



SAFETY DATA SHEET

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Product name

FORCH LIQUID METAL GREY K154 30G

Synonyms 6430 4185 - ARTICLE NUMBER • FORCH LIQUID METAL GREY K154

1.2 Uses and uses advised against

Uses ADHESIVE • EPOXY ADHESIVE

1.3 Details of the supplier of the product

Supplier name	FORCH AUSTRALIA PTY LTD
Address	2 Forward St, Gnangara, WA, 6077, AUSTRALIA
Telephone	(08) 9303 9113
Fax	(08) 9303 9114
Email	shop@forch.com.au
Website	https://www.forch.com.au/

1.4 Emergency telephone numbers

Emergency(08) 9303 9113Emergency0413 550 330; 0424 135 792

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

Physical Hazards

Not classified as a Physical Hazard

Health Hazards

Skin Corrosion/Irritation: Category 2 Skin Sensitisation: Category 1 Serious Eye Damage / Eye Irritation: Category 2A Germ Cell Mutagenicity: Category 2

Environmental Hazards

Aquatic Toxicity (Chronic): Category 2

2.2 GHS Label elements

Signal word WARNING

Pictograms



Hazard statements

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H341	Suspected of causing genetic defects.
H411	Toxic to aquatic life with long lasting effects.

ChemAlert.

Prevention statements	S
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash thoroughly after handling.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
Response statements	
P302 + P352	IF ON SKIN: Wash with plenty of water.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
P321	Specific treatment is advised - see first aid instructions.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P391	Collect spillage.
Storage statements	
P405	Store locked up.
Disposal statements	
P501	Dispose of contents/container in accordance with relevant regulations.

2.3 Other hazards

No information provided.

3. COMPOSITION/ INFORMATION ON INGREDIENTS

3.1 Substances / Mixtures

Ingredient	CAS Number	EC Number	Content (w/w)
BISPHENOL A DIGLYCIDYL ETHER	1675-54-3	216-823-5	50 to <70%
GLYCIDYL-2-METHYLPHENYL ETHER	2210-79-9	218-645-3	1 to 10%
ALUMINIUM POWDER (STABILISED)	7429-90-5	231-072-3	Not Available
BARIUM SULPHATE	7727-43-7	231-784-4	Not Available
SILICON DIOXIDE	99439-28-8	685-393-2	Not Available

4. FIRST AID MEASURES

4.1 Description of first aid measures

Еуе	If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.
Inhalation	If inhaled, remove from contaminated area. To protect rescuer, use a Type A (Organic vapour) respirator or an Air-line respirator (in poorly ventilated areas). Apply artificial respiration if not breathing.
Skin	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor.
Ingestion	For advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If swallowed, do not induce vomiting.
First aid facilities	Eye wash facilities and safety shower should be available.

4.2 Most important symptoms and effects, both acute and delayed

Irritating to the eyes and skin. May cause sensitisation by skin contact.

4.3 Immediate medical attention and special treatment needed

Treat symptomatically.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Dry agent, carbon dioxide or foam. Prevent contamination of drains and waterways.

ChemAlert.

5.2 Special hazards arising from the substance or mixture

Combustible. May evolve toxic gases (carbon/ nitrogen/ sulphur/ silicon oxides, hydrogen chloride, halogenated compounds, phenol, hydrocarbons) when heated to decomposition.

5.3 Advice for firefighters

Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.

5.4 Hazchem code

•3Z

- •3 Alcohol Resistant Foam is the preferred firefighting medium but, if it is not available, normal foam can be used.
- Z Wear full fire kit and breathing apparatus. Contain spill and run-off.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS. Clear area of all unprotected personnel. Ventilate area where possible. Contact emergency services where appropriate.

6.2 Environmental precautions

Prevent product from entering drains and waterways.

6.3 Methods of cleaning up

Contain spillage, then cover / absorb spill with non-combustible absorbent material (vermiculite, sand, or similar), collect and place in suitable containers for disposal. Eliminate all sources of ignition.

6.4 Reference to other sections

See Sections 8 and 13 for exposure controls and disposal.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

7.2 Conditions for safe storage, including any incompatibilities

Store tightly sealed in a cool, dry, well ventilated area, removed from incompatible substances, heat or ignition sources and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Check regularly for leaks or spills. Large storage areas should be bunded and have appropriate fire protection and ventilation systems.

