

Application:	Linear joints and penetration seals
Fire resistance period:	Up to 240 minutes
Insulation/integrity:	Integrity and insulation
Test standard(s):	BS EN 1366-3 and BS EN 1366-4
Approval type:	CE Mark - 0843-CPR-0148

CE Intumescent Acrylic Sealant



Pyroplex[®] CE Intumescent Acrylic is used to form linear gap seals where gaps are present in wall and floor constructions and linear joints where wall and floor constructions abut. The sealant can also be used to form a penetration seal around metallic pipes and electrical cables to reinstate the fire resistance performance of wall and floor constructions, where they have been provided with apertures for the penetration of services. Pyroplex[®] CE Intumescent Acrylic has slight intumescent properties that cause it to expand on exposure to elevated temperatures. The intended function of the sealant is to reinstate the fire resistance performance of fire compartment, tested to BS EN 1366-3 and BS EN 1366-4 Pyroplex[®] CE Intumescent Acrylic can provide up to 240 minutes fire resistance integrity depending on application and backing material.

ETA-13/0659 & ETA-13/0660, ETAG No. 026 Parts 2 & 3, Linear Joint & Gap Seal & Penetration Seal 'Pyroplex Intumescent Acrylic' Use category Z.
See ETA 13/0659 & 13/0660 for other relevant characteristics*.

Certificate of Constancy of Performance – 0843-CPR-0148*

(*available to download from the Pyroplex website, www.pyroplex.com)

FIELD OF APPLICATION

The intended use of Pyroplex[®] CE Intumescent Acrylic is to reinstate the fire resistance performance of:

- Gaps at the head of flexible wall constructions
- Gaps in rigid wall and floor constructions
- Joints between rigid wall and floor constructions
- Metal pipe services penetrations through rigid wall and floor constructions, up to 150mm in diameter, with and without combustible insulation and electrical cables

PRODUCT FEATURES

- Fire resistance up to 240 minutes
- Excellent adhesion with common building materials
- Extended shelf life – 24 months
- Movement capability ≤ 7.5%.
- Fully paintable
- Cartridges and foil packs are fully recyclable
- Available in White. Other colours are available on request

INSTALLATION INSTRUCTIONS

Installation of Pyroplex[®] CE Intumescent Acrylic shall be conducted as follows:

1. Wear suitable protective clothing, skin and eye protection.
2. Ensure all surfaces are clean and dry.

Linear Joint/Gap Seals

3. Position appropriate backing material within the gap at the minimum depth to allow for the specified thickness of sealant.
4. Gun the sealant into the opening ensuring that the gap is fully filled and scrape away any excess material.

Penetration Seals

3. Tightly pack mineral wool backing material (nominal density of 90kg/m³) within the opening and around the service(s), leaving a minimum 10mm depth to the plane of the floor/wall surface at both sides.

4. Gun the sealant onto both exposed faced of the mineral wool backing and around the service(s), ensuring that good contact is achieved with both the service(s) and sides of the opening. Scrape away excess material ensuring that a minimum 10mm thickness of sealant is achieved.
5. Tool the surface of the seal as required within 30 minutes of application using a wet spatula.
6. Clean tools using soap and warm water.

PRODUCT PACKAGING

Pyroplex[®] CE Intumescent Acrylic is supplied in:



310ml cartridges
Part No: AC310WTCE



600ml foil packs
Part No: AC600WTCE

QUALITY APPROVAL

Pyroplex Limited have a Quality Management System that meets the requirements of ISO 9001 and an Environmental Management System that meets the requirements of ISO 14001, both are independently verified by BSI Quality Assurance under Certificate Numbers FM 10371 and EMS 637894. Copies of these certificates are available on our website to download at www.pyroplex.com.

OTHER INFORMATION

The information contained herein is based upon the present state of our knowledge. Recipients of Pyroplex[®] products must take responsibility for observing existing laws and regulations.

Due to our policy of continuous improvement, Pyroplex Limited reserves the right to amend specifications without prior notice.

