

# TECHNICAL INFORMATION SHEET



## EXPANDING FOAMS

### PRODUCT DESCRIPTION

Rhodia Expanding Foam is a one component, polyurethane foam systems under pressure in an aerosol container.

Each canister contains a specially developed liquid of crude MDI (diphenylmethane di-Isocyanate), in combination with a mixture of HFC and Hydrocarbon products as the propellant and foaming agent.

This product is moisture-cured and are designed to be used as multi purpose foam sealants or gap filling adhesives by foam in place techniques.

Canisters must be stored in a cool dry place and clear instructions printed on product label.

### SAFETY INFORMATION

Rhodia Expanding Foams contain flammable propellant components and attention should be paid to the appropriate Material Safety Data Sheet.

All polyurethane foams are organic, combustible materials and may therefore present a fire risk if exposed to flame, fire and/or heat.

### Typical Canister Profile

Product Size		ml	500	750	750 Gun
Can Dimension	Diameter	mm	65	65	65
	Length	mm	195	300	300
Capacity	Maximum	ml	650	1000	1000
Burst Pressure		bar	15 minimum		
Product Pressure	@ 20°C	bar	5 maximum		
	@ 50°C	bar	10 maximum		
Shelf life	Maximum @ 15°C		18 months		
Operation temperature		°C	5 to 30		
		°C	20 optimum		

**Typical Physical Properties of Cured Foam**  
(all tested at 23°C and 50% RH)

Product Size		500	750	750 Gun
Reactivity (20cm bead)				
Tack Free Time	Maximum (minutes)	20		
Foam can be cut	Maximum (hours)	4		
Yield (free rise #2) per can	Litres	27	40	42
Foam properties	Sample size 12cm x 6cm x 6cm			
Density (free rise #2 core)	(kg/m <sup>3</sup> ) BS4370	17	17	14
Compressive strength	(kPa) BS4370	50	50	45
<b>#2 = Foam saturated with fine spray of water during test</b>				
	Sample size 5cm x 3cm x 12cm			
Dimensional Stability	(Maximum linear change)			
24hr @ -20°C (%)	ASTM	1		
24hr @ +50°C (%)	D2126	6		
	Sample size 25cm x 15cm x 15cm)			
Tensile strength	(kPa) BS4370	71		
Thermal Conductivity	(W/mk) Anacon	0.027		
Operating temperature		20°C - +90°C		
Flammability Rating #3	DIN4102	B3		

#3 . This is a small-scale laboratory test and should be used for comparative purpose. It is **not** to be used to assess the potential fire hazard of a material use.

The above physical properties have been obtained under the conditions stated. The physical properties obtained when making different items, using alternative conditions to those detailed above, may vary and should be determined for the intended application.

## MATERIAL SAFETY DATA SHEET

PRODUCT : RHODIA EXPANDING FOAM

- (1) Identification of substance/preparation and of the Company  
Product Name : CONSTRUCTION CHEMICALS UK LTD  
75 TOWN GREEN ST  
ROTHLEY  
LEICESTER  
Telephone No. : 0116 230 1955  
Fax No : 0116 230 1944
- (2) Composition/information on ingredients  
A one-component polyurethane foam.  
Contains diphenylmethane di-isocyanate, HCFC & Butane
- (3) Hazards Identification  
Routes of Exposure/Health Hazards: Skin and eye contact, inhalation and ingestion  
Symptoms of Exposure (Acute): Vapour may cause irritation of nose, throat and upper respiratory system.  
Causes defatting of the skin. Irritating to eyes.  
Symptoms of Exposure (Chronic): Long term exposure to isocyanate vapour may cause respiratory problems including asthma and sensitisation.  
Medical conditions aggravated: Bronchitis, asthma and other respiratory complaints by exposure: Dermatitis, eczema, psoriasis and other skin complaints. Conjunctivitis and other eye complaints.  
Explosion hazards: Excessive pressurisation of aerosol can will occur if heated, with risk of explosion. Explosive mixtures of propellant/air may be formed.  
Fire hazards: All organic materials are combustible and may present a fire risk if exposed to flame, fire heat or other potential sources of ignition.  
Flammable product (flash point below 55 °C).  
Corrosion hazards: No known corrosive hazard.  
Environmental hazards: Entry into water courses and sewage systems.
- (4) First Aid Measures  
Inhalation: Remove patient to fresh air. If not breathing apply artificial respiration. If breathing is difficult, oxygen may be given by suitably qualified personnel. Seek medical attention. Effects may be delayed.  
Eye Contact: Flush with copious amounts of water for at least 15 minutes. Seek immediate medical attention.  
Skin Contact: Wash with soap and water for 15 minutes. Obtain medical attention.  
Ingestion: Wash with soap and water for 15 minutes. Obtain medical attention.  
Advice to Physicians: Treat symptomatically.
- (5) Fire Fighting Measures  
Fire Extinguishing Media: Use Foam, Dry Powder, Carbon Dioxide. In case of larger fires, water spray/mist may be used.  
Special Fire Fighting Procedures: Water jets are not suitable.  
Protective Equipment: Full-face positive pressure breathing apparatus as and full protective clothing.  
Special exposure hazard(s): In the event of a fire may produce toxic vapour and fumes. Explosive mixtures of propellant/air may be formed. Excessive pressurisation of aerosol can will occur if heated, with risk of explosion.

