MICROE MEASUREMENTS

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH),

1272/2008 (CLP) & 2015/830

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#### 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 +44 (0) 1256 462131

 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)],  $\alpha$ -(2-oxiranylmethyl)- $\omega$ -(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.

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.

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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)], $\alpha$ -(2-oxiranylmethyl)- $\omega$ -(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**



4.4	Description of first old mesoning
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.

If breathing is difficult, remove victim to fresh air and keep at rest in a position Inhalation

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 Causes skin irritation. Causes eye irritation. May cause an allergic skin reaction.

and delayed

4.3 Indication of any immediate medical attention and Treat symptomatically.

special treatment needed

#### **SECTION 5: FIREFIGHTING MEASURES**

#### 5.1 **Extinguishing media**

Suitable Extinguishing media

Unsuitable extinguishing media

5.2 Special hazards arising from the substance or mixture

5.3 Advice for fire-fighters As appropriate for surrounding fire. Extinguish preferably with foam, carbon dioxide or dry chemical.

Do not use water jet. Direct water jet may spread the fire.

Not flammable. May decompose in a fire giving off toxic fumes. Combustion products: Carbon monoxide, Carbon dioxide

Fire fighters should wear complete protective clothing including self-contained

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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.

Avoid release to the environment. Do not allow to enter drains, sewers or

watercourses.

6.3 Methods and material for containment and cleaning

up

6.2

6.4

7.3

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.

Reference to other sections See Section: 8, 13

#### **SECTION 7: HANDLING AND STORAGE**

**Environmental precautions** 

**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

Storage temperature

Incompatible materials

Keep only in original container. Store in a cool/low-temperature, well-ventilated

(dry) place away from heat and ignition sources.

Store at ambient temperature.

Strong oxidising agents, Acids and Bases.

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					WEL
		-	1	-	-	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.

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# 8.2.2 Individual protection measures, such as personal protective equipment (PPE)

Eye/ face protection



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.

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.

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.

Respiratory protection



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

Initial boiling point and boiling range

Flash point

Not established

Not established

>150 °C [Closed cup]

Evaporation rate (Water = 1)

Flammability (solid, gas)

Not established

Not established

Upper/lower flammability or explosive limits

Vapour pressure

Vapour density

Relative density

Solubility(ies)

Not established

Not applicable

Not established

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.

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Conditions to avoid 10.4 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 - Skin Contact** 

**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. 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)],  $\alpha$ -(2-oxiranylmethyl)- $\omega$ -No data

(2-oxiranylmethoxy)-:

Serious eye damage/irritation Eye Irrit. 2; Causes eye irritation.

Phenol, polymer with formaldehyde, glycidyl ether: No data Poly[oxy(methyl-1,2-ethanediyl)],  $\alpha$ -(2-oxiranylmethyl)- $\omega$ -No data

(2-oxiranylmethoxy)-:

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)],  $\alpha$ -(2-oxiranylmethyl)- $\omega$ -

(2-oxiranylmethoxy)-:

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.

Based upon the available data, the classification criteria are not met. STOT - single exposure 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** Aguatic Chronic 2: Toxic to aquatic life with long lasting effects.

Estimated Mixture LC50 > 1 to ≤ 10 mg/l. (Fish)

Allergic contact dermatitis (Haz-Map®)

EC50 1.6 mg/l 48hr (Daphnia magna) (Wyness LE et al, 1993) Phenol, polymer with formaldehyde, glycidyl ether:

Persistence and degradability No data for the mixture as a whole. 12.2 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.

Other adverse effects 12.6 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.

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#### **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

**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)],  $\alpha$ -(2-oxiranylmethyl)- $\omega$ -(2-oxiranylmethoxy)- (CAS No. 26142-30-4) and Talc (CAS No. 14807-96-6). https://hazmap.nlm.nih.gov/

None

#### 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

PNEC: Predicted No Effect Concentration

PBT: PBT: Persistent, Bioaccumulative and Toxic

IARC: The International Agency for Research on Cancer

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#### 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 eve 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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Document No.: 63999 Revision: 15-Jul-2014