SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product Name	Gagekote #5 Part B

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified Use(s)	Epoxy / Urethane Resin
Uses Advised Against	Anything other than the above.

1.3 Details of the supplier of the safety data sheet

Company Identification	VISHAY MEASUREMENTS GROUP UK LTD Stroudley Road Basingstoke Hampshire RG24 8FW United Kingdom
Telephone	+44 (0) 1256 462131
Fax	+44 (0) 1256 471441
E-Mail (competent person)	mm.uk@vishaypg.com

1.4 Emergency telephone number

Emergency Phone No.	(00-1) 703-527-3887	CHEMTREC (24 hours)
Languages spoken	All official European languages.	

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

2.1.1 Regulation (EC) No. 1272/2008 (CLP)

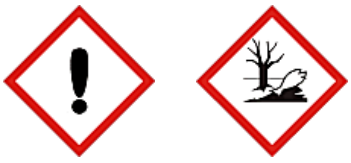
Skin Irrit. 2; H315
Skin Sens. 1; H317
Eye Irrit. 2; H319
Aquatic Chronic 2; H411

2.2 Label elements

Product Name: Gagekote #5 Part B

Contains: Phenol, polymer with formaldehyde, glycidyl ether and Poly[oxy(methyl-1,2-ethanediyl)], α-(2-oxiranylmethyl)-ω-(2-oxiranylmethoxy)-

Hazard Pictogram(s)



Signal Word(s): DANGER

Hazard Statement(s):
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H411: Toxic to aquatic life with long lasting effects.

Precautionary Statement(s):
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P261: Avoid breathing vapours.
P302+P352: IF ON SKIN: Wash with plenty of water.
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313: If eye irritation persists: Get medical advice/attention.

2.3 Other hazards None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances Not applicable

3.2 Mixtures

EC Classification Regulation (EC) No. 1272/2008 (CLP)

Chemical identity of the substance	%W/W	CAS No.	EC No.	REACH Registration No.	Hazard classification
Phenol, polymer with formaldehyde, glycidyl ether	<60	28064-14-4	-	Not yet assigned in the supply chain	Skin Irrit. 2; H315 Skin Sens. 1; H317 Eye Irrit. 2; H319 Aquatic Chronic 2; H410
Poly[oxy(methyl-1,2-ethanediyl)], α-(2-oxiranylmethyl)-ω-(2-oxiranylmethoxy)-	30 - 35	26142-30-3	-	Not yet assigned in the supply chain	Skin Irrit. 2; H315 Skin Sens. 1; H317 Eye Irrit. 2; H319
Talc*	20 - 25	14807-96-6	238-887-9	Not yet assigned in the supply chain	Not classified

For full text of H/P Statements see section 16. *Substance with a national exposure limit

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Self-protection of the first aider: Use personal protective equipment as required. Wear appropriate personal protective equipment, avoid direct contact. Ensure adequate ventilation. Avoid breathing vapours. Avoid contact with skin, eyes or clothing.

Inhalation: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Apply artificial respiration if breathing has ceased or shows signs of failing. Get medical advice/attention if you feel unwell.

Skin Contact: IF ON SKIN (or hair): After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of soap and water. If irritation (redness, rash, blistering) develops, get medical attention.

Eye Contact: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 15 minutes. Immediately call a POISON CENTER/doctor.

Ingestion: Rinse mouth with water (do not swallow). Do NOT induce vomiting. If vomiting occurs turn patient on side. Never give anything by mouth to an unconscious person. IF exposed or concerned: Call a POISON CENTER/doctor.

4.2 Most important symptoms and effects, both acute and delayed Causes skin irritation. Causes eye irritation. May cause an allergic skin reaction.

4.3 Indication of any immediate medical attention and special treatment needed Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing media: As appropriate for surrounding fire. Extinguish preferably with foam, carbon dioxide or dry chemical.

Unsuitable extinguishing media: Do not use water jet. Direct water jet may spread the fire.

