MATERIAL SAFETY DATA SHEET FOR
BOSS PVC PRESSURE SOLVENT CEMENT - 79088020

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Product type:	Adhesive
Intended use:	Jointing pipe and fittings in pressure systems
Trade Name:	BOSS PVC Pressure Solvent Cement
Supplier of product:	The BSS Group Ltd
Registered Office:	Travis Perkins PLC, Lodge Way House, Lodge Way, Harlestone Road, Northampton NN5 7UG.
Telephone/Fax Numbers:	0116 245 5500 / 0116 218 2214
E-mail Address	reception@bssgroup.com
Web site Address	www.bssindustrial.co.uk

2. HAZARD IDENTIFICATION

Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008

	GHS02	Flam. Liq. 2	H225 Highly flammable liquid and vapour
	GHS08	Carc. 2	H351 Suspected of causing cancer.
	GHS05	Eye Dam. 1	H31 Causes serious eye damage
	GHS07	Skin Irrit. 2 STOT SE3	H315 Causes skin irritation H335 May cause respiratory irritation

Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation

2. HAZARD IDENTIFICATION (Cont.)

Hazard pictograms		
 GHS02	 GHS05	 GHS07  GHS08
Signal word:	Danger	
Hazard-determining components of labelling:	Cyclohexanone Tetrahydrofuran	
Hazard statements:	H225 Highly flammable liquid and vapour. H315 Causes skin irritation. H318 Causes serious eye damage. H351 Suspected of causing cancer. H335 May cause respiratory irritation.	
Precautionary statements	P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261 Avoid breathing vapours. P281 Use personal protective equipment as required. P370+P378 In case of fire: Use to extinguish: Water haze, Alcohol resistant foam, Fire-extinguishing powder, Carbon dioxide. P403+P233 Store in a well-ventilated place. Keep container tightly closed. P501 Dispose of contents/container in accordance with national regulations	
Other hazards		
Results of PBT and vPvB assessment:	PBT: Not applicable vPvB: Not applicable	

3. COMPOSITION/INFORMATION ON INGREDIENTS.

Mixtures
Description: Adhesive

Dangerous components:

CAS: 109-99-9 EINECS: 203-726-8 Reg.nr.: 01-2119444314-46	tetrahydrofuran Flam. Liq. 2, H225; Carc. 3, H351; Eye Irrit. 2, H319; STOT SE 3, H335	50-100%
CAS: 108-94-1 EINECS: 203-631-1 Reg. Nr.: 01-2119453616-35	Flam. Liq. 3, H226; Eye Dam. 1, H318, Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. E, H315	10-25%
CAS: 78-93-3 EINECS: 201-159-0 Reg. Nr.: 01-2119457290-43	Flam. Liq. 2, H225; Eye Irrit 2, H319; STOT SE 3, H336	2.5-10%
Additional Information: For the wording of the listed hazard phrases refer to section 16		

4. FIRST AID MEASURES

After Inhalation:	Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. In case of unconsciousness place patient stable in side position for transportation. Call a doctor immediately.
After Skin Contact:	Immediately wash with water and soap and rinse thoroughly.
After Eye Contact:	Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
After Swallowing:	Do not induce vomiting; call for medical help immediately. Rinse out mouth and then drink plenty of water.
Most important symptoms and effects, both acute and delayed:	No further relevant information available.
Indication of any immediate medical attention and special treatment needed:	No further relevant information available.

5. FIRE FIGHTING MEASURES

Extinguishing media	
Suitable extinguishing agents:	Water haze Alcohol resistant foam Fire-extinguishing powder Carbon dioxide
For safety reasons, unsuitable extinguishing agents:	Water with full jet
Special hazards arising from the substance or mixture:	No further relevant information available.
Advice for firefighters:	
Protective equipment:	Mount respiratory protective device.
Additional information:	Cool endangered receptacles with water spray. Collect contaminated fire fighting water separately. It must not enter the sewage system.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:	Wear protective equipment. Keep unprotected persons away.
Environmental precautions:	Prevent seepage into sewage system, workpits and cellars. Do not allow to enter sewers/ surface or ground water.
Methods and material for containment and cleaning up:	Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Use neutralising agent. Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.
Reference to other sections	See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

7. HANDLING AND STORAGE:

Handling:	
Precautions for safe handling:	Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care. Prevent formation of aerosols. Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).
Information about fire - and explosion protection:	Keep ignition sources away - Do not smoke. Protect against electrostatic charges. Keep respiratory protective device available.
Conditions for safe storage, including any incompatibilities **Storage:**	
Requirements to be met by storerooms and receptacles:	Store in a cool location.
Information about storage in one common storage facility:	Not required
Further information about storage conditions:	Keep receptacle tightly sealed. Store in cool, dry conditions in well sealed receptacles.
Specific end use(s):	No further relevant information available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Additional information about design of technical facilities:
No further data; see item 7.

