



**Firebreak 1100 High Temperature
Adhesive/Sealant
Material Safety Data Sheet**

1 Identification of the preparation and company

- i) Product Name: Firebreak 1100 High Temperature Adhesive/Sealant.
- ii) Water based silicate adhesive/sealant with resistance to high temperatures.
- iii) Intended Use: Bonding surfaces subject to high temperatures.
Sealing gaps subject to high temperatures.
- iv) Supplier: Neutron Fire Technologies Ltd.
Shire Hall
Lostwithiel
Cornwall
PL22 0BS
Telephone: +44 (0) 1208 871185 Facsimile: +44 (0) 1208 871254

2. Composition / information on ingredients:

Substances which present a health hazard within the meaning of CHIP regulations, or which are assigned Occupational Exposure Limit values:

Name of Substance	EINICS No.	Concentration	Symbol*	R Phrases*
Sodium Silicate	215-687-4	10 % -20%	Xi	R36/37/38

*For full text see Section 16

3. Hazards identification

None, according to CHIP regulations. Also refer to Section 11.
This product is alkaline. Contact with eyes will cause severe irritation.

4. First-aid measures

General:

- * In all cases of doubt, or when symptoms persist, seek medical attention.
- * If unconscious, place in recovery position, give nothing by mouth.

Inhalation:

- * Not a hazard.

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Eye Contact:

- * Remove contact lenses. Immediately irrigate copiously with clean water for at least 15 minutes and seek medical attention.

Skin Contact:

- * Remove contaminated clothing.
- * Wash skin thoroughly with soap and water or recognised skin cleaner.
- * Do NOT use solvents or thinners.
- * Seek medical attention if skin irritation persists.

Ingestion:

- * If swallowed obtain immediate medical attention.
- * Keep at rest.
- * Do NOT induce vomiting.

5. Fire-fighting measures

The product is 'non-flammable'.

Suitable Extinguishing Media:

- * Carbon dioxide; alcohol resistant foam; water spray.

Fire can produce dense black smoke containing hazardous products of combustion. Exposure to decomposition products may be a hazard to health. Appropriate self-containing breathing apparatus and approved protective clothing is required.

Cool packaging exposed to fire with water spray. Do not allow run off from fire fighting to enter drains or watercourses.

6. Accidental release measures

- * Exclude non-essential personnel. (see protective measures in Sections 7 and 8).
- * Contain/collect spillage with non-combustible absorbent materials (e.g. sand; earth). Place waste in marked containers and dispose of in accordance with local regulations (see Section 13).
- * Clean contaminated surfaces, preferably with detergents. Do not use solvents and prevent residue from entering drains or watercourse. If materials enter drains or watercourse inform the local water authority and/or Environment Agency immediately.

7. Handling and storage

Handling:

- * Avoid skin and eye contact.



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- * Smoking, eating and drinking should be avoided in areas of storage or use. Wash hands before breaks and after work. For personal protection; see Section 8.
- * Keep containers closed whilst not in use.
- * Never use pressure to empty; the container is not a pressure vessel.
- * Ensure good housekeeping and regular safe removal of waste materials.
- * The Manual Handling 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. Allowance will then have to be given to the immediate packaging to give the approximate gross weight.

Storage:

- * Observe label precautions.
- * Store between +5° and +25°C in a dry well-ventilated place away from sources of heat. Protect from frost.
- * Do not store product in proximity to food, drink or animal feed. Keep out of the reach of children.
- * Keep the product away from oxidizing agents and strongly alkaline or acid agents.

8. Exposure controls / Personal protection

Exposure controls:

- * No special requirements.

Occupational Exposure Limits (OEL's):

Substance	OEL's			
	8 hr LTEL (1)		15 min STEL (2)	
	ppm	mg/m ³	ppm	mg/m ³
-	-	-	-	-

- (1) Long term exposure limit - 8 hour weighted time.
- (2) Short term exposure limit - 15 mins weighted time.
- (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.

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OEL's are taken from the current version of EH40, except those marked (R) or (A), which are assigned by the supplier of the substance.