5.2 Special hazards arising from the substance or mixture Not flammable. May decompose in a fire giving off toxic fumes. Combustion products: Carbon monoxide, Carbon dioxide

5.3 Advice for fire-fighters Fire fighters should wear complete protective clothing including self-contained

breathing apparatus. Do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. Avoid run off to waterways and sewers.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1	**Personal precautions, protective equipment and emergency procedures**	Use personal protective equipment as required. Wear appropriate personal protective equipment, avoid direct contact. Ensure operatives are trained to minimise exposures. Contaminated clothing should be laundered before reuse. Ensure adequate ventilation. Avoid breathing vapours. Avoid contact with skin, eyes or clothing.
	Large spillages:	Evacuate the area and keep personnel upwind. Only trained and properly protected personnel must be involved in clean-up operations.
6.2	**Environmental precautions**	Avoid release to the environment. Do not allow to enter drains, sewers or watercourses.
6.3	**Methods and material for containment and cleaning up**	Contain spillages with sand, earth or any suitable adsorbent material. Sweep or shovel-up spillage and remove to a safe place. Transfer to a container for disposal or recovery.
	Small spillages:	Allow small spillages to evaporate provided there is adequate ventilation.
	Large spillages:	Only trained and properly protected personnel must be involved in clean-up operations.
6.4	**Reference to other sections**	See Section: 8, 13

SECTION 7: HANDLING AND STORAGE

7.1	**Precautions for safe handling**	Ensure operatives are trained to minimise exposures. Ensure adequate ventilation. Wear appropriate personal protective equipment, avoid direct contact. Avoid breathing vapours. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Keep good industrial hygiene. Wash hands thoroughly after handling. Contaminated clothing should be thoroughly cleaned. Do not eat, drink or smoke at the work place. Keep from direct sunlight.
7.2	**Conditions for safe storage, including any incompatibilities**	Keep only in original container. Store in a cool/low-temperature, well-ventilated (dry) place away from heat and ignition sources.
	Storage temperature	Store at ambient temperature.
	Incompatible materials	Strong oxidising agents, Acids and Bases.
7.3	**Specific end use(s)**	See Section: 1.2

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Occupational Exposure Limits

SUBSTANCE	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m³)	STEL (ppm)	STEL (mg/m³)	Note
Talc	14807-96-6	-	1	-	-	WEL Respirable Aerosol

Source: WEL: Workplace Exposure Limit (UK HSE EH40)

8.1.2 Biological limit value Not established.

8.1.3 PNECs and DNELs Not established.

8.2 Exposure controls

8.2.1 Appropriate engineering controls Ensure adequate ventilation. Store in a cool/low-temperature, well-ventilated (dry) place away from heat and ignition sources. Atmospheric levels should be controlled in compliance with the occupational exposure limit.

8.2.2	**Individual protection measures, such as personal protective equipment (PPE)**	Keep good industrial hygiene. Wear appropriate personal protective equipment, avoid direct contact. Avoid breathing vapours. Avoid contact with skin, eyes or clothing. IF exposed: Wash immediately with water. Wash contaminated clothing before reuse. Do not eat, drink or smoke at the work place.
	Eye/ face protection 	Wear protective eye glasses for protection against liquid splashes. Wear eye protection with side protection (EN166).
	Skin protection 	**Hand protection:** Wear impervious gloves (EN374). Protective index 6, corresponding > 480 minutes of permeation time according to EN 374 Gloves should be changed regularly to avoid permeation problems. Breakthrough time of the glove material: refer to the information provided by the gloves' producer. Suitable materials: Butyl rubber, Nitrile rubber, Neoprene. **Body protection:** Wear impervious protective clothing, including boots, lab coat, apron or coveralls, as appropriate, to prevent skin contact.
	Respiratory protection 	In case of inadequate ventilation wear respiratory protection. A suitable mask with filter type A (EN141 or EN405) may be appropriate. A suitable mask with filter type A (EN141 or EN405) may be appropriate.
	Thermal hazards	Not applicable
8.2.3	**Environmental Exposure Controls**	Avoid release to the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Green, thixotropic paste
Odour	Slight
Odour threshold	Not established
pH	Not established
Melting point/freezing point	Not established
Initial boiling point and boiling range	Not established
Flash point	>150 °C [Closed cup]
Evaporation rate (Water = 1)	Not established
Flammability (solid, gas)	Not established
Upper/lower flammability or explosive limits	Not established
Vapour pressure	LT 1mm Hg
Vapour density	Not applicable
Relative density	Not established
Solubility(ies)	Partly soluble in water.
Partition coefficient: n-octanol/water	Not established
Auto-ignition temperature	Not established
Decomposition Temperature	Not established
Viscosity	Green, thixotropic paste
Explosive properties	Not established
Oxidising properties	Not established