7.3 Specific end uses

No information provided.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Exposure standards

Ingredient	Reference	TWA		STEL	
ingreatent	Reference	ppm	mg/m³	ppm	mg/m³
Aluminium & compounds	SWA [Proposed]		1		
Aluminium (metal dust)	SWA [AUS]		10		
Aluminium (welding fumes) (as Al)	SWA [AUS]		5		
Aluminium, pyro powders (as Al)	SWA [AUS]		5		
Barium sulphate	SWA [AUS]		10		
Barium sulphate (inhalable)	SWA [Proposed]		4		
Barium sulphate (respirable)	SWA [Proposed]		1.35		

Biological limits

No biological limit values have been entered for this product.



8.2 Exposure controls

Engineering controls Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended.

PPE

Eye / Face	Wear splash-proof goggles.
Hands	Wear PVA or Viton® or nitrile gloves.
Body	Wear coveralls. If spraying, with prolonged use, or if in confined areas, wear impervious coveralls.
Respiratory	Where an inhalation risk exists, wear a Type A (organic vapour) / Organic vapour respirator. If sanding dry product, wear a Class P1 (particulate) / N95 respirator.



9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	LIGHT YELLOW LIQUID
Odour	CHARACTERISTIC ODOUR
Flammability	CLASS C2 COMBUSTIBLE
Flash point	> 93°C
Boiling point	NOT AVAILABLE
Melting point	NOT AVAILABLE
Evaporation rate	NOT AVAILABLE
рН	NOT AVAILABLE
Vapour density	NOT AVAILABLE
Relative density	1.16
Solubility (water)	INSOLUBLE
Vapour pressure	NOT AVAILABLE
Upper explosion limit	NOT AVAILABLE
Lower explosion limit	NOT AVAILABLE
Partition coefficient	NOT AVAILABLE
Autoignition temperature	NOT AVAILABLE
Decomposition temperature	NOT AVAILABLE
Viscosity	NOT AVAILABLE
Explosive properties	NOT EXPLOSIVE
Oxidising properties	NON OXIDISING
Odour threshold	NOT AVAILABLE

10. STABILITY AND REACTIVITY

10.1 Reactivity

Carefully review all information provided in sections 10.2 to 10.6.

10.2 Chemical stability

Stable under recommended conditions of storage.

10.3 Possibility of hazardous reactions

Hazardous polymerisation is not expected to occur.

10.4 Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources.

10.5 Incompatible materials

Incompatible with oxidising agents (e.g. hypochlorites), acids (e.g. nitric acid), alkalis (e.g. sodium hydroxide), heat and ignition sources.

10.6 Hazardous decomposition products

May evolve toxic gases (carbon/ nitrogen/ sulphur/ silicon oxides, hydrogen chloride, halogenated compounds, phenol, hydrocarbons) when heated to decomposition.

ChemAlert.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Acute oral exposure may result in irritation of the mouth, throat, oesophagus and gastrointestinal tract.

Information available for the ingredients:

Ingredient		Oral LD50	Dermal LD50	Inhalation LC50
BISPHENOL A DIGL	BISPHENOL A DIGLYCIDYL ETHER			
GLYCIDYL-2-METHY	LPHENYL ETHER	4000 mg/kg (rat)		
BARIUM SULPHATE		> 5000 mg/kg (rat)	> 2000 mg/kg (rat)	
Skin	Contact may result in irritation	on, redness, rash and derm	atitis.	
Eye	Contact may result in irritation	on, lacrimation, pain and re	dness.	
Sensitisation	Epoxy resins may cause allergic skin reactions. Insufficient data for classification as a respiratory sensitiser.			
Mutagenicity	Suspected of causing genetic defects.			
Carcinogenicity	Not classified as a carcinogen.			
Reproductive	Not classified as a reproductive toxin.			
STOT - single exposure	Over exposure may result in irritation of the nose and throat, with coughing. High level exposure may result in dizziness, drowsiness and breathing difficulties.			
STOT - repeated exposure	Not classified as causing organ damage from repeated exposure.			
Aspiration	Not classified as causing as	piration.		

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

No information provided.

