

**Safety Data Sheet
 to 91/155/EEC**

Written on: **20.07.1994**
 Revised on: **10.04.2007**

SDS No. **001_E**
 Page **1 of 4**

**Trade Name:
 Pyropen Refill, 75ml**

1 Materials / Preparation and company designation	
Product:	<i>Aerosol</i>
Trade name:	<i>Weller Pyropen Refill Part No. 005 16 160 99</i>
Manufacturer / Supplier:	<i>CooperTools GmbH, Carl-Benz-Str. 2, 74354 Besigheim Tel: +49 7143 580-0, Fax: +49 7143 580-108</i>
Information supplied by:	<i>Environmental Protection Department Tel.: +49 7143 580 101, Fax: +49 7143 580 183</i>
Emergency Phone:	<i>GIZ Mainz Tel.: +49 6131 - 19240</i>

2 Composition / Component Data						
Chemical characteristics:		<i>Mixture of propane, n-butane, iso-butane</i>				
▪ Description:		<i>Butane Application: Burning gas for soldering equipment and lighters</i>				
▪ Hazardous contents:						
	CAS No.	Designation	%	Class	R paragraphs	EG No.
!	<i>000074-98-6</i>	<i>Propane</i>	<i>10-25</i>	<i>F+</i>	<i>12</i>	<i>200-827-9</i>
	<i>000075-28-5</i>	<i>Isobutane</i>	<i>25-50</i>	<i>F+</i>	<i>12</i>	<i>200-857-2</i>
	<i>000106-97-8</i>	<i>Butane</i>	<i>50-100</i>	<i>F+</i>	<i>12</i>	<i>203-448-7</i>

3 Potential hazards		
!	Hazard designation:	<i>F+ Extremely flammable</i>
	Special hazard information for persons and environment:	<i>Frostbite due to the effects of liquefied gas on the skin. Can form an explosive mixture with air. The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version. Warning! Pressurized container. R 12 Extremely flammable. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition – No smoking. Buildup of explosive mixtures possible without sufficient ventilation. Keep out of the reach of children The classification is according to the latest editions of the EU-lists, and extended by company and literature data.</i>

4 First Aid measures		
!	General Information:	<i>None</i>
	If breathed in:	<i>Supply fresh air; consult doctor in case of complaints..</i>
	If contact with skin:	<i>Generally the product does not irritate the skin.</i>
	If contact with eyes:	<i>Firstly evaporate the liquid by blowing on it. Rinse opened eye for several minutes under running water. Obtain medical assistance.</i>
	If swallowed:	<i>If symptoms persist consult doctor.</i>

5 Measures for fire-fighting		
!	Suitable extinguishing agents:	<i>CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.</i>
	Extinguishing agents unsuitable for reasons of safety:	<i>Water with full jet</i>
	Special hazard resulting from the substance, its products of combustion or gases released:	<i>Bursting hazard if overheated</i>
	Special protective equipment:	<i>Cool endangered receptacles with water spray.</i>

6 Measures if inadvertently released		
!	Personal precautions:	<i>Wear protective equipment. Keep unprotected persons away.</i>
	Environmental precautions:	<i>No special measures required..</i>
	Procedure for cleaning / gathering up:	<i>n.a.</i>
	Additional information:	<i>Ensure adequate ventilation.</i>