9.2 Other information None known

SECTION 10: STABILITY AND REACTIVITY

10.1	**Reactivity**	Stable under normal conditions.
10.2	**Chemical stability**	Stable under normal conditions.
10.3	**Possibility of hazardous reactions**	Stable under normal conditions. Hazardous polymerisation will not occur.

10.4	**Conditions to avoid**	Heat
10.5	**Incompatible materials**	Strong oxidising agents, Acids and Bases.
10.6	**Hazardous decomposition product(s)**	Combustion products: Carbon monoxide, Carbon dioxide

SECTION 11: TOXICOLOGICAL INFORMATION

11.1	**Information on toxicological effects**	
	Acute toxicity - Ingestion	Based upon the available data, the classification criteria are not met. Acute Toxicity Estimate Mixture Calculation: Estimated LC50 > 2000 mg/kg bw/day.
	Acute toxicity - Inhalation	Based upon the available data, the classification criteria are not met. Acute Toxicity Estimate Mixture Calculation: Estimated LC50 >20.0 mg/l.
	Acute toxicity - Skin Contact	Based upon the available data, the classification criteria are not met. Acute Toxicity Estimate Mixture Calculation: Estimated LC50 > 2000 mg/kg bw/day.
	Skin corrosion/irritation	Skin Irrit. 2; Causes skin irritation.
	Phenol, polymer with formaldehyde, glycidyl ether:	No data
	Poly[oxy(methyl-1,2-ethanediyl)], α-(2-oxiranylmethyl)-ω-(2-oxiranylmethoxy)-:	No data
	Serious eye damage/irritation	Eye Irrit. 2; Causes eye irritation.
	Phenol, polymer with formaldehyde, glycidyl ether:	No data
	Poly[oxy(methyl-1,2-ethanediyl)], α-(2-oxiranylmethyl)-ω-(2-oxiranylmethoxy)-:	No data
	Respiratory or skin sensitization	Skin Sens. 1; May cause an allergic skin reaction.
	Phenol, polymer with formaldehyde, glycidyl ether:	Allergic contact dermatitis (Pontén, A et al, 1999)
	Poly[oxy(methyl-1,2-ethanediyl)], α-(2-oxiranylmethyl)-ω-(2-oxiranylmethoxy)-:	Allergic contact dermatitis (Haz-Map®)
	Germ cell mutagenicity	Based upon the available data, the classification criteria are not met.
	Carcinogenicity	Based upon the available data, the classification criteria are not met.
	Reproductive toxicity	Based upon the available data, the classification criteria are not met.
	STOT - single exposure	Based upon the available data, the classification criteria are not met.
	STOT - repeated exposure	Based upon the available data, the classification criteria are not met.
	Aspiration hazard	Based upon the available data, the classification criteria are not met.
11.2	**Other information**	None known

