

1. Identification of the substance/preparation and of the company/undertaking

1.1 Identification of the substance or preparation:

Synonyms
Tubing : CGFC

1.2 Use of the substance or the preparation:

Heat-Shrinkable Polymeric Products

1.3 Company/undertaking identification:

Premier Farnell
150 Armley Road
Leeds LS12 2QQ
Tel. : +44 (0) 870 129 8608

1.4 Telephone number for emergency:

+44 (0) 870 202530

2. Composition/information on ingredients

Plastic materials may be based on polyethylene and olefin copolymers, chloropolymers, polyamides or silicones. Products may be coated with, or used in conjunction with adhesives/mastics based on polyamides and/or olefin copolymer

3. Hazards identification

This Safety Data Sheet applies to a group of products which are not hazardous as supplied in accordance with directives 67/548/EEC and 1999/45/EEC

Products may emit hazardous thermal decomposition products if overheated or burnt (see section 10.3)

4. First aid measures

4.1 Eye contact:

If molten material contacts the eye : Rinse immediately with plenty of water for 15 minutes
Consult a doctor/medical service if irritation persists

4.2 Skin contact:

If molten material contacts the skin: : Immediately flush with cold water for 15 minutes
Do not attempt to remove material stuck to the skin
Treat as a burn

Consult a doctor/medical service

4.3 After inhalation:

If exposed to fumes from overheated
or burnt material : Remove the victim into fresh air
Keep warm and at rest

Consult a doctor/medical service if breathing problems develop

4.4 After ingestion:

Not applicable

5. Fire-fighting measures

5.1 Suitable extinguishing media:

Water spray
Polyvalent foam
ABC powder
Carbon dioxide

5.2 Unsuitable extinguishing media:

No data available

5.3 Special exposure hazards:

Toxic decomposition products may be evolved in a fire (see section 10.3)

5.4 Instructions:

Not applicable

5.5 Special protective equipment for firefighters:

Self-contained breathing apparatus with full face piece
Protective clothing for exposure to chemicals

6. Accidental release measures

6.1 Personal protection/precautions:

See headings 8.1/8.3/10.3

6.2 Environmental precautions:

Not applicable

6.3 Clean-up:

Pick up for continued use or disposal

7. Handling and storage

7.1 Handling:

Refer to product installation instructions
Avoid overheating the product after shrinkage has occurred
Stop heating immediately if the product blisters, chars or shows other signs of degradation
Avoid inhaling fumes which may be released and ventilate the area thoroughly before resuming work
Avoid contact with molten material
Wash hands before eating, drinking or smoking
Practice good standards of personal and industrial hygiene

7.2 Storage:

Store in a dry area
Store in a cool area
Product should be stored at temperatures below 40°C to avoid prerecovery of expanded product
Store in the original packaging
Keep away from: heat sources

Safety Data Sheet

pro-POWER

Storage temperature	: <40°C
Quantity limits	: N.D. kg
Storage life	: N.D.
Materials for packaging	:
Suitable	: No data available
To avoid	: No data available

7.3 Specific uses:

See information supplied by the manufacturer

8. Exposure controls/Personal protection

8.1 Exposure limit values:

Not applicable
Sampling methods:
No data available

8.2 Exposure controls:

8.2.1 Occupational exposure controls:
- Work under local exhaust/ventilation
- When using gas torches in confined spaces ensure an adequate supply of fresh air to avoid oxygen depletion
8.2.2 Environmental exposure controls: see heading 13

8.3 Personal protection:

8.3.1 respiratory protection:
- Not required for normal conditions of use
- Approved respirator or self contained breathing apparatus for installations in confined/unventilated areas
8.3.2 hand protection:
- Heat resistant gloves if handling hot products after installation
Suitable materials: No data available
- Breakthrough time: N.D.
8.3.3 eye protection:
- Safety glasses with side shield, goggles or face shield depending on application
8.3.4 skin protection:
- Protective clothing
Suitable materials: No data available

9. Physical and chemical properties

9.1 General information:

Appearance (at 20°C)	: Plastic tubing and moulded parts
Odour	: Almost odourless
Colour	: Variable in colour

9.2 Important health, safety and environmental information:

pH value	: N.D.
Boiling point/boiling range	: N.D. °C
Flashpoint	: N.D. °C

www.element14.com
www.farnell.com
www.newark.com
www.cpc.co.uk

pro-POWER

Explosion limits	: N.D. vol% (°C)
Vapour pressure (at 20°C)	: N.D. hPa
Vapour pressure (at 50°C)	: N.D. hPa
Relative density (at 20°C)	: 0.9/2.2
Water solubility	: Insoluble
Soluble in	: N.D.
Relative vapour density	: N.D.
Viscosity	: N.D. Pa.s
Partition coefficient n-octanol/water	: N.D.
Evaporation rate ratio to butyl acetate	: N.D.
ratio to ether	: N.D.