TECHNICAL DATA:

PRODUCT TESTING

Pyroplex® CE Intumescent Acrylic has been tested to the requirements of BS EN 1366-4 and has the following classifications:

Linear Joints

Linear joints in rigid wall constructions - 100mm in thickness with sealant applied to both sides of the joint [unexposed and exposed] Double-sided joint configuration						
Substrate	Minimum depth of sealant (mm)	Permissible width Min - Max. (mm)	Backing media	Fire resistance	Orientation	Joint type
Masonry/Concrete	15	0 - 30	PE	EI - 120	Vertical	Movement capacity not exceeding ≤7.5%
Masonry/Concrete	15	0 - 30	PE	E - 240	Vertical	Movement capacity not exceeding ≤7.5%

Linear joints in rigid wall constructions - 150mm in thickness with sealant applied to both sides of the joint [unexposed and exposed] Double-sided joint configuration						
Substrate	Minimum depth of sealant (mm)	Permissible width Min - Max. (mm)	Backing media	Fire resistance	Orientation	Joint type
Masonry/Concrete	10	0 - 20	PE	EI - 180	Vertical	Movement capacity not exceeding ≤7.5%
Masonry/Concrete	10	0 - 20	PE	EI - 240	Vertical	Movement capacity not exceeding ≤7.5%
Masonry/Concrete to Steel	10	0 - 30	PE	EI - 90	Vertical	Movement capacity not exceeding ≤7.5%
Masonry/Concrete to Steel	10	0 - 30	PE	E - 240	Vertical	Movement capacity not exceeding ≤7.5%
Masonry/Concrete to Timber	15	0 - 30	MF [120mm min. depth]	EI - 180	Vertical	Movement capacity not exceeding ≤7.5%
Masonry/Concrete to Timber	20	0 - 30	PE	EI - 120	Vertical	Movement capacity not exceeding ≤7.5%

Linear joints in rigid wall constructions - 200mm in thickness with sealant applied to both sides of the joint [unexposed and exposed] Double-sided joint configuration						
Substrate	Minimum depth of sealant (mm)	Permissible width Min - Max. (mm)	Backing media	Fire resistance	Orientation	Joint type
Masonry/Concrete	10	0 - 10	10mm depth Stone Wool (90kg/m³)	EI - 240	Vertical	Movement capacity not exceeding ≤7.5%
Masonry/Concrete	20	0 - 30	20mm depth Stone Wool (90kg/m³)	EI - 240	Vertical	Movement capacity not exceeding ≤7.5%

Linear joints in rigid floor constructions - 150mm in thickness with sealant applied to both sides of the joint [unexposed and exposed] Double-sided joint configuration						
Substrate	Minimum depth of sealant (mm)	Permissible width Min - Max. (mm)	Backing media	Fire resistance	Orientation	Joint type
Masonry/Concrete	10	0 - 30	PE	EI - 180	Horizontal	Movement capacity not exceeding ≤7.5%
Masonry/Concrete	10	0 - 30	PE	E - 240	Horizontal	Movement capacity not exceeding ≤7.5%
Masonry/Concrete to steel	10	0 - 30	PE	EI - 90	Horizontal	Movement capacity not exceeding ≤7.5%
Masonry/Concrete to Steel	10	0 - 30	PE	E - 240	Horizontal	Movement capacity not exceeding ≤7.5%

Linear joints in rigid floor constructions - 150mm in thickness with sealant applied to top of floor only [unexposed face] Single-sided joint configuration						
Substrate	Minimum depth of sealant (mm)	Permissible width Min - Max. (mm)	Backing media	Fire resistance	Orientation	Joint type
Masonry/Concrete	10	0 - 30	min. 25mm depth Stone Wool (90kg/m³)	E - 240	Horizontal	Movement capacity not exceeding ≤7.5%
Masonry/Concrete	10	0 - 30	min. 25mm depth Stone Wool (90kg/m³)	EI - 180	Horizontal	Movement capacity not exceeding ≤7.5%
Masonry/Concrete	10	0 - 10	PE	EI - 120	Horizontal	Movement capacity not exceeding ≤7.5%
Masonry/Concrete	10	0 - 10	PE	E - 240	Horizontal	Movement capacity not exceeding ≤7.5%
Masonry/Concrete	10	0 - 20	PE	EI - 60	Horizontal	Movement capacity not exceeding ≤7.5%
Masonry/Concrete	10	0 - 20	PE	E - 240	Horizontal	Movement capacity not exceeding ≤7.5%
Masonry/Concrete	15	0 - 30	PE	EI - 45	Horizontal	Movement capacity not exceeding ≤7.5%
Masonry/Concrete	15	0 - 30	PE	E - 90	Horizontal	Movement capacity not exceeding ≤7.5%

