

## Safety Data Sheet

### Liquid Weld Cement

Issue 25.01.19

#### 1. Identification of the Substance/Preparation and the Company Undertaking

##### 1.1. Product Identifier

**Product Name** Terrain Liquid Weld (THF Free)

##### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Application** Adhesive

##### 1.3. Details of the supplier of the safety data sheet

**Supplier** Polypipe Building Services  
College Road  
New Hythe Business Park  
Aylesford  
Kent  
ME20 7PJ  
Tel: 01622 795200

##### 1.4. Emergency telephone number

Tel. +44 1785 272650 (24 hrs)

#### 2. Hazard Identification

##### 2.1. Classification of the substance or mixture

Classification (EC 1272/2008)		
Physical and Chemical Hazards		Flam. Liq 2 – H225
Human health		Eye damage 1 - H318; STOT SE 3 – H336
Environment		Not classified

The full text for all Hazard Statements are displayed in Section 16

##### 2.2. Label elements

Label In Accordance With (EC) No. 1272/2008



**Signal Word** DANGER

##### Hazard Statements

H225	Highly flammable liquid and vapour
H318	Causes serious eye damage
H336	May cause drowsiness or dizziness
EUH066	Repeated exposure may cause skin dryness or cracking
EUH205	Contains epoxy constituents. May produce an allergic reaction
EUH208	Contains Bisphenol-A-Epichlorhydrin resin. May produce allergic reaction

##### Precautionary Statements

P210	Keep away from heat/sparks/open flames/hot surfaces – No smoking
P271	Use only outdoors or in a well-ventilated area
P280	Wear protective gloves/protective clothing/eye protection/face protection
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

**2. Hazard Identification (continued)**

P501 P430+233 P260	Dispose of contents/container to approved waste disposal plant Store in well ventilated place. Keep container tightly closed Do not breathe fumes
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**2.3. Other hazards**
**General Hazards**

In use may form flammable / explosive vapour-air mixture

**PBT and vPvB Assessment**

The components in this formulation do not meet the criteria for classification as PBT or vPvB

**3. Composition/Information on Ingredients**
**3.1. Substances**

This product is a mixture. Health hazard information is based on its components

**3.2. Mixtures**

Name	CAS-No.	EC No.	Content
Bisphenol A-Epichlorohydrin Epoxy Resin (Number AV MW<700)	25068-38-6	500-033-5	0.1-<1%
Classification (EC 1272/2008) Skin Irrit. 2 – H315 Eye Irrit. 2 – H319 Skin Sens. 1 – H317 Aquatic Chronic 2 – H411	REACH Registration Number: 01-2119456619-26-XXXX		

Name	CAS-No.	EC No.	Content
Methyl Ethyl Ketone	78-93-3	201-159-0	40-80%
Classification (EC 1272/2008) Flam. Liq. 2 – H225 EUH066 Eye Irrit. 2 – H319 STOT SE 3 – H336	REACH Registration Number: 01-2119457290-43-XXXX		

Name	CAS-No.	EC No.	Content
Cyclohexanone	108-94-1	203-631-1	5-10%
Classification (EC 1272/2008) Flam. Liq. 3 – H226 Acute Tox. 4 – H302 Acute Tox. 4 – H312 Acute Tox. 4 – H332 Skin Irrit. 2 – H315 Eye Dam. 1 – H318	REACH Registration Number: 01-2119453616-35-XXXX		

The full Text for all Hazard Statements are displayed in section 16

**4. First Aid Measures**
**4.1. Description of first aid measures**
**General Advice**

If medical advice is needed, have product container or label at hand

**Inhalation**

Remove to fresh air

**Ingestion**

If swallowed do not induce vomiting: Seek medical advice immediately and show this container or label

**Skin Contact**

Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention

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**Eye Contact**

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Remove contact lenses if present and easy to do so. Continue rinsing. Call a doctor immediately

**4.2. Most important symptoms and effects, both acute and delayed****Symptoms**

None known

**4.3. Indication of any immediate medical attention and special treatment needed****Note to doctors**

Treat symptomatically

**5. Fire Fighting Measures****5.1. Extinguishing media****Extinguishing Media**

Use CO2, dry chemical or foam

**Unsuitable Extinguishing Media**

Use water fog or spray; Do not use straight streams

**5.2. Special hazards arising from the substance or mixture**

Carbon monoxide, carbon dioxide and unburned hydrocarbons, (smoke)