Personal Protection:

- * Contact your local supplier of personal protection equipment for guidance when choosing suitable equipment for the working situation in question.
- * 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 COSHH regulations.

Respiratory Protection:

- * Not necessary in normal use.

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 suitable for full physical protection. They should not be applied once exposure had occurred.

Eye Protection:

- *Wear suitable eye protection designed to protect against liquid splashes.

Skin Protection:

- * Cotton or cotton/synthetic overalls are normally suitable. Grossly contaminated clothing should always 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.

9. Physical and chemical properties:

- Physical State: Viscous paste.
- Flash Point: Not applicable.
- Density, g/ml: 1.8 to 1.9 (20°C).
- Colour: Black; Buff.
- Solubility in Water: Miscible.
- pH: 10 to 11.

10. Stability and reactivity

- * Stable under recommended storage and handling conditions (see Section 7).



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11. Toxicological information

The product is not classed as a carcinogen.

12. Ecological information:

- * There is no data available on preparation itself. Do not allow to enter drains or watercourses.
- * This product has been assessed under the conventional method in CHIP and is not classified as dangerous for the environment.
- * Do not allow to enter drains or water courses or be deposited where it can affect ground or surface waters.
- * Soluble silicates, upon dilution, rapidly depolymerise into molecular species indistinguishable from natural dissolved silica. The alkalinity of the material will have a local effect on ecosystems sensitive to changes in pH.

13. Disposal considerations

- * Do not allow product to enter watercourses or drains.
- * Waste, including emptied containers, is 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 Special Waste Regulations apply.

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 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:

Packaging group:

Sub-hazard class:

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15. Regulatory information

The product is determined as not being dangerous according to the requirements of the CHIP Regulations, however, the following safety precautions should be observed:

S Phrases:

S2	Keep out of the reach of children
S24/25	Avoid contact with skin and eyes
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S28	After contact with skin, wash immediately with plenty of soap and water or a recognised skin cleaner. DO NOT USE SOLVENTS OR THINNERS

The information contained in this safety data sheet does not constitute the users own assessment of workplace risks as required by other health and safety legislation. The provisions of the Health and Safety at Work Act and the Control of Substances Hazardous to Health Regulations apply to the use of this product at work.

16. Other information:

Symbols and text of the R phrases are in section 2:

Xi	Irritant
R36	Irritating to eyes
R37	Irritating to respiratory system
R38	Irritating to skin

REFERENCE DOCUMENTS:

Statutory:

Chemical (Hazard Information and Packaging for Supply) (Amendment) Regulations 2002
Air Navigation (Dangerous Substances) Regulations
Carriage of Dangerous Goods by Road and Rails (Classification, Packaging, Labelling) Regulations 1996
Carriage of Dangerous Goods by Road Regulations 1996 as amended
Consumer Protection Act 1987
Control of Pollution (Amendment) Act 1989
Control of Substances Hazardous to Health Regulations 1999

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Environmental Protection Act 1995
Environmental Protection (Duty of Care) Regulations 1992
Environmental Protection Act 1990
Factories Act 1961
Health and Safety at Work Act 1974
International Rail/Road Transport - RID and ADR (current editions)
Management of Health and Safety at Work Regulations 1999
Manual Handling Regulations 1992
Merchant Shipping (Dangerous Goods and Marine Pollutants) Regulations 1997
Personal Protective Equipment at Work Regulations 1992
Protection of Eyes Regulations 1974
Provision and use of Personal Protective Equipment Regulations 1992
Special Waste Regulations 1996 as amended
Waste Management Regulations 1996

APPROVED CODES OF PRACTICE:

ACOP - Control of Substances Hazardous to Health/Control of Carcinogenic Substances- HSE Books
ACOP - Waste Management - The Duty of Care

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



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This safety data sheet should be used in conjunction with technical data sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith.

The attention of the user is drawn to the possible risks incurred by using the product for any other purpose than that for which it was intended.

This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to fulfil his obligations regarding the use of hazardous products.

This information is not exhaustive. This does not exonerate the user from ensuring that legal obligations, other than those mentioned, relating to the use and storage of the product, do not exist. This is solely his/her responsibility.