9.3 Other information:

Melting point/melting range	: 70/170°C (Adhesives)
Auto-ignition point	: N.D. °C
Saturation concentration	: N.D. g/m ³

10. Stability and reactivity

10.1 Conditions to avoid/reactivity:

Stable under normal conditions

10.2 Materials to avoid:

Keep away from: heat sources

10.3 Hazardous decomposition products:

Thermal decomposition is not significant when products are used in accordance with product installation instructions
At higher temperatures and if materials burn, thermal decomposition products will depend on the base polymer used and may include, but are not limited to: alcohols, aldehydes, carbon monoxide, carbon dioxide, hydrocarbons, hydrogen bromide, hydrogen chloride, silicon dioxide and oxides of nitrogen, phosphorus and sulphur

11. Toxicological information

11.1 Acute toxicity:

LD50 oral rat	: N.D. mg/kg
LD50 dermal rat	: N.D. mg/kg
LD50 dermal rabbit	: N.D. mg/kg
LC50 inhalation rat	: N.D. mg/l/4 h
LC50 inhalation rat	: N.D. ppm/4 h

11.2 Chronic toxicity:

EC carc. cat.	: Not listed
EC muta. cat.	: Not listed
EC repr. cat.	: Not listed
Carcinogenicity (TLV)	: Not listed
IARC classification	: Not listed

11.3 Routes of exposure:

Inhalation of thermal decomposition products

11.4 Acute effects/symptoms:

After Inhalation

Overheating products during installation may produce vapours/fumes that can cause irritation of the respiratory tract
Symptoms may include coughing, headache, dizziness, nausea and in the absence of ventilation, possible asphyxiation

After Skin Contact

Contact with molten material may cause thermal burns

After Eye Contact

Overheating products during installation may produce vapours/fumes that can cause irritation and redness of the eye tissue

After Ingestion

Not a normal route of exposure

11.5 Chronic effects:

None known

12. Ecological information

12.1 Ecotoxicity:

No data available

12.2 Mobility:

Volatile organic compounds (VOC) : N.D.

Insoluble in water

For other physicochemical properties see heading 9

12.3 Persistence and degradability:

Biodegradation BOD₅ : N.D. % ThOD

Water : Not readily biodegradable in water
test : OECD

Soil : T ½: N.D. days

12.4 Bioaccumulative potential:

Log Pow : N.D.

BCF : N.D.

12.5 Other adverse effects:

WGK : N.D.

Effect on the ozone layer : Not dangerous for the ozone layer (1999/45/EC)

Greenhouse effect : No data available

Effect on waste water purification : No data available

13. Disposal considerations

13.1 Provisions relating to waste:

Waste material code (75/442/EEC, Council Decision 2001/118/EC, O.J. L47 of 16/2/2001): 07 02 13 (waste plastic)

13.2 Disposal methods:

Landfill or incinerate at an approved site in accordance with national and local regulations
Recycle/reuse
Remove to an authorized dump (Class II)
For incineration use a high temperature incinerator equipped with secondary combustion chamber and acid gas scrubber
Do not discharge to wastewater treatment installation

13.3 Packaging/Container:

No available data

14. Transport information

14.1 Classification of the substance in compliance with UN Recommendations

UN number : -
Class :
Sub Risks :
Packing :
Proper Shipping Name :

14.2 ADR (transport by road)

Class : Not Subject
Packing Or Classification Code :
Danger Label Tanks :
Danger Label Packages :

14.3 RID (transport by rail)

Class : Not Subject
Packing Or Classification Code :
Danger Label Tanks :
Danger Label Packages :

14.4 ADNR (transport by inland waterways)

Class : Not Subject
Packing Or Classification Code :
Danger Label Tanks :
Danger Label Packages :

14.5 IMDG (maritime transport)

Class : Not Subject
Sub Risks :
Packing :
MFIAG :
EMS :
Marine Pollutant :

14.6 ICAO (air transport)

Class : Not Subject
Sub Risks :
Packing :
Packing Instructions Passenger Aircraft :
Packing Instructions Cargo Aircraft :