**5.3. Advice for fire-fighters**

Wear self contained breathing apparatus for fire fighting if necessary

**6. Accidental Release Measures****6.1. Personal precautions, protective equipment and emergency procedures****Personal Precautions**

Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas

Water spray may reduce vapour; but may not prevent ignition in closed spaces

**For Emergency Responders**

Use personal protection recommended in section 8. Isolate hazard area and deny entry to unnecessary and unprotected personnel

**6.2. Environmental Precautions**

Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point

**6.3. Methods and material for containment and cleaning up****Methods For Containment**

Dyke far ahead of spill, use dry sand to contain the flow of material. Contain and collect spillage with non-combustible absorbent material, (eg sand, diatomaceous earth, vermiculite), and place in container for disposal according to local / national regulations (see section 13)

**Methods For Cleaning Up**

Use clean non sparking tools to collect absorbed material. Dyke far ahead of liquid spill for later disposal

**6.4. Reference to other sections**

See section 12: ECOLOGICAL INFORMATION

Section 7: HANDLING AND STORAGE

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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#### 7. Handling and Storage

##### 7.1. Precautions for safe handling

###### Advice On Safe Handling

Keep away from heat / sparks / open flames / hot surfaces – No smoking. Take precautionary measures against static discharge.

Use explosion proof electrical / ventilation / lighting / equipment

###### General Hygiene

Do not eat, drink or smoke when using product. Regular cleaning of equipment, work area and clothing is recommended

##### 7.2. Conditions for safe storage, including any incompatibilities

###### Storage Conditions

Keep only in the original container / package in a cool well ventilated place.

##### 7.3. Specific end use(s)

Recommendations; observe technical data sheet

#### 8. Exposure Control/Personal Protection

##### 8.1. Control parameters

Name	Std	TWA – 8 hrs		STEL – 15 min	
Methyl Ethyl Ketone	WEL	200 ppm(Sk)	600 mg/m <sup>3</sup> (Sk)	300 ppm(Sk)	899 mg/m <sup>3</sup> (Sk)
Cyclohexanone	WEL	10 ppm(Sk)	41 mg/m <sup>3</sup> (Sk)	20 ppm(Sk)	82 mg/m <sup>3</sup> (Sk)

WEL = Workplace Exposure Limit

PPM = Parts Per Million

Sk = Skin

###### Derived No Effect Level

No information available

###### Predicted No Effect Concentration (PNEC)

No information available

##### 8.2. Exposure controls

###### Protective Equipment



###### Engineering Controls

Ensure adequate ventilation, especially in confined areas

###### Personal Protective Equipment

Tight sealing safety goggles, face protection shield.

Antistatic footwear, wear fire / flame resistant clothing. Gloves made of plastic or rubber and suitable protective clothing / apron

###### Environmental Exposure Controls

Do not allow to enter into any sewer, on the ground or into any body of water

#### 9. Physical and Chemical Properties

##### 9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	No Information Available
Odour	Characteristic
Flash Point (°C)	Minus 9°C
Boiling Point (°C)	79 °C

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**9.1. Other information**

None

**10. Stability and Reactivity**

**10.1. Reactivity**

Stable under recommended storage conditions

**10.2. Chemical stability**

Stable under recommended storage conditions

**Explosion Data**

Sensitivity to mechanical impact – None

Sensitivity to static discharge – May be ignited by friction, heat, sparks or flames

**10.3. Possibility of hazardous reactions**

**Possibility of Hazardous Reactions**

None under normal processing

**10.4. Conditions to avoid**

Keep away from heat, sparks and flames

**10.5. Incompatible materials**

**Materials to avoid**

Strong acids and bases

**10.6. Hazardous decomposition products**

None under normal use conditions

**11. Toxicological Information**

**11.1. Information on toxicological effects**

**Product Information**

No information or data specific to the product on this toxicological, (health), effect is available

<b>Inhalation</b>	No Data Available
<b>Eye Contact</b>	No Data Available
<b>Skin Contact</b>	No Data Available
<b>Ingestion</b>	No Data Available
<b>Sensitisation</b>	No Data Available

<b>Skin Corrosion / Irritation</b>	Not Applicable
<b>Serious Eye Damage / Eye Irritation</b>	Not Applicable
<b>Sensitisation</b>	Not Applicable
<b>Germ Cell Mutagenicity</b>	Not Applicable
<b>Carcinogenicity</b>	Not Applicable

