear protective gloves/protective clothing/eye protection
	P305+P351+P338	$\operatorname{IF}\nolimits$ IN EYES: Rinse cautiously with water for several minutes. Remove
		contact lenses if present and easy to do. Continue rinsing
	P337+P313	If eye irritation persists: Get medical advice/attention

2.3 Other hazards

May cause respiratory tract irritation May be harmful if swallowed

3.1 Mixtures

Ingredient	Weight in Product (% w/w)	EC (EINECS) No.	CLP Classification
Acetic Acid CAS No. 64-19-7	<1.0%	200-580-7	Danger Skin Corrosive Cat.1A; H314
Sodium Borate CAS No. 1303-96-4	<1.0%	215-540-4	Reproductive toxicity Cat.1B; H360FD
Aluminium Sulphate CAS No. 10043-01-3	1-2%	233-135-0	Danger Serious eye damage Cat.1; H318
Ammonium Thiosulphate CAS No. 7783-18-8	10-15%	231-982-0	Not classified
Sodium Sulphite CAS No. 7757-83-7	1-2%	231-821-4	Not classified

Important Note: The classification descriptions given in this section relate to the components in their pure form and do not correspond to the classification of this preparation. The classification of this product as supplied is given in Section 2.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation

Remove fresh air and rest. If recovery is not rapid, obtain prompt medical attention,

Ingestion

Do not induce vomiting. Give plenty of water to drink. Beware of aspiration if vomiting occurs. Seek medical attention immediately.

Skin Contact

Remove contaminated clothing. Wash with soap/cleanser and rinse with plenty of water. If irritation persists, get medical attention.

Eye Contact

Irrigate with water for at least 15 minutes. If irritation persists, then consult a doctor.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation

Some asthmatics or sulphite sensitive individuals may experience wheezing, chest tightness, stomach upset, hives, faintness, weakness and diarrhoea. May cause irritation of the respiratory tract. May be harmful if inhaled.

Ingestion

May be harmful if swallowed. Some asthmatics or sulphite sensitive individuals may experience wheezing, chest tightness, stomach upset, hives, faintness, weakness and diarrhoea.

Skin Contact

May cause irritation.

Eye Contact

May cause irritation

4.3 Indication of any immediate medical attention and special treatment needed

Note to physician. Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Extinguishing Media

Non-flammable material as supplied. Use fire extinguishing media appropriate for surrounding materials. Extinguish with foam, carbon dioxide, dry powder or water fog.

5.2 Special hazards arising from the substance or mixture

Hazardous Combustion Products

Toxic fumes are produced when substance is involved in a fire.

5.3 Advice for firefighters

Protective Measures In Fire

Use protective equipment appropriate for surrounding materials.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 personal precautions, protective equipment and emergency procedures

Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Wear rubber gloves/eye protection as necessary.

6.2 Environmental precautions

Do not allow spill to enter drains, sewers or water courses.

6.3 Methods and material for containment and cleaning up

Isolate the spillage and absorb with inert material (e.g. sand, earth, diatomaceous earth, vermiculite or absorbent granules). Scoop up and place in a plastic container for disposal according to local/national regulations.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid inhalation of vapour. Ensure adequate ventilation. Avoid skin contact. Avoid eye contact. Wear suitable protective clothing.

7.2 Conditions for safe storage, including any incompatibilities

Store in tightly closed labelled containers. Store in a cool, dry, well ventilated area. Store away from foodstuffs. Store away from acids, strong bases, oxidising agents and halogenated compounds. Keep out of reach of children/store under lock and key. Recommended storage temperature 5-25°C. Contact with strong acids liberates sulphur dioxide.

Contact with strong bases liberates ammonia.

Contact with strong bases liberates ammonia. Contact with sodium hypochlorite (bleach) may form chloramine (toxic gas).

7.3 Specific end use(s)

X-Ray Fixer

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Name	STD	TWA -	8 Hrs	STEL -	15 Min	Notes
Acetic Acid	WEL		10 ppm		15 ppm	

WEL = Workplace Exposure Limit

8.2 Exposure controls

Protective Equipment











Hand Protection

Wear Nitrile rubber gloves.

Eye Protection

Wear approved, tight fitting safety glasses where splashing is probable.

Hygiene Measures

If skin is contaminated, wash off immediately.

Skin Protection

Wear suitable protective clothing as protection against splashing or contamination.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance
Odour

Colourless liquid Slightly pungent (Acetic Acid/Sulphur Dioxide)

рН	
Boiling Point/range	

4-5

Melting Point/range	n/a	Relative Density	1.092
Flash Point	n/a	Solubility	Completely soluble in water
Flammability	Non-flammable	Partition Coefficient	n/a
Auto Flammability	n/a	Miscibility	Completely miscible in water
Explosive Properties	n/a	Vapour Density	n/a
Oxidising Properties	None	Evaporation Rate	n/a
Vapour Pressure	n/a	Viscosity	n/a
			n/a = not applicable

9.2 Other information

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

No dangerous reaction known under normal use conditions.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazard reactions

Oxidising agents. Contact with strong acids liberates sulphur dioxide. Contact with strong bases liberates ammonia. Contact with sodium hypochlorite (bleach) may form chloramine (toxic gas).