Control parameters
Ingredients with limit values that require monitoring at the workplace:

78-93-3 methyl ethyl ketone	WEL (Great Britain)	Short-term value: Long-term value: Sk, BMGV	899 mg/m³, 300 ppm 600 mg/m³, 200 ppm
	IOELV (European Union)	Short-term value: Long-term value:	900 mg/m³, 300 ppm 600 mg/m³, 200 ppm
78-93-3 methyl ethyl ketone	BMGB (Great Britain)	70 µmol/L Medium: urine Sampling time: post shift Parameter: butan-2-one	

Additional information: The lists valid during the making were used as a basis

8. EXPOSURE CONTROLS/PERSONAL PROTECTION (cont.)

Exposure controls:	
Personal protective equipment:	
General protective and hygienic measures:	The usual precautionary measures are to be adhered to when handling chemicals. Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing Wash hands before breaks and at the end of work. Store protective clothing separately. Do not inhale gases / fumes / aerosols. Avoid contact with the skin. Avoid contact with the eyes and skin.
Respiratory Protection:	Suitable respiratory protective device recommended. In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device. Use suitable respiratory protective device in case of insufficient ventilation.
Recommended filter device for short term use:	Filter A
Protection of Hands:	 Protective gloves PVC or PE gloves Solvent resistant gloves The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
Material of gloves:	The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. Not required.

Penetration time of glove material:	The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed. **For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:** PVC or PE gloves For the permanent contact gloves made of the following materials are suitable: Nitrile rubber, NBR PVC or PE gloves Neoprene gloves **For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:** PVC or PE gloves **As protection from splashes gloves made of the following materials are suitable:** PVC or PE gloves

8. EXPOSURE CONTROLS/PERSONAL PROTECTION (cont.)

Eye Protection:	 Tightly sealed goggles
Body Protection:	Use protective suit Solvent resistant protective clothing

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties **General Information**	
Appearance:	
Form:	Fluid
Colour:	According to product specification
Odour:	Characteristic
Odour threshold:	Not determined.
pH-value:	Not determined.
Change in condition	
Melting point/Melting range:	Undetermined
Boiling point/Boiling range:	65°C
Flash point:	-14°C
Flammability (solid, gaseous):	Not applicable.
Ignition temperature:	230°C
Decomposition temperature:	Not determined.
Self-igniting:	Product is not self igniting.
Danger of explosion:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
Explosion limits:	
Lower: **Upper:**	1.3 Vol % 12.0 Vol %
Vapour pressure at 20°C:	200 hPa
Density at 20°C:	0.989 g/cm³
Relative density:	Not determined.
Vapour density :	Not determined.
Evaporation rate:	Not determined
Solubility in / Miscibility with water:	Not miscible or difficult to mix.
Partition coefficient (n-octanol/water):	Not determined.
Viscosity	
Dynamic at 20 °C:	2500 mPas
Kinematic:	Not determined
Organis solvents:	78.9 %
Solids content:	20.9 %
Other information All relevant physical data were determined for the mixture. All non-determined data are not measurable or not relevant for the characterization of the mixture.	