<b>Reproductive Toxicity</b>	No Information Available
<b>STOT – SE</b>	No Information Available
<b>STOT – RE</b>	No Information Available

<b>Target Organ Effects</b>	Central nervous system, eyes, kidney liver, respiratory system, skin
<b>Aspiration Hazard</b>	No Information Available

**Numerical Measures Of Toxicity**

**Acute Toxicity**

The following values are calculated based on chapter 3.1 of the GHS document

<b>ATEmix (oral)</b>	20,365.00 mg/kg
<b>ATEmix (dermal)</b>	16,907.00 mg/kg
<b>ATEmix (inhalation-dust/mist)</b>	23.10 mg/l
<b>ATEmix (inhalation-vapour)</b>	42.00 mg/l

<b>Unknown acute toxicity</b>	75% of the mixture consists of ingredient(s) of unknown toxicity
	0.33% of the mixture consists of ingredient(s) of unknown acute oral toxicity
	0.33% of the mixture consists of ingredient(s) of unknown acute dermal toxicity
	8.959% of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
	75.07% of the mixture consists of ingredient(s) of unknown acute inhalation toxicity, vapour
	2.45% of the mixture consists of ingredient(s) of unknown acute inhalation toxicity dust/mist

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Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Methyl Ethyl Ketone	=2483 mg/kg (rat)	= 5000 mg/kg (rabbit)	= 11700 ppm (rat) 4h
Cyclohexanone	= 1535 mg/kg (rat)	= 947 mg/kg (rabbit)	= 8000 ppm (rat) 4h
Bisphenol-A-Epichlorohydrin Epoxy resin <700MW	=11400 mg/kg (rat)	>2000 mg/Kg (rat)	-

### 12. Ecological Information

#### 12.1. Toxicity

##### Ecotoxicity

No information available

#### Component Information

Data obtained on the component include

Chemical Name	Algae/Aquatic Plants	Fish	Crustacea
Methyl Ethyl Ketone	EC50=1972 mg/l (pseudokirchneriella subcapitata)	LC50 96h 3130-3329 mg/L (Pimephales promelas flow-through)	EC50 48h > 308 mg/L (Daphnia magna)
Cyclohexanone	EC50 96h = 20 mg/L (Chlorella vulgaris)	LC50 96h 481 – 578 mg/L (Pimephales promelas flow-through)	EC50 24h=800 mg/L (Daphnia magna)
Bisphenol-A-Epichlorohydrin Epoxy resin <700MW	-	1.2 mg/l 96Hr (Oncorhynchus)	2.7 mg/l 48Hr (Daphnia magna)

#### 12.2. Persistence and degradability

No information available

#### 12.3. Bioaccumulative potential

No Information available

#### Partition Coefficient

No information available

#### 12.4. Mobility in soil

No information available

#### 12.5. Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB

#### 12.6. Other adverse effects

No information available

#### Endocrine Disruptor Information

Chemical Name	EU – Endocrine Disruptors Candidate List	EU – Endocrine Disruptors – Evaluated Substances
Bisphenol-A-Epichlorohydrin Epoxy resin <700MW	Group III chemical	

### 13. Disposal Considerations

#### 13.1. Waste treatment methods

##### Waste From Residues / Unused Product

Disposal should be in accordance with applicable regional, national and local laws and regulations

##### Contaminated Packaging

Improper disposal or reuse of this container may be dangerous and illegal

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**European Waste Catalogue**

08 04 09\* Waste adhesives and sealants containing organic solvents or other dangerous substances

**Other Information**

Waste codes should be assigned by the user based on the application for which the product was used

<b>14. Transport Information</b>
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**ADR**

<u>14.1. UN/ID Number</u>	UN1133
<u>14.2. UN Proper Shipping Name</u>	Adhesives
<u>14.3. Transport hazard class</u>	3
<u>Labels</u>	3
<u>14.4. Packing group</u>	III
<u>Description</u>	UN1133, Adhesives, 3, III
<u>14.5. Environmental hazards</u>	Not Applicable
<u>14.6. Special Provisions</u>	640E
<u>Classification Code</u>	F1
<u>Tunnel Restriction Code</u>	(D/E)
<u>Limited Quantity</u>	5 L
<u>ADR Hazard ID (Kemmler Number)</u>	30

