

1.0	Identification of the substance / preparation and the company / undertaking
1.1	<b>Product Name</b> Pulsa Fuel Cells 700E, 700P, 1000
1.2	Supplier ITW Construction Products Fleming Way Crawley West Sussex RH10 9DP England
1.3	Emergency Telephone Number 44 (0) 1293 523372
2.0	Composition / information on ingredients
2.1	Chemical characteristics Aerosol, propellant: propane/butane
2.2	Chemical Name / Content % / Symbols / R-Phrases / CAS No. / Einecs, eilincs Butane / 50-90 / F+ / R12 / 106-97-8 / 203-448-7 Propane / 10-20 / F+ / R12 / 115-07-1 / 204-062-1
3.0	Hazards identification
3.1	Most important hazards In use may form flammable/explosive vapour-air mixtures.
3.2	Specific hazards Inhalation of vapour may have narcotising effect.
4.0	First aid measures
4.1	General advice Avoid contact with skin and eyes.
4.2	Inhalation Move to fresh air. Seek medical advice if necessary.
4.3	Skin contact Rinse thoroughly with plenty of water, remove contaminated clothes. In case of skin irritation seek medical advice.
4.4	Eye contact Rinse immediately with plenty of water and seek medical advice.
5.0	Fire-fighting measures
5.1	<b>Suitable extinguishing media</b> Dry extinguisher, CO <sup>2</sup> , water jet spray
5.2	Extinguisher not to be used
5.3	Risks arising from combustion In case of fire, the following can develop: Gases hazardous to health. Decomposition products. Danger of explosion by prolonged heating. Dangerous vapours heavier than air.
5.4	Special protective equipment for fire fighters Use protection for the respiratory tract.
6.0	Accidental release measures
6.1	Personal precautions Remove ignition sources, do not smoke, ventilate rooms, avoid inhaling.
6.2	Environmental precautions If large amounts leak, try to stop it.
6.3	Methods for cleaning up leakage of aerosol/gas Provide appropriate ventilation.
7.0	Handling and storage
7.1	Handling Observe directions on label and instructions for use. Keep away from sources of ignition - do not smoke. Ensure good ventilation. Handle only when appropriate ventilation system is activated. Take precautions against electrostatic charges.
7.2	Storage for storage rooms and containers Do not store in gangways or stairwells. Do not store with flammable or self-igniting materials. Storage rooms must be well ventilated, keep away from open fire and other ignition sources. Only store products unopened, in original packing.

## ITW Construction Products **Safety Data Sheet** According to EEC Regulation 91/155/EEC

	<b>.</b>	<u> </u>		
	Observe special regulations t	for aerosols.		
7.3	Special storage conditions Protect from sunlight and do		to temperatures exceeding 50°C.	
3.0	Exposure controls / p	personal	protection	
	Chemical Name / Content % / OES, MEL, MAK, TRK / BMGV, BAT Butane / 50-90 / 1000ppm (2400 mg/m <sup>3</sup> )			
	Respiratory protection			
	Respiratory protection On exceeding OES-MEL-MAK-value gas mask filter AX (EN 141)			
	Hand protection Recommended, protective hand cream recommended.			
	<b>Eye protection</b> Tight fitting protective goggles with side protection (EN 166).			
	Skin and body protection Protective working garments (e.g. safety shoes EN 344, long-sleeved protective working garments).			
9.0	Physical and chemica	al proper	ties	
	State of aggregation		Aerosol	
	Smell	(	Characteristic	
	Boiling point		-48 to -1°C (butane)	
	Flash point	(	ca80°C (propene)	
	Flammability		Yes	
	Vapour pressure		7 bar / 20°C, 11.6 bar / 50°C	
	Minimum explosion limit		1.5 - 2.0 (propene)	
	Maximum explosion limit		8.5 - 11.7 (propene)	
	Water solubility		poorly	
10.0	Stability and reactivit	v		
10.1	Conditions to avoid Refer to section 7 Rise of pressure leads to danger of burst, open fire, ignition sources.			
10.2	Materials to avoid Refer to section 7 Avoid contact with oxidising and other chemicals. Dinitrogen monoxide, fluorine, hydrogen chloride.			
10.3	Hazardous decomposition products Refer to section 5			
11.0	Toxicological informa	ation		
	No data available, inhalation of vapour may have narcotising effect.			
12.0	Ecological informatio	on		
	Class of water damaging			
	1 - slightly hazardous to water. Degradability			
	No data.			
13.0	Disposal consideration	ons		
13.1	For the material / preparation / residue EC disposal code no: The waste codes are recommendations based on the scheduled use of this product.			
	Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. 16 05 04 gases in pressure containers (included halons) containing dangerous substances. 21 01 99 other fractions not otherwise specified.			
	Recommendation:		pecified. ations e.g dispose at suitable refuse	
	Pay attention to local and na site.			

14.0	Transport information			
	General statements UN-Number	1950		
	Road / rail transport (ADR / RID) Class / packing-group: 1950 AEROSOLS Classification code: LQ	2 / - 5F 2		
	Marine transport IMDG-code EmS-number Marine Pollutant AEROSOLS Spit Fuel Cell	/ 2 - (class / packing-group) 2-1 n/a printed date 31.01.03		
	Air transport IATA Aerosols, flammable	2.1 / - / - (class / secondary danger / packing-group)		
	Additional information Danger code and packing code on req	juest.		
15.0	Regulatory information			
15.1	Labelling Classification according to Dangerous Product Regulations including EEC Guidelines (67/548/EEC and 88/379/EEC).			
15.2	Name of product Pulsa Fuel Cells			
15.3	Contains Propane, Butane			
15.4	Symbol(s) R - phrase(s) R12 Extremely flammable. R18 In use, may form flammar mixtures.	nable explosive vapour		
	S - phrase(s)         S9       Keep containers in a well ventilated place.         S23       Do not breathe aerosols.         S51       Use only in well ventilated areas.         Appendixes         Pressurised container. Protect from sunlight and do not expose to temperatures exceeding 50°C.         Do not pierce or burn, ever after use.         Do not spray on a naked flame or any incandescent material.         Keep away from ignition sources - no smoking.         Keep out of the reach of children.			
16.0	Other information			
	These statements refer to the product in the state of being delivered.         Storage classification according to VCI:       2B         Revised:       1-16         The above mentioned statements are based on our knowledge and information at the date stated on this Safety Data Sheet. It characterises the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.			
	Legend n/a = not applicable n.v. / kDv = not available n.g. = not checked OES = occupational exposure standard MEL = maximum exposure limit BMGV = biological monitoring guidance (Germany) / TRK = technical guidance (Germany) / BAT = biological tolerance (Germany) / BAT = biological tolerance (Germany) / WGK = water hazard class WK 2 = hazardous, WK 1 = slightly haz VOC-CH = volatile organic compounds AOX = absorbable organic halogen co VwVwS = administrative order relating (Germany) The statements made here should des necessary safety precautions - they ar characteristics - but they are based or No responsibility.	e value vrk place concentration 6 for work place 5 - WK 3 = very hazardous, zardous to water 5 (VOCV - Switzerland) mpounds to substances hazardous to water cribe the product with regard to the e not meant to guarantee definite		

Further advice and assistance may be obtained from our Technical Help Line on freephone 0800 731 4924.