Safety Data Sheet

pro-POWER

14.7 Special precautions in connection with transport

Not restricted for any mode of international transport

15. Regulatory information

Classification according to directives 67/548/EEC and 1999/45/EC
Not Applicable

16. Other information

N.A. = Not Applicable
N.D. = Not Determined
* = Internal Classification

Exposure limits:

TLV : Threshold Limit Value - ACGIH USA
OES : Occupational Exposure Standards - United Kingdom
MEL : Maximum Exposure Limits - United Kingdom
MAK : Maximale Arbeitsplatzkonzentrationen - Germany
TRK : Technische Richtkonzentrationen - Germany
MAC : Maximale aanvaarde concentratie - The Netherlands
VME : Valeurs limites de Moyenne d'Exposition - France
VLE : Valeurs limites d'Exposition à court terme - France
GWBB : Grenswaarde beroepsmatige blootstelling - Belgium
GWK : Grenswaarde kortstondige blootstelling - Belgium
EC : Indicative occupational exposure limit values - directive 2000/39/EC

Part Number Table

Inside Diameter		Wall Thickness	Length (m)	Colour	Part Number
Min. Expanded as Supplied (D)	Max. Recovered After Heating (d)	Nominal Recovered After Heating (W)			
3	1	0.55	10	Black	CGFC-3/1-0
6	2	0.65	7	Black	CGFC-6/2-0
9	3	0.75	5	Black	CGFC-9/3-0
12	4	0.75	4	Black	CGFC-12/4-0
18	6	0.85	3	Black	CGFC-18/6-0
24	8	1	3	Black	CGFC-24/8-0
3	1	0.55	10	Red	CGFC-3/1-2
6	2	0.65	7	Red	CGFC-6/2-2
9	3	0.75	5	Red	CGFC-9/3-2
12	4	0.75	4	Red	CGFC-12/4-2
18	6	0.85	3	Red	CGFC-18/6-2
24	8	1	3	Red	CGFC-24/8-2

www.element14.com
www.farnell.com
www.newark.com
www.cpc.co.uk

pro-POWER

Safety Data Sheet

pro-POWER

Inside Diameter		Wall Thickness	Length (m)	Colour	Part Number
Min. Expanded as Supplied (D)	Max. Recovered After Heating (d)	Nominal Recovered After Heating (W)			
3	1	0.55	10	Yellow	CGFC-3/1-4
6	2	0.65	7	Yellow	CGFC-6/2-4
9	3	0.75	5	Yellow	CGFC-9/3-4
12	4	0.75	4	Yellow	CGFC-12/4-4
18	6	0.85	3	Yellow	CGFC-18/6-4
24	8	1	3	Yellow	CGFC-24/8-4
3	1	0.55	10	Green	CGFC-3/1-5
6	2	0.65	7	Green	CGFC-6/2-5
12	4	0.75	4	Green	CGFC-12/4-5
18	6	0.85	3	Green	CGFC-18/6-5
3	1	0.55	10	Blue	CGFC-3/1-6
6	2	0.65	7	Blue	CGFC-6/2-6
9	3	0.75	5	Blue	CGFC-9/3-6
12	4	0.75	4	Blue	CGFC-12/4-6
18	6	0.85	3	Blue	CGFC-18/6-6
24	8	1	3	Blue	CGFC-24/8-6
3	1	0.55	10	White	CGFC-3/1-9
6	2	0.65	7	White	CGFC-6/2-9
9	3	0.75	5	White	CGFC-9/3-9
12	4	0.75	4	White	CGFC-12/4-9
18	6	0.85	3	White	CGFC-18/6-9
24	8	1	3	White	CGFC-24/8-9
3	1	0.55	10	Green/Yellow	CGFC-3/1-45
9	3	0.75	5	Green/Yellow	CGFC-9/3-45
12	4	0.75	4	Green/Yellow	CGFC-12/4-45
18	6	0.85	3	Green/Yellow	CGFC-18/6-45
24	8	1	3	Green/Yellow	CGFC-24/8-45
3	1	0.55	10	Clear	CGFC-3/1-X
6	2	0.65	7	Clear	CGFC-6/2-X
12	4	0.75	4	Clear	CGFC-12/4-X
18	6	0.85	3	Clear	CGFC-18/6-X
24	8	1	3	Clear	CGFC-24/8-X

Important Notice : This data sheet and its contents (the "Information") belong to the members of the Premier Farnell group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. pro-POWER is the registered trademark of the Group. © Premier Farnell plc 2012.

www.element14.com
 www.farnell.com
 www.newark.com
 www.cpc.co.uk

pro-POWER