10.4 Conditions to avoid

High temperatures.

10.5 Incompatible materials

Materials To Avoid

Oxidising agents, strong acids, strong bases. Halogenated compounds.

10.6 Hazardous decomposition products

None when stored and handled correctly.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Toxicity (Oral LD_{50})	No information available		
Acute Toxicity (Dermal LD_{50})	No information available		

Acute Toxicity (Inhalation LC₅₀)

Inhalation

Some asthmatics or sulphite sensitive individuals may experience wheezing, chest tightness, stomach upset, hives, faintness, weakness and diarrhoea. May cause irritation of respiratory tract. May be harmful if inhaled.

No information available

Ingestion

May be harmful if swallowed. Some asthmatics or sulphite-sensitive individuals may experience wheezing, chest tightness, stomach upset, hives, faintness, weakness and diarrhoea.

Skin Contact

May cause irritation.

Eye Contact

May cause eye irritation.

Acute Toxicity - Component Information

Chemical Name	LD_{50} Oral	LD_{50} Dermal	$LD_{_{50}}$ Inhalation
Ammonium Thiosulphate	>2000mg/kg (Rat)		
Acetic Acid	3310 mg/kg (Rat)	1060 mg/kg (Rabbit)	11.4 mg/L (Rat) 4h
Sodium Sulphite	820 mg/kg (Rat)		22 mg/L (Rat) 1h 5.5 mg/L (Rat) 4h
Sodium Borate	2403 mg/kg (Rat)	2000 mg/kg (Rabbit)	

Acetic Acid Cont.	Severe eye irritation. Severe skin irritation. Acute overexposure to extremely high airborne concentrations of respiratory irritants has been associated with development of an asthma-like reactive airways syndrome (RADS) in susceptible individuals. Extremely high airborne concentrations are not generated during normal conditions of use but may occur following a spill. The potential to generate extremely high airborne concentrations in a spill situation depends upon physical factors such as the concentration of the solution, the volume of the spill, the surface area of the spill, the size of the room where the spill occurred and the ventilation rate in the room.
Sodium Sulphite	No skin irritation. Mild eye irritation.
Sodium Borate	Based on repeated-dose ingestion studies in animals, may cause adverse reproductive and developmental effects. However the doses administered were many times those to which humans would normally be exposed.
Aggravated Medical Conditions	
Pre-existing eye disorders, skin disor	rders, respiratory disorders.
Subchronic Toxicity	
No data available.	
Chronic Toxicity	Prolonged exposure may cause chronic effects.
Sensitisation	No information available.
Neurological Effects	No information available.
Target Organ Effects	Eyes, skin, respiratory system, teeth.
CMR Effects	
Carcinogenicity	Contains no ingredient listed as a carcinogen.
Reproductive Toxicity	Contains a known or suspected reproductive toxin. However, based on available data the product should not be classified for reproductive effects.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated.

12.1 Toxicity

Acute Aquatic Toxicity - Product Information

No information available.

Acute Aquatic Toxicity - Component Information

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Daphnia and Other Aquatic Invertebrates
Acetic Acid		LC ₅₀ = 79 mg/L (Pimephales Promelas) 96h LC ₅₀ = 75 mg/L (Lepomis Macrochirus) 96h	EC ₅₀ = 47 mg/L (Daphnia Magna) 24h EC ₅₀ = 65mg/L (Daphnia Magna) 48h
Sodium Sulphite		LC ₅₀ = 220 - 460 mg/L (Leuciscus Idus) 96h	LC ₅₀ = 330 mg/L (Psammechinus Miliaris) 24h
Sodium Borate	EC ₅₀ = 158 mg/L (Desmodesmus subspicatus) 96h EC ₅₀ = 2.6-21.8 mg/L (Pseudokirchneriella subcapitata) 96h	LC ₅₀ = 340 mg/L (Limanda Limanda) 96h	LC ₅₀ = 1085-1402 mg/L (Daphnia Magna) 48h

12.2 Persistence and degradability

Degradability

Expected to be readily biodegradable.

12.3 Bioaccumulative potential

Bioaccumulative Potential

No information available.

Chemical Name	log Pow	
Acetic Acid	-0.31	
Sodium Sulphite	-4	

12.4 Mobility in soil

Mobility

No information available.

12.5 Results of PBT and vPvB assessment

12.6 Other adverse effects

No information available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Do not discharge into drains or watercourses. Dispose of through an authorised contractor to a licensed landfill site. Dispose of in accordance with Local Authority regulations. Do not reuse empty containers. Dispose of in accordance with local regulations.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number

ADR/RID	Not regulated	ADN	Not regulated
IMDG/IMO	Not regulated	TDG	Not regulated
ICAO/IATA	Not regulated		

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislations specific for the substance or mixture

EU Legislation

Labelling according to Regulation (EC) No 1272/2008 GHS label elements.

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out.

SECTION 16: OTHER INFORMATION

Revision Comments

Issued By	Chemistry Manager
Revision Date	01/06/2015
Revision	GHS1
Hazard Statements In Full	
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage.
H360	May damage fertility or the unborn child.

Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.