Linear joints in flexible wall constructions - 110mm in thickness with sealant applied to both sides of the joint [unexposed and exposed] Double-sided joint configuration - Header Joints						
Substrate	Minimum depth of sealant (mm)	Permissible width Min - Max. (mm)	Backing media	Fire resistance	Orientation	Joint type
Masonry/Concrete to Gypsum Board	30	0 - 10	50mm (min) Steel head track filled with 50mm Stone Wool	EI - 120	Horizontal	Movement capacity not exceeding ≤7.5%

Penetration Seals

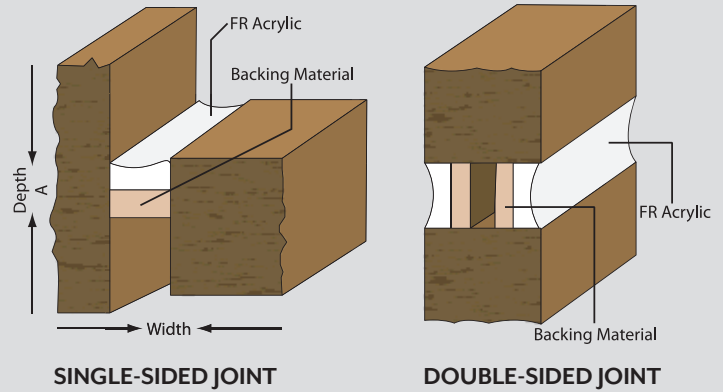
Penetration Seals in Rigid Walls 150mm in thickness (min.)				
Aperture (mm)	Sealant configuration	Services	Position of services in penetration	Fire resistance (Classification)
300 x 300	Component applied to both sides of the penetration to a minimum depth of 10mm. Backing medium 130mm depth of Stone Wool with a minimum measured density of (90 kg/m³)	Single mild steel pipe 89mm diameter (3mm - 14.2mm wt)	Central	EI - 120 C/U
300 x 300	Component applied to both sides of the penetration to a minimum depth of 10mm. Backing medium 130mm depth of Stone Wool with a minimum measured density of (90 kg/m³)	Single mild steel or copper pipe 35mm diameter (1mm - 14.2mm wt)	Central	EI - 90 C/U

Penetration Seals in Floors 150mm in thickness (min.)

Aperture	Sealant configuration	Services	Position of services in penetration	Fire resistance (Classification)
150mm diameter	Component applied to both sides of the penetration to a minimum depth of 10mm. Backing medium 130mm depth of Stone Wool with a minimum measured density of (90 kg/m ³)	Single mild steel pipe 89mm diameter (3mm – 14.2mm wt)	Central	E 240 C/U EI 15 C/U
150mm diameter	Component applied to both sides of the penetration to a minimum depth of 10mm. Backing medium 130mm depth of Stone Wool with a minimum measured density of (90 kg/m ³)	Single copper or mild pipe 35mm diameter (1.2mm – 14.2mm wt). Provided with 500mm long 19mm Armaflex insulation (continuous or interrupted through the penetration)	Central	E 240
150mm diameter	Component applied to both sides of the penetration to a minimum depth of 10mm. Backing medium 130mm depth of Stone Wool with a minimum measured density of (90 kg/m ³)	Single mild steel pipe 89mm diameter (3.0mm – *14.2mm wt)	Central	EI – 240 C/U EI – 90 C/U*
150mm diameter	Component applied to both sides of the penetration to a minimum depth of 10mm. Backing medium 130mm depth of Stone Wool with a minimum measured density of (90 kg/m ³)	Single mild steel pipe 35mm diameter (1.20mm – 14.2mm wt)	Central	E – 240
100mm diameter	Component applied to both sides of the penetration to a minimum depth of 10mm. Backing medium 130mm depth of Stone Wool with a minimum measured density of (90 kg/m ³)	Single bundle of 21 x 14mm diameter (3 - 1.5mm 2 copper core/steel armoured cables (BS7671-6944XLH)	Central	E – 240 EI – 120
100mm diameter	Component applied to both sides of the penetration to a minimum depth of 10mm. Backing medium 130mm depth of Stone Wool with a minimum measured density of (90 kg/m ³)	Single bundle of 4 x 25mm diameter (4 x 16mm 2 copper/steel armoured cables (BS7671-6944XLH) *5 x 19mm diameter (4 x 6.0mm 2 core copper/steel armoured cables (BS7671-6944 LSH)	Central	E – 240 EI – 90
300 x 300	Component applied to both sides of the penetration to a minimum depth of 10mm. Backing medium 130mm depth of Stone Wool with a minimum measured density of (90 kg/m ³)	Up to 21 x 16mm diameter (3 x 6 copper core/steel armoured cables (BS7671-6944XLH) with 20mm separations	Central	E – 120 EI – 60
300 x 300	Component applied to both sides of the penetration to a minimum depth of 10mm. Backing medium 130mm depth of Stone Wool with a minimum measured density of (90 kg/m ³)	Single bundle of 9 x 30mm diameter 4 x 25mm copper core, steel armoured cables - BS7671-6944XLH)	Central	EI – 120