**Safety Data Sheet
 to 91/155/EEC**

Written on: **20.07.1994**
 Revised on: **10.04.2007**

SDS No. **001_E**
 Page **2 of 4**

**Trade Name:
 Pyropen Refill, 75ml**

7 Handling and Storage	
!	Handling
	<ul style="list-style-type: none"> ▪ Information for safe handling: <i>Avoid impacts, friction and electrostatic discharges; explosion hazard! Ensure good ventilation, especially at floor level (heavier than air). Open and handle receptacle with care.</i> ▪ Information for fire and explosion protection: <i>Keep ignition sources away - Do not smoke. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C, i.e. electric lights. Do not pierce or burn, even after use. Do not spray onto a naked flame or any incandescent material.</i>
	Storage
	<ul style="list-style-type: none"> ▪ Requirements for store rooms and containers: <i>Store in a cool location. Observe official regulations on storing packagings with pressurized containers.</i> ▪ Storage with other substances: <i>Store away from oxidizing and explosive material.</i> ▪ Further data on conditions of storage: <i>Protect against sunlight and against temperatures over 50 °C. Keep container tightly sealed. Protect from heat and direct sunlight.</i>

8 Exposure limits and personal protective equipment					
!	Additional information for layout of technical equipment:		<i>See section 7. No additional measures necessary.</i>		
	Components with limit values for monitoring in the workplace:				
	CAS No.	Substance designation	Art	Limit value	Unit
	106-97-8	Butane	WEL	<i>Short-term value: 750 / 1810 Long-term value: 600 / 1450 Carc (if more than 0.1% of buta-1.3-diene)</i>	<i>ppm /mg/m³ ppm /mg/m³</i>
	Additional Information:		<i>The lists valid during the making were used as basis.</i>		
	Personal protective equipment:				
	General protection and hygiene measures:		<i>Observe regulations issued by professional associations. Do not eat, drink or smoke when working with this material. Do not inhale gases / fumes / aerosols.</i>		
	▪ Breathing protection		<i>Not necessary if room is well-ventilated.</i>		
	▪ Hand protection		Material of gloves <i>If contamination is possible, use gloves made of nitrile according EN 374. Penetration time of glove material > 480 min / 0,4 mm thickness.</i>		
	▪ Eye protection		<i>Not required.</i>		
▪ Body protection		<i>Not required.</i>			

9 Physical and chemical properties:				
!	Form:	<i>Aerosol.</i>		
	Colour:	<i>Colourless</i>		
	Odour:	<i>Recognizable</i>		
		Value / Range	Unit	Method
	Flashpoint:	-97	°C	
	Inflammation temperature:	<i>not applicable</i>	°C	
	Viscosity:	<i>not applicable</i>		
	Density at 20 °C:	0.56	g/cm ³	
	Lower Ex limit:	1,5	Vol %	
	Upper Ex limit:	10,9	Vol %	
	Solubility in water at 20 °C:	<i>insoluble</i>		
	Change of state:	<i>Evaporates immediately</i>		
	Melting point:	<i>not applicable</i>		
	Boiling point / boiling range:	-44	°C	
	Solvent content: organic solvent	0	%	
	Bulk density:	<i>not applicable</i>		
	Vapour pressure at 20 °C:	<i>approx. 2000 - 3500</i>	hPa	
	PH value at 2%:	<i>not applicable</i>		
	Additional information	<i>Vapours are heavier than air</i>		

**Safety Data Sheet
 to 91/155/EEC**

Written on: **20.07.1994**
 Revised on: **10.04.2007**

SDS No. **001_E**
 Page **3 of 4**

**Trade Name:
 Pyropen Refill, 75ml**

10 Stability and reactivity		
!	Thermal decomposition / conditions to be avoided:	<i>Do not heat to more than 50 °C – bursting hazard. Keep away from sources of ignition (sparks, flames, glow)</i>
	Hazardous reactions:	<i>No dangerous reactions known.</i>
	Hazardous products of decomposition:	<i>No dangerous decomposition products known.</i>

11 Toxicology data		
!	Acute toxicity:	
	Primary irritant effects:	
	▪ On the skin:	<i>No irritant effect.</i>
	▪ On the eye:	<i>No irritating effect.</i>
	▪ Sensory effects	<i>No sensitizing effects known.</i>
▪ Additional toxicological information:	<i>None</i>	