SECTION 12: ECOLOGICAL INFORMATION

12.1	**Toxicity**	Aquatic Chronic 2; Toxic to aquatic life with long lasting effects. Estimated Mixture LC50 > 1 to ≤ 10 mg/l. (Fish)
	Phenol, polymer with formaldehyde, glycidyl ether:	EC50 1.6 mg/l 48hr (Daphnia magna) (Wyness LE et al, 1993)
12.2	**Persistence and degradability**	No data for the mixture as a whole.
12.3	**Bioaccumulative potential**	No data for the mixture as a whole.
12.4	**Mobility in soil**	The product is predicted to have low mobility in soil. Partly soluble in water.
12.5	**Results of PBT and vPvB assessment**	Not classified as PBT or vPvB.
12.6	**Other adverse effects**	None known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1	**Waste treatment methods**	Dispose of this material and its container as hazardous wasteSend after pre-treatment to a appropriate hazardous waste incinerator facility according to legislation.
13.2	**Additional Information**	Dispose of contents in accordance with local, state or national legislation.

SECTION 14: TRANSPORT INFORMATION

		ADR/RID	IMDG	IATA/ICAO
14.1	**UN number**	UN 3082	UN 3082	UN 3082
14.2	**UN proper shipping name**	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID (CONTAINS, Phenol, polymer with formaldehyde, glycidyl ether)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID (CONTAINS, Phenol, polymer with formaldehyde, glycidyl ether)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID (CONTAINS, Phenol, polymer with formaldehyde, glycidyl ether)
14.3	**Transport hazard class(es)**	9	9	9
14.4	**Packing group**	III	III	III
14.5	**Environmental hazards**	Environmentally hazardous substance.	Classified as a Marine Pollutant.	Environmentally hazardous substance.
14.6	**Special precautions for user**	See Section: 2		
14.7	**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**	Not applicable		

SECTION 15: REGULATORY INFORMATION

15.1	**Safety, health and environmental regulations/legislation specific for the substance or mixture**	
15.1.1	**EU regulations**	
	Authorisations and/or Restrictions On Use	Not restricted
15.1.2	**National regulations**	None
15.2	**Chemical Safety Assessment**	A chemical safety assessment is not required under REACH.

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1 – 16

References:

the Classification and Labelling Inventory for Phenol, polymer with formaldehyde, glycidyl ether (CAS No. 28064-14-3), Poly[oxy(methyl-1,2-ethanediyl)], α-(2-oxiranylmethyl)-ω-(2-oxiranylmethoxy)- (CAS No. 26142-30-4) and Talc (CAS No. 14807-96-6).
https://hazmap.nlm.nih.gov/

Literature References:

1. Pontén, A. and Bruze, M. (1999), Occupational allergic contact dermatitis from epoxy resins based on bisphenol F. Contact Dermatitis, 41: 235. doi:10.1111/j.1600-0536.1999.tb06149.x
2. Wyness LE, Cheeman H, Lad DD and Baldwin MK (1993), EPIKOTE 862: Acute toxicity to Oncorhunchus mykiss, Daphnia magna and Selenastrum capricornutum; SBGR.92.237

EU Classification: This Safety Data Sheet was prepared in accordance with EC Regulation (EC) 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830.

Classification of the substance or mixture According to Regulation (EC) No. 1272/2008 (CLP)	Classification Procedure
Skin Irrit 2; H315	Threshold Calculation
Eye Irrit 2; H319	Threshold Calculation
Skin Sens. 1; H317	Threshold Calculation
Aquatic Chronic 2; H411	Summation Calculation

LEGEND

LTEL: Long Term Exposure Limit
DNEL: Derived No Effect Level
PBT: PBT: Persistent, Bioaccumulative and Toxic
IARC: The International Agency for Research on Cancer
STEL: Short Term Exposure Limit
PNEC: Predicted No Effect Concentration
vPvB: very Persistent and very Bioaccumulative

Hazard classification / Classification code:

Skin Irrit. 2; Skin corrosion/irritation, Category 2
Skin Sens. 1; Skin Sensitisation, Category 1
Eye Irrit. 2; Eye Irritation, Category 2
Aquatic Chronic 2; Hazardous to the aquatic environment, Chronic , Category 2

Hazard Statement(s)

H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H411: Toxic to aquatic life with long lasting effects.

Training advice: Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required.

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