JOINT CONFIGURATION

The fire resistance performance of the material is based upon the joint configuration and the position and location of the seal, within the construction and backing materials used.



BACKING MATERIALS

Backing materials	
PE	Polyethylene, with a nominal density of 0.35kg/m ³
MW	Mineral fibre, with a nominal density of 100kg/m ³

STRUCTURAL CONSTRUCTIONS

Pyroplex® CE Intumescent Acrylic can be used in walls and floors of a solid construction.

Construction element	Fire resistance period [mm]	Minimum thickness	Material types and minimum density
Wall and floor	Up to 120 minutes	100mm	Solid masonry work*, with a density no less than 650kg/m ³
Wall and floor	Up to 240 minutes	150mm	Solid masonry work*, with a density no less than 650kg/m ³

* Aerated concrete, lightweight ash blocks and/or solid brick construction.

Wall construction and fire resistance periods:

- Aerated concrete, lightweight ash blocks and/or solid brick construction.

Depth	Width			
	6mm	10mm	15mm	20mm
6mm	9m	5m	3m	12m
10mm	5m	3m	2m	2m
15mm	3m	2m	1m	1m

Linear metres per 310ml cartridge, the figures quoted estimated and for guidance only.

MAINTENANCE AND INSTALLATION RECORDS

This product is not subject to routine and replacement programmes, Pyroplex Limited recommend that all firestopping materials are checked regularly to ensure that the product remains integral.

PRODUCT GUARANTEE

Providing the product is installed in accordance with the requirements of the guidance document, the fire performance characteristics of the product is guaranteed for a period of 10 years.

TECHNICAL SUPPORT AND GUIDANCE

Should you require any further information regarding this product please contact Pyroplex Limited or visit our website, www.pyroplex.com

MATERIAL SAFETY DATA:

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

- 1.1 Product name:** Pyroplex® CE Intumescent Acrylic
- 1.2 Use:** A water-borne acrylic sealant with fire and smoke resisting capability for internal gap sealing.
- 1.3 Supplier of the safety data sheet:**
Pyroplex Limited
The Furlong,
Droitwich,
Worcestershire, WR9 9BG,
United Kingdom
Phone: +44 (0)1905 795432
Fax: +44 (0)1905 796662
Email: info@pyroplex.com
www.pyroplex.com
E-Mail of competent person responsible for SDS: andy.walsh@pyroplex.com
- 1.4 Emergency telephone number:** +44 (0)1905 795432

SECTION 2: HAZARDS IDENTIFICATION

- 2.1.1 Regulation EC 1272/2008**
This product is not classified as hazardous according to regulation (EC) 1272/2008 (CLP)
- 2.2 Label elements**
- 2.2.1 Regulation EC 1272/2008**
Signal word: None
Hazard statement: None
- 2.3 Other hazards**

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS No.	EC No.	REACH Registration No.	Classification According to Reg. (EC) 1278/2008 (CLP)	% W/W
2,2,4-trimethyl-1,3-pentanediol diisobutyrate	6846-50-0	229-934-9	01-2119451093-47-0000	H412	5-10%