**IMDG**

<u>14.1. UN/ID Number</u>	UN1133
<u>14.2. UN Proper Shipping Name</u>	Adhesives
<u>14.3. Transport hazard class</u>	3
<u>14.4. Packing group</u>	III
<u>Description</u>	UN1133, Adhesives, 3, III, Minus 9°C
<u>14.5. Marine Pollutant</u>	Np
<u>14.6. Special Provisions</u>	223, 955
<u>EmS-No</u>	F-E, S-D
<u>Limited Quantity</u>	5 L

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No information available

**RID**

<u>14.1. UN/ID Number</u>	UN1133
<u>14.2. UN Proper Shipping Name</u>	Adhesives
<u>14.3. Transport hazard class</u>	3
<u>14.4. Packing group</u>	III
<u>Description</u>	UN1133, Adhesives, 3, III
<u>14.5. Environmental hazards</u>	Not Applicable
<u>Classification Code</u>	F1
<u>14.6. Special Provisions</u>	None
<u>Limited Quantity</u>	5 L

**ICAO (air)**

<u>14.1. UN/ID Number</u>	UN1133
<u>14.2. UN Proper Shipping Name</u>	Adhesives

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<b>14.3. Transport hazard class</b>	3
<b>14.4. Packing group</b>	III
<b>Description</b>	UN1133, Adhesives, 3, III
<b>14.5. Environmental hazards</b>	Not Applicable
<b>14.6. Special Provisions</b>	A3

#### **IATA**

<b>14.1. UN/ID Number</b>	UN1133
<b>14.2. UN Proper Shipping Name</b>	Adhesives
<b>14.3. Transport hazard class</b>	3
<b>14.4. Packing group</b>	III
<b>Description</b>	UN1133, Adhesives, 3, III
<b>14.5. Environmental hazards</b>	Not Applicable
<b>14.6. Special Provisions</b>	A3
<b>Limited Quantity</b>	10 L
<b>ERG Code</b>	3L

### 15. Regulatory Information

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

##### **European Union**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work  
 Check whether measures in accordance with Directive 94/33/EC for the protection of young people at work must be taken  
 Take note of Directive 92/85/EC on the protection of pregnant and breastfeeding women at work

##### **Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) Regulation (EC 1907/2006) EU-REACH (1907/2006) – Candidate list of substances of very high concern (SVHC) for authorisation in accordance with Article 59**

This product does not contain candidate substances of very high concern at a concentration  $\geq 0.1\%$  (Regulation (EC) No. 1907/2006 (REACH), Article 59)

##### **EU-REACH (1907/2006) – Annex XVII – Substances subject to restriction**

This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

##### **EU-REACH (1907/2006) – Annex XIV – List of substances subject to authorisation**

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV)

##### **Dangerous substance category per Seveso directive (2012/18/EU)**

P5a – Flammable Liquids  
 Or  
 P5b – Flammable Liquids  
 Or  
 P5c – Flammable Liquids

##### **Ozone – Depleting substances (ODS) regulation (EC) 1005/2009**

Not applicable

##### **Persistent Organic Pollutants**

Not applicable

#### **15.2. Chemical safety assessment**

No information currently available



**16. Other Information****Key or legend to abbreviations and acronyms used in the safety data sheet****Full text of H-Statements referred to under section 3**

H332 – Harmful If Inhaled  
H226 – Flammable Liquid and Vapour  
H302 – Harmful If Swallowed  
H312 – Harmful In Contact With Skin  
H315 – Causes Skin Irritation  
H318 – Causes Serious Eye Damage  
H317 – May Cause Allergic Skin Reaction  
H411 – Toxic To Aquatic Life With Long Lasting Effects  
H336 – May Cause Drowsiness Or Dizziness  
H225 – Highly Flammable Liquid And Vapour  
EUH066 – Repeated Exposure May Cause Skin Dryness Or Cracking

**Legend**

SVHC – Substances of very high concern

**Section 8: Exposure Controls / Personal Protection**

TWA – Time weighted average (Maximum limit value / Ceiling)  
STEL – Short term exposure limit (Skin Designation)  
PBT – Persistent, Bioaccumulative and Toxic Chemicals  
STOT (SE) – Specific target organ toxicity: Single exposure  
STOT (RE) – Specific target organ toxicity: Repeated exposure  
EWC – European Waste Catalogue

**Disclaimer**

The information provided in this safety data sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in this text.