12 Ecology data		
	General information:	<i>Generally not hazardous for water</i>

13 Information for disposal		
!	Product:	
	▪ Recommendation:	<i>Destroy as materials or energy.</i>
	Waste reference number:	<i>According to national or local regulations</i>
	Name of waste:	<i>[recommendation: 16 05 05 gases in pressure containers other than those mentioned in 16 05 04]</i>
	Uncleaned packaging:	
	▪ Recommendation:	<i>Total empty cans may be taken for recycling</i>
▪ Disposal route:		

! 14 Transport data	
Land and inland navigation transport ADR/RID/GGVS/GGVE/ADNR)	
▪ Classification code :	<i>2 / 5 F</i>
▪ Kemler number:	<i>-</i>
▪ UN number:	<i>1950</i>
▪ Designation of goods:	<i>UN 1950, AEROSOLS, 2.1</i>
▪ Comments:	<i>Endorsement in shipping documents: transportation according chapter 3.4 ADR Dispatch article identification: UN 1950 (rhombus) Transportation as Limited Quantities (LQ2)</i>
Ocean transport IMDG / GGVSee	
▪ IMDG / GGV sea class:	<i>2</i>
▪ Page.	
▪ UN number:	<i>1950</i>
▪ Packaging group:	<i>II</i>
▪ EMS number:	<i>F-D, S-U</i>
▪ MFAG:	
▪ Marine pollutant:	<i>No</i>
▪ Correct technical name:	<i>AEROSOLS</i>
▪ Comments:	<i>Endorsement in shipping documents: limited quantities Packaging labelling: AEROSOLS UN 1950 (rhombus)</i>

**Safety Data Sheet
 to 91/155/EEC**

Written on: **20.07.1994**
 Revised on: **10.04.2007**

SDS No. **001_E**
 Page **4 of 4**

**Trade Name:
 Pyropen Refill, 75ml**

Air transport ICAO / IATA	
▪ ICAO / IATA class:	2.1
▪ UN / ID number:	UN 1950
▪ Packaging group:	II
▪ Correct technical name:	Aerosols, flammable
▪ Comments:	UN-4G/Y fibre board boxes required, Label: Flammable Gas Marking: Aerosols, flammable UN 1950
Further transport data:	ADR: Accident data sheet not prescribed

15	Instructions	
!	▪ Identification to EC directives:	Extremely flammable under directive 75/324/EEC
	▪ Identification letter and hazard designation of product:	F+ Extremely flammable
	▪ Hazardous components for labelling:	Butane
	▪ R paragraphs:	12 = Extremely flammable
	▪ S paragraphs:	2 = Keep out of the reach of children. 16 = Keep away from sources of ignition, no smoking. 33 = Take precautionary measures against static discharges 51 = Use only in well-ventilated areas 9 = Keep container in a well-ventilated place.
	▪ Special Identification special preparation:	Containers are pressurised. Protect against sunlight and temperatures over 50 °C. Additionally, do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition, no smoking. Keep away from children, store out of reach of children. In the absence of sufficient ventilation, can form explosive mixture with air. Safety data sheet available on request for professional users.
	National regulations	
	▪ Occupational restrictions	n.a.
	▪ Hazardous Incidents Ordinance:	n.a.
	▪ VbF classification:	n.a.
▪ Technical atmospheric instructions	n.a.	
▪ Water hazard class:	Classed as non-polluting to water	

16	Other data
Recommended use and restrictions: Further information:	Use only in accordance with the instructions for use and in observance of warnings. The regulations of directives 98/98/EEC, 1999/45/EEC, 2001/58/EEC, 2001/59/EEC and 2001/60/EEC are applicable. The data in this Safety Data Sheet should be used for training.

These data are based on our present state of knowledge, they do not however represent an assurance of product properties and cannot be relied on for contractual purposes at law.

**Data sheet issued by: Environmental Protection Department
 Contact person: V. Heller**

n.a.	= not applicable
n.c.	= not classified
n.r.	= not required