10. STABILITY AND REACTIVITY

Chemical stability	
Thermal decomposition / conditions to be avoided:	No decomposition if used according to specifications.
Possibility of hazardous reactions	Corrosive action on metals.
Conditions to avoid	No further relevant information available
Incompatible materials:	No further relevant information available.
Hazardous decomposition products:	Danger of forming toxic pyrolysis products

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects				
Acute toxicity	Based on available data, the classification criteria are not met.			
LD/LC50 values relevant for classification:				
109-99-9 tetrahydrofuran	Oral	LD50	3000 mg/kg	(rat)
108-94-1 cyclohexanone	Oral	LD50	1900 mg/kg	(rat)
	Dermal	LD50	948 mg/kg	(rbt)
	Inhalative	LC50/4 h	8000 mg/l	(rat)
78-93-3 methyl ethyl ketone	Oral	LD50	3300 mg/kg	(rat)
	Dermal	LD50	5000 mg/kg	(rbt)
Primary irritant effect:				
Skin corrosion/irritation	Causes skin irritation.			
Serious eye damage/irritation	Causes serious eye damage.			
Respiratory or skin sensitisation	Based on available data, the classification criteria are not met.			
CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)				
Germ cell mutagenicity	Based on available data, the classification criteria are not met			
Carcinogenicity	Suspected of causing cancer			
Reproductive toxicity	Based on available data, the classification criteria are not met.			
STOT-single exposure	May cause respiratory irritation			
STOT-repeated exposure	Based on available data, the classification criteria are not met			
Aspiration hazard	Based on available data, the classification criteria are not me			

12. ECOLOGICAL INFORMATION

Toxicity	
Aquatic toxicity:	No further relevant information available.
Persistence and degradability	No further relevant information available
Bioaccumulative potential	No further relevant information available
Mobility in soil	No further relevant information available
Additional ecological information: **General notes:**	
Water hazard class 1 (German Regulation) (Self-assessment):	slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.	
Results of PBT and vPvB assessment	
PBT:	Not applicable.
vPvB:	Not applicable.
Other adverse effects	No further relevant information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods	
Recommendation	Must not be disposed together with household garbage. Do not allow product to reach sewage system.
Uncleaned packaging:	
Recommendation:	Disposal must be made according to official regulations. Packagings that may not be cleansed are to be disposed of in the same manner as the product.

14. TRANSPORT INFORMATION

UN-Number	
ADR, ADN, IMDG, IATA	UN1133
UN proper shipping name	
ADR/ADN	1133 ADHESIVES
IMDG, IATA	ADHESIVES
Transport hazard class(es)	
ADR/AND 	
Class	3 (F1) Flammable liquids.
Label	3
IMDG, IATA 	
Class	3 (F1) Flammable liquids.
Label	3
Packing group	
ADR,ADN, IMDG, IATA	III
Environmental hazards:	
Marine pollutant:	No
Special precautions for user:	Warning: Flammable liquids
Danger code (Kemler):	33
EMS Number:	F-E, S-D
Stowage Category:	A
Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable
Transport/Additional information:	
ADR/ADN	
Limited quantities (LQ)	5L
Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30ml Maximum net quantity per outer packaging: 1000 ml
Transport category	3

14. TRANSPORT INFORMATION (cont)

Tunnel restriction Code	D/E
IMDG	
Limited quantities (LQ)	5L
Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30ml Maximum net quantity per outer packaging: 1000 ml
Remarks:	Under certain conditions substances in Class 3 (flammable liquids) can be classified in packing group III. See IMDG, Part 2, Chapter 2.3, Paragraph 2.3.2.2
UN "Model Regulation":	UN 1133 ADHESIVES, 3, III

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Directive 2012/18/EU
Named dangerous substances - ANNEX I None of the ingredients is listed.
Seveso category P5c FLAMMABLE LIQUIDS
Qualifying quantity (tonnes) for the application of lower-tier requirements: 5,000 t
Qualifying quantity (tonnes) for the application of upper-tier requirements: 50,000 t
REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
15.2 Chemical safety assessment:
A Chemical Safety Assessment has not been carried out.

16. OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.

Abbreviations and acronyms:

Flam. Liq. 2:	Flammable liquids – Category 2
Flam. Liq. 3:	Flammable liquids – Category 3
Acute Tox. 4:	Acute toxicity – Category 4
Skin Irrit. 2:	Skin corrosion/irritation – Category 2
Eye Dam. 1:	Serious eye damage/eye irritation – Category 1
Eye Irrit. 2:	Serious eye damage/eye irritation – Category 2
Carc. 2:	Carcinogenicity – Category 2
STOT SE 3:	Specific target organ toxicity (single exposure) – Category 3

. *** Data compared to the previous version altered.**

DISCLAIMER

This information relates only to the specific material designated and may not be valid for such material used in combination with any other material 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, the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.