12.3 Bioaccumulative potential

No information provided.

12.4 Mobility in soil

No information provided.

12.5 Other adverse effects

Avoid contamination of drains and waterways.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste disposal Mix components together (small amounts), absorb with sand, vermiculite or similar and dispose of to an approved landfill site. Ensure protective equipment is worn when mixing. Do not seal containers/tins until reaction is complete. Contact the manufacturer/supplier for additional information (if required). Prevent contamination of drains and waterways as environmental damage may result.

Legislation Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE





	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
14.1 UN Number	3082	3082	3082
14.2 Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains epoxy resin)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains epoxy resin)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains epoxy resin)
14.3 Transport hazard class	9	9	9
14.4 Packing Group			

14.5 Environmental hazards

Marine Pollutant.

14.6 Special precautions for user

Hazchem code	•3Z
GTEPG	9C1
EmS	F-A, S-F
Other information	The environmentally hazardous substance mark is not required when transported in packages of less than 5 kg/L (UN Model Regulations: Special Provision 375; IATA: Special Provision A197; IMDG: Special Provision 969) or less than 500 kg/L by Australian Road and Rail.

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture			
Poison schedule	Classified as a Schedule 5 (S5) Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).		
Classifications	Safe Work Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals (GHS Revision 7).		
Inventory listings	AUSTRALIA: AIIC (Australian Inventory of Industrial Chemicals) Some components are listed on AIIC, or are exempt.		

16. OTHER INFORMATION

Additional information

WELDING - SANDING - CUTTING DRIED OR CURED PRODUCT: If sanding, cutting or welding dried or cured product, adverse health effects may be avoided by the use of appropriate engineering controls and/or personal protective equipment. If welding, wear a Class P2 (Metal fume) respirator and depending on the nature of the surface being welded, additional protection (e.g. for organic vapours/acid gas) may also be required. A Class P1 (Particulate) respirator is recommended if dust is generated.

EPOXY - PHENOXY RESINS AND POLYURETHANES: Where spray painting with two or more component epoxy resins or polyurethane paints is undertaken, an employee shall wear a air-line respirator, full length chemically resistant coveralls and gloves. Further, if an individual is to enter an enclosed booth where a vapour or gas curing process is occurring, an air-line respirator is required. Once cured, these resins are considered non toxic.

RESPIRATORS: In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:

The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as form of product, method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.



HEALTH EFFECTS FROM EXPOSURE:

It should be noted that the effects from exposure to this product will depend on several factors including: form of product; frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

Abbreviations AC	ACGIH	American Conference of Governmental Industrial Hygienists	
	CAS #	Chemical Abstract Service number - used to uniquely identify chemical compounds	
	CNS	Central Nervous System	
	EC No.	EC No - European Community Number	
	EMS	Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods)	
GTE IAR(LC5 LD5 mg/r OEL pH ppm STE STC STC	GHS	Globally Harmonized System	
	GTEPG	Group Text Emergency Procedure Guide	
	IARC	International Agency for Research on Cancer	
	LC50	Lethal Concentration, 50% / Median Lethal Concentration	
	LD50	Lethal Dose, 50% / Median Lethal Dose	
	mg/m³	Milligrams per Cubic Metre	
	OEL	Occupational Exposure Limit	
	·	relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).	
		Parts Per Million	
		Short-Term Exposure Limit	
	STOT-RE	Specific target organ toxicity (repeated exposure)	
	STOT-SE	Specific target organ toxicity (single exposure)	
	SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons	
		Safe Work Australia	
		Threshold Limit Value	
	IVVA	Time Weighted Average	
Report status	This document has been compiled by RMT on behalf of the manufacturer, importer or supplier of the product and serves as their Safety Data Sheet ('SDS').		
	It is based on information concerning the product which has been provided to RMT by the manufacturer, importer or supplier or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer, importer or supplier.		
	While RMT has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.		
Prepared by	5 Ventnor Ă Western Au Phone: +61 Fax: +61 8 9 Email: info@	Risk Management Technologies 5 Ventnor Ave, West Perth Western Australia 6005 Phone: +61 8 9322 1711 Fax: +61 8 9322 1794 Email: info@rmtglobal.com Web: www.rmtglobal.com	
		[End of SDS]	