SECTION 4: FIRST AID MEASURES

- 4.1 General:** In all cases of doubt or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
Skin Contact: Wash skin thoroughly with soap and water or a recognised skin cleaner. DO NOT USE SOLVENT OR THINNERS.
Eye Contact: Contact lenses should be removed. Irrigate copiously with clean, fresh water for at least 10 minutes holding eyelids apart, and seek medical advice.
Ingestion: If accidentally swallowed wash mouth with water and give water to drink. DO NOT INDUCE VOMITING.
Inhalation: Remove to fresh air.
- 4.2 Most important symptoms and effects**
Skin contact: No symptoms anticipated
Eye contact: There may be irritation and redness
Ingestion: No symptoms anticipated. If there is any persistence of discomfort seek medical advice
Inhalation: No symptoms

SECTION 5: FIRE FIGHTING MEASURES

- The liquid product is 'non-flammable'.
- 5.1 Extinguishing Media:** Recommended: alcohol resistant foam, CO₂, powder, water spray/mist.
- 5.2 Special Hazards:** As the products contain combustible organic components, fire will produce hazardous products of combustion (see section 10). Exposure to decomposition products may be a hazard to health.
- 5.3 Advice for firefighters:** Appropriate self-contained breathing apparatus may be required. Cool closed containers exposed to fire with water spray. Do not allow run off from fire fighting to enter drains or water courses.

SECTION 6: ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions and protective equipment:** Refer to section 8 of SDS for details
- 6.2 Environmental precautions:** Do not allow to enter drains or water courses. If the product enters drains or sewers, the local water company should be contacted immediately. In the case of contamination of streams, rivers or lakes, the relevant Environment Agency.
- 6.3 Method for containment and clean up:** Contain and collect spillages with non-combustible absorbent materials e.g. sand, earth, vermiculite, diatomaceous earth, and place in a suitable container for disposal in accordance with the waste regulations (see section 13).

SECTION 7: HANDLING AND STORAGE

- 7.1 Precautions for safe handling:** Avoid contact with skin and eyes. Smoking, eating and drinking should be prohibited in areas of storage and use. For personal protection see Section 8.

The Manual Handling Operations Regulations may apply to the handling of containers/packages of this product. In order to calculate the weight of any pack size, multiply the volume in litres by the specific gravity value given in section 9. This will give the net weight of the product in kilograms.

- 7.2 Precautions for safe storage:** Keep containers closed when not in use. Never use high pressure to empty. The container is not a pressure vessel. Ensure good housekeeping and regular safe removal of waste materials. Observe label precautions - Store between 5°C and 25°C in a dry well-ventilated place away from sources of heat. Protect from frost. Keep out of reach of children. Store separately from oxidising agents and strongly alkaline and strongly acidic materials.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Measures: Provide adequate ventilation during application and drying. Where practicable this should be achieved by the use of local exhaust ventilation. If this is not sufficient to maintain concentration of solvent vapours below the relevant Occupational Exposure Limit, suitable respiratory protection must be worn (see 'Occupational Exposure Controls' below).

EXPOSURE LIMITS:

Substance	Occupational Exposure Limits				Notations
	8 hr LTEL (1)		15 min STEL(2)		
	ppm	mgm-3	ppm	mgm-3	

(1) Long-term exposure limit - 8 hour time weighted average.

(2) Short-term exposure limit - 15 mins time weighted average.

(S) Occupational Exposure Standard (OES)

(M) Maximum Exposure Limit (MEL)

(R) Recommended by suppliers

(A) Allocated limits by analogy with similar materials

(SK) Risk of absorption through unbroken skin

(Sen) Capable of causing sensitisation by inhalation

OCCUPATIONAL EXPOSURE CONTROLS: All Personal Protective Equipment (ppe), including Respiratory Protective Equipment (rpe), used to control exposure to hazardous substances must be selected to meet the requirements of the COSHH regulations.

RESPIRATORY PROTECTION: If exposure to hazardous substances identified in section 8 cannot be controlled by the provision of natural ventilation e.g. work in enclosed areas, exposure should be controlled, where reasonably practicable, by the use of mechanical exhaust ventilation; when this is not reasonably practicable, suitable respiratory protective equipment must be worn.

