

MATERIAL SAFETY DATA SHEET: SPEARS FS-5 CEMENT

Issue Date: 04.07.05 Rev: 3

1. IDENTIFICATION OF PREPARATION AND COMPANY

Product name : SPEARS FS-5 One-Step Cement

Product use : Solvent Cement for CVPC BlazeMaster Plastic Pipes and Fittings

EU Suppliers Name and Address:

International Plastic Systems Limited
Seaham Grange Industrial Estate
Seaham
County Durham
SR7 0PT

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2. COMPOSITION / INFORMATION ON INGREDIENTS

Substance	Approx %	Symbols	Risk Phrases	CAS No.
Chlorinated Polyvinyl Chloride Resin (CPVC)				NON/HAZ
Tetrahydrofuran (THF)	50-60	F, Xi	R 11-36,19,66/67	109-99-9
Methyl Ethyl Ketone (MEK)	2-9	F, Xi	R 11-36-66/67	78-93-3
Cyclohexanone	2-10	Xn	R 10-20	108-94-1
Acetone	5-12	F	R-11-36,66/67	67-64-1

3. HAZARD IDENTIFICATION

Flammable, irritant.

4. FIRST AID MEASURES

Skin contact

Remove contaminated clothing and shoes. Wash skin with plenty of soap and water for at least 15 minutes. Skin irritant. Liquid contact may remove natural skin oils resulting in skin irritation. Dermatitis may occur with prolonged contact. If irritation develops, obtain medical attention.

Eye contact

Flush with plenty of water for at least 15 minutes. Vapours slightly uncomfortable. Overexposure may result in severe eye injury with corneal or conjunctival inflammation on contact with liquid. Obtain medical attention.

Inhalation

If overcome by vapours, remove to fresh air and if breathing stopped, give artificial respiration. If breathing is difficult, give oxygen. Can cause drowsiness, irritation to eyes and nasal passages. Severe overexposure may result in nausea, dizziness or headache. Do not smoke. Obtain medical attention.

Ingestion

Give 1 or 2 glasses of water or milk. Do not induce vomiting. Moderately toxic. May cause nausea, vomiting, and diarrhoea. May cause mental sluggishness. Obtain immediate medical attention.

5. FIRE-FIGHTING MEASURES

Fire Extinguishing Agents

Water spray, carbon dioxide and dry powder

Exposure Hazards

Carbon monoxide, carbon dioxide, hydrogen chloride and smoke

Combustion Products

Carbon monoxide, carbon dioxide, hydrogen chloride and smoke

Protective Equipment for Firefighters

Self-contained breathing apparatus, positive pressure hose or airline masks

6. ACCIDENTAL RELEASE MEASURES

Keep away from heat, sparks, open flame. Use explosion proof ventilation equipment only. PVA coated gloves or neoprene gloves. Splashproof chemical goggles.

Eliminate all ignition sources. Avoid breathing of vapours. Absorb with sand or non-flammable absorbent material.

7. HANDLING AND STORAGE

Avoid breathing of vapour, avoid contact with eyes, skin and clothing. All handling equipment should be electrically grounded. Store in the shade below 32°C in a well ventilated area with adequate means of containment.

Incompatible materials

Caustics, ammonia, inorganic acids, chlorinated compounds, strong oxidizers and isocyanates.

Follow all precautionary information given on container label, product bulletins and solvent cementing literature.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

System Design

Fume hood with average air flow of 1000 FPM.

Workplace Exposure Limits

Tetrahydrofuran 50ppm (long term) & 100ppm (short term), can be absorbed through the skin; Methyl Ethyl Ketone (butanone) 200ppm (long term) & 300ppm (short term); Cyclohexanone 10ppm (long term) & 20ppm (short term), can be absorbed through the skin; Acetone 500ppm (long term) & 1500ppm (short term).

NOTE: Long term = 8 hour TWA Reference period & Short term = 15 minute reference period

Recommended Monitoring Procedures

Maintain airborne concentrations below TLV.

Respiratory Protection

Full face piece of NIOSH-approved organic vapour cartridge respirator

Hand protectio

PVA coated or neoprene gloves

Eye Protection

Splash-proof chemical goggles

Skin Protection

PVC coated gloves or neoprene gloves

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Red, medium syrupy liquid
Odour	Ethereal
Boiling Point	56C, based on first boiling point component i.e. Acetone
Flashpoint	Minus 18°C - 14°C based on Acetone
Autoflammability	321°C, THF
Vapour pressure	143 mm Hg of Acetone @ 20°C
Solubility	Solvent portion completely soluble in water. Resin portion separates out.
Vapour density	2.0 (Air = 1)
Evaporation Rate	>1.0 (BUAC = 1)
Viscosity	1600 Minimum CPS @ 23 ± 2°C

10. STABILITY AND REACTIVITY

Keep away from heat, sparks, open flame and other sources of ignition.

Materials to avoid

Caustics, ammonia, inorganic acids, chlorinated compounds, strong oxidants and isocyanates.

Hazardous Decomposition Products

When forced to burn, this product gives off carbon dioxide, carbon monoxide, hydrogen chloride and smoke.

11. TOXICOLOGICAL INFORMATION

EFFECTS OF OVEREXPOSURE

Skin contact

Liquid contact may remove natural skin oils resulting in skin irritation. Dermatitis may occur with prolonged skin contact.

Eye contact

Vapours slightly uncomfortable. Overexposure may result in severe eye injury with corneal or conjunctival inflammation on contact with the liquid.

Inhalation

Severe overexposure may result in nausea, dizziness and headache. Can cause drowsiness, irritation of eyes and nasal passages.

Ingestion

May cause nausea, vomiting, diarrhoea. May cause mental sluggishness.

Symptoms of respiratory tract irritation and damage to respiratory epithelium were reported in rats exposed to 5000 ppm THF for 90 days. Elevation of SGPT suggests a disturbance in liver function. The NOEL was reported to be 200 ppm.

12. ECOLOGICAL INFORMATION

None of the components of the preparation are classified as dangerous to the environment. However care should be taken to prevent material entering surface drains.

13. DISPOSAL CONSIDERATIONS

Dispose of through local authorities if appropriate facilities are available, otherwise transfer to chemical disposal company.

14. TRANSPORT INFORMATION

Proper Shipping Name	Adhesive			
UN Number	1133	Class Number	3	Pkg. Group II
UK Road & Sea Freight (IMO) Classification	3	Emergency Action Code	3YE	
Hazard Identification No	33	Special Provisions	185 & 187 apply	

15. REGULATORY INFORMATION

Symbols	:	F, Xi
Risk phrases	:	R11 Highly flammable R19 May form explosive peroxides R36 Irritating to eyes and respiratory system R66 Repeated exposure may cause skin dryness or cracking R67 Vapours may cause drowsiness or dizziness
Safety phrases	:	S7 Keep container tightly closed when not in use S16 Keep away from sources of ignition - no smoking S29 Do not empty into drains S51 Use only in well ventilated areas

16. OTHER INFORMATION

No additional information.

The data contained in this Safety Data Sheet has been supplied as required by the **Chemicals (Hazard Identification and Packaging for Supply) Regulations 2002**, as amended, for the purpose of protecting the health and safety of industrial and commercial users who are deemed capable of understanding and acting on the information provided.

Please ensure that it is passed to the appropriate person(s) in your company, who are capable of acting on the information.