- (6) Accidental Release Measures  
 Personal Precautions: Remove all sources of ignition. Full protective clothing and eye protection. Goggles.  
 Environmental Precautions: Contain and cover any spillage immediately with sand, earth or other suitable absorbent. Prevent ingress into watercourses and sewers.  
 Methods of clean-up: Transfer absorbent material to a suitable waste container. Do not seal. Keep damp and in open air for 7 days. Dispose of in accordance with local and National regulations.
- (7) Handling & Storage  
 Safe Handling Advice: Avoid contact with skin and eyes. Ensure adequate ventilation to maintain atmospheric levels in accordance with exposure limit(s). Read instructions on aerosol can.  
 Storage precautions: Keep containers tightly closed and dry, in a well ventilated area away from heat and direct sunlight. Store can in an upright position.  
 Storage Temperature: 10-23 C
- (8) Exposure Controls/personal protection  
 Exposure Limits: Natural ventilation  
 Personal Protection:  
 Respiratory Protection: In the absence of exhaust or natural ventilation that maintains atmospheric concentration in accordance with the exposure limit(s), self contained breathing apparatus should be worn.  
 Eye Protection: Safety goggles  
 Hand Protection: PVC/rubber gloves.  
 Skin Protection: WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS), GAUNTLETS AND EYE PROTECTION when using.
- (9) Physical & Chemical Properties  
 Physical State:  
 Colour:  
 Odour: Odourless  
 pH: N/A  
 Boiling Point/Boiling Range:  
 Melting Point/Melting Range:  
 Flash Point:  
 Flammability:  
 Autoflammability: Auto ignition Temperature >100 C  
 Explosive Properties: -  
 Oxidising Properties: -  
 Relative Density:  
 Solubility: Partially miscible, reacts with water
- (10) Stability & Reactivity  
 Chemical Stability: Stable under recommended storage conditions and in intended use and applications.  
 Conditions to Avoid: Elevated temperatures.  
 Materials to Avoid: None known.  
 Hazardous Decomposition Products: Stable under recommended storage conditions and in intended use and applications.  
 Toxic fumes or vapours may be generated on incineration.
- (11) Toxicological Information  
 Oral: Single dose oral toxicity is low.  
 Harmful.

Skin: Repeated skin contact will cause defatting, leading to irritation and dermatitis.

Eyes: May cause irritation.

Respiratory: May cause headaches, breathlessness (respiratory effects could be delayed). Propellant gas can displace air.

Sensitisation: Respiratory sensitisation may occur as a result of long term exposure to isocyanate vapours or short term exposure to excessive vapour concentrations.

Chronic effects: Possible sensitisation and long-term asthma-like symptoms may result from exposure to isocyanates.

Appraisal of Toxicological Data: Repeated or prolonged exposure to components of this preparation may result in irreversible effects.

(12) Ecological Information

Entry into water may result in the blocking of sunlight and oxygen diffusion so causing harm to the aquatic environment. Bioaccumulative potential of some components should be considered to be high due to low biodegradation rates. All necessary precautions should be taken to prevent entry of the components into soil, water or atmosphere.

(13) Disposal Considerations

Aerosol can should not be punctured or incinerated after use.  
 Small quantities of isocyanate may be decontaminated using an approved technique.  
 DISPOSE OF by the WASTE DISPOSAL AUTHORITY.

(14) Transport Information

UN No.	1950
Packing Group	Not applicable
ADR/RED Class	2,10(b) 1
IMO Class	9
ICAO/IATA Class	2.1
IMO Shipping name	Aerosols
IATA Shipping name	Aerosols, flammable, N.O.S., containing substances in Division 6.1, Packing Group III
ADR/RID Shipping name	Aerosol dispensers
MFAG Table No.	370
EMS No.	6.1-02
Marine Pollutant (Yes/No)	No

(15) Regularity Information

HARMFUL

R20 - Harmful by inhalation

S02 - Keep out of reach of children.

R36/37/38 - Irritating to eyes, skin

S16 - Keep away from sources of ignition, no smoking & respiratory system.

S23 - Do not breathe vapour/spray.

R42 - May cause sensitisation by

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S28 - After contact with skin, wash

S37/39 - Wear suitable gloves and eye/face protection.  
 immediately with plenty of soap & water.

S38 - In case of insufficient ventilation,  
 wear suitable respiratory equipment.

S45 - In case of accident or if you feel  
 unwell, seek medical advice immediately  
 (show the label where possible).

S51 - Use only in well ventilated areas.

Other Phrases

Do not spray on flame or incandescent objects

Discard only when completely empty

Contains isocyanates

See information supplied by the manufacturer

No smoking, naked flames or other sources of ignition. Earth all electrical equipment. Take precautionary measures against static discharge.

Aerosol can is pressurised-protect from sunlight and do not expose to temperatures exceeding 50 °C

Aerosol can should not be punctured or incinerated after use

All organic materials are combustible and may present a fire risk if exposed to flame, fire heat or other potential sources of ignition.

Product Registration(s)

MDI prepolymer solution in propellant

(16) Other Information

THE (COSHH) Control of Substances Hazardous to Health Regulations 1994 may apply to the use of this product at work.

Recommended Use      IF YOU FEEL UNWELL, seek medical advice (show label where possible). Required training Engineering control of operator exposure must be used where reasonably practicable.

The information contained on these sheets is, to the best of our knowledge, true and accurate, but any recommendations or suggestions are made without guarantee.