HAND PROTECTION: When skin exposure may occur, advice should be sought from glove suppliers on appropriate types and usage times for this product. The instructions and information provided by the glove supplier on use, storage, maintenance and replacement must be followed. Barrier creams may help to protect exposed areas of skin but are not substitutes for full physical protection. They should not be applied once exposure has occurred.

EYE PROTECTION: Eye protection designed to protect against liquid splashes should be worn.

SKIN PROTECTION: Cotton or cotton/synthetic overalls are normally suitable. Grossly contaminated clothing should be removed and the skin washed with soap and water or a recognised skin cleaner. ALWAYS WASH YOUR HANDS BEFORE EATING, SMOKING OR USING THE TOILET.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Viscous paste
Flash point	>100°C
Viscosity	N/A
Specific gravity	1.60-1.64 @ 20°C
Solubility in water	Miscible when wet
pH	7.7-8.5
VOC	3g/ltr
LEED(2009) VOC	3.5g/ltr

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under normal temperature and storage conditions

10.3 Possibility of hazardous reactions

None known

10.4 Conditions to avoid

See section 10.3

10.5 Incompatible materials

See section 10.3

10.6 Hazardous decomposition products

Oxides of carbon released under high temperature (>300°C)

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological effects

There is no evidence of toxicological effects of the product

Ingestion: May cause discomfort if swallowed. May cause stomach pain

Skin contact: May be irritating to skin

Eye contact: Risk of irritation to eyes.

Sensitisation: Not sensitising

STOT: Not classified

SECTION 12: ECOLOGICAL INFORMATION

12.1 Ecotoxicity: Not regarded as dangerous for the environment

Not considered toxic to fish

12.2 Persistence and degradeability

The product is not biodegradable

12.3 Bio accumulative potential

The product is not bio accumulating

12.4 Mobility in soil

Not mobile

12.5 Results of PBT and vPvB assessment

Not classified as PBT/vPvB

12.6 Other adverse effects

None known

SECTION 13: DISPOSAL CONSIDERATIONS

Do not allow to enter drains or water courses. Wastes, including emptied containers, are controlled waste and should be disposed of in accordance with regulations made under the 'Control of Pollution Act' and the 'Environmental Protection Act'. Using information provided in this data sheet, advice should be obtained from the relevant Environment Agency whether the Special Waste Regulations apply.

SECTION 14: TRANSPORT INFORMATION

Transport within the users premises: Always transport in closed containers that are upright and secure.

Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Onwards transport subsequent to purchase: Transport to be in accordance with ADR for road, IMDG for sea and ICAO/IATA for air.

Proper shipping name: The product is not classified as dangerous for carriage.

UN number

Hazard class:

Packing group:

Sub-hazard class:

SECTION 15: REGULATORY INFORMATION

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

Control of Substances Hazardous to Health Regulations 2002

Environment Act 1995

Management of Health and Safety at Work Regulations 1999

Personal Protective Equipment at Work Regulations 2002

Special Waste Regulations 1996 as amended

HEALTH AND SAFETY EXECUTIVE GUIDANCE NOTES

HS(G)37 An Introduction to Local Exhaust Ventilation

EH40 Occupational Exposure Limits

EH44 Dust: General Principles of Protection

HS(G)53 The Selection, Use and Maintenance of Respiratory Protective Equipment

HS(G)71 Storage of Packaged Dangerous Substances

HS(G)193 COSHH Essentials: easy steps to control chemicals

L23 Manual Handling Guidance on Regulations

BRITISH STANDARDS PUBLICATIONS

EN420: General Requirements for Gloves

EN166: Personal Eye Protection: Specifications

BS2092: Eye Protection for Industrial and Non-Industrial Users

BS4275: Recommendations for the Selection, Use and Maintenance of Respiratory Protective Equipment

15.2 Chemical safety assessment

SECTION 16: OTHER INFORMATION

Symbols and text of the H phrases in section 2 and 3:

H412 Harmful to aquatic life with long lasting effects

The information contained in the Health and Safety Data Sheet is provided in accordance with the requirements of EU Regulation 1272/2008 (CLP). The product should not be used for purposes other than those identified without first referring to the supplier and obtaining written handling instructions. As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with. This information contained in the safety data sheet is based on present knowledge and current national legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular application.