

SAFETY DATA SHEET

Version: 2.0
Date of Issue: 05 May 2017
Date of First Issue: 03 September 2012


www.vishaypg.com

ACCORDING TO OSHA HCS (29 CFR 1910.1200)

SECTION 1: IDENTIFICATION

Product identifier used on the label	Gagekote 5 Part B	
Other means of identification	Not applicable	
Recommended use of the chemical and restrictions on use		
Recommended use	Epoxy / Urethane Resin	
Restrictions on use	Anything other than the above.	
Details of the supplier of the safety data sheet		
Supplier	VISHAY MEASUREMENTS GROUP, INC.	
Address of Supplier	Post Office Box 27777 Raleigh, NC 27611 USA	
Telephone	+1 919-365-3800	
Fax	+1 919-365-3945	
E-Mail (competent person)	mm.us@vishaypg.com	
Emergency telephone number	1-800-424-9300	CHEMTREC (24 hours)

SECTION 2: HAZARD(S) IDENTIFICATION

Classification of the substance or mixture in accordance with paragraph (d) of 29 CFR 1910.1200		
Physical hazards	Not classified	
Health hazards	Skin Corrosion/Irritation, Category 2 Skin Sensitisation, Category 1 Eye Irritation, Category 2	
Environmental hazards	Hazardous to the aquatic environment, Chronic, Category 2	
Hazard Symbol		
Signal Word(s)	DANGER	
Hazard Statement(s)	Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Toxic to aquatic life with long lasting effects.	
Precautionary Statement(s)	Wash hands and exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.	
Other hazards	None known.	
Percent of the mixture consists of ingredient(s) of unknown acute toxicity:	0%	

SAFETY DATA SHEET

Version: 2.0
Date of Issue: 05 May 2017
Date of First Issue: 03 September 2012

www.vishaypg.com

ACCORDING TO OSHA HCS (29 CFR 1910.1200)

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substances Not applicable

Mixtures Substances in preparations / mixtures

Chemical identity of the substance	%W/W	CAS No.	EC No.	Hazard classification
Phenol, polymer with formaldehyde, glycidyl ether	<60	28064-14-4	608-164-0	Skin Corrosion/Irritation, Category 2 Skin Sensitisation, Category 1 Eye Irritation, Category 2 Hazardous to the aquatic environment, Chronic, Category 2
Poly[oxy(methyl-1,2-ethanediyl)], α-(2-oxiranylmethyl)-ω-(2-oxiranylmethoxy)-	30 - 35	26142-30-3	607-873-2	Skin Corrosion/Irritation, Category 2 Skin Sensitisation, Category 1 Eye Irritation, Category 2
Talc	20 - 25	14807-96-6	238-887-9	Not classified

SECTION 4: FIRST AID MEASURES



Description of first aid measures

Self-protection of the first aider

Inhalation

Skin Contact

Eye Contact

Ingestion

Most important symptoms and effects, both acute and delayed

Indication of any immediate medical attention and special treatment needed

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 comfortable for breathing. Apply artificial respiration if breathing has ceased or shows signs of failing. Get medical advice/attention if you feel unwell.

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.

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.

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.

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

Treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media

Unsuitable extinguishing Media

Special hazards arising from the substance or mixture

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

SAFETY DATA SHEET

Version: 2.0
Date of Issue: 05 May 2017
Date of First Issue: 03 September 2012

www.vishaypg.com

ACCORDING TO OSHA HCS (29 CFR 1910.1200)

SECTION 6: ACCIDENTAL RELEASE MEASURES

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.

Methods and material for containment and cleaning up

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

Small spillages:

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.

Large spillages:

Allow small spillages to evaporate provided there is adequate ventilation. Only trained and properly protected personnel must be involved in clean-up operations.

SECTION 7: HANDLING AND STORAGE

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.

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.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

SUBSTANCE	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m ³)	STEL (ppm)	STEL (mg/m ³)	Note
Talc (containing no asbestos and less than 1% quartz)	14807-96-6	-	2	-	-	NIOSH Respirable Dust
		20 mppcf*	-	-	-	OSHA
		-	2	-	-	ACGIH, A4

Note: OSHA PELs 1910.1000 TABLE Z-3/ NIOSH RELs / ACGIH TLVs

A4: Not Classifiable as a Human Carcinogen: Agents which cause concern that they could be carcinogenic for humans but which cannot be assessed conclusively because of the lack of data. In vitro or animal studies do not provide indications of carcinogenicity which are sufficient to classify the agent into one of the other categories.

*Mppcf: Millions of particles per cubic foot of air

The other components listed in Section 3 do not have occupational exposure limits.

Biological Exposure Indices

Not established

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.

Individual protection measures, such as personal

Keep good industrial hygiene. Wear appropriate personal protective equipment,

SAFETY DATA SHEET

Version: 2.0

Date of Issue: 05 May 2017

Date of First Issue: 03 September 2012

www.vishaypg.com

ACCORDING TO OSHA HCS (29 CFR 1910.1200)

protective equipment (PPE)

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.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Green, thixotropic paste
Odor	Slight
Odor 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 (Butyl acetate = 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

SECTION 10: STABILITY AND REACTIVITY

Reactivity	Stable under normal conditions.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	Stable under normal conditions. Hazardous polymerisation will not occur.
Conditions to avoid	Heat
Incompatible materials	Strong oxidising agents, Acids and Bases.
Hazardous decomposition product(s)	Combustion products: Carbon monoxide, Carbon dioxide

SAFETY DATA SHEET

Version: 2.0
Date of Issue: 05 May 2017
Date of First Issue: 03 September 2012

www.vishaypg.com

ACCORDING TO OSHA HCS (29 CFR 1910.1200)

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects (Substances in preparations / mixtures)

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 Corrosion/Irritation, Category 2; Causes skin irritation.
Serious eye damage/irritation	Eye Irritation, Category 2; Causes serious eye irritation.
Respiratory or skin sensitization	Skin Sensitisation, Category 1; May cause an allergic skin reaction.
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.

Information on likely routes of exposure

Inhalation	Unlikely – accidental exposure
Ingestion	Unlikely – accidental exposure
Skin Contact	Possible – accidental exposure
Eye Contact	Unlikely – accidental exposure

Early onset symptoms related to exposure Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation.

Delayed health effects from exposure None known

Other information

NTP Report on Carcinogens	All chemicals are not listed
IARC Monographs	Talc - Group 3: Not classifiable as to its carcinogenicity to humans.
OSHA Designated Carcinogen	All chemicals are not listed

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity	Aquatic Chronic 2; Toxic to aquatic life with long lasting effects. Estimated Mixture LC50 > 1 to ≤ 10 mg/l. (Fish)
Persistence and degradability	No data for the mixture as a whole.
Bioaccumulative potential	No data for the mixture as a whole.
Mobility in soil	The product is predicted to have low mobility in soil. Partly soluble in water.
Other adverse effects	None known.

SECTION 13: DISPOSAL CONSIDERATIONS

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

SAFETY DATA SHEET

Version: 2.0
Date of Issue: 05 May 2017
Date of First Issue: 03 September 2012

www.vishaypg.com

ACCORDING TO OSHA HCS (29 CFR 1910.1200)

SECTION 14: TRANSPORT INFORMATION

	ADR/RID	IMDG	IATA
UN number	UN 3082	UN 3082	UN 3082
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)
Transport hazard class(es)	9	9	9
Packing group	III	III	III
Environmental hazards	Environmentally hazardous substance.	Classified as a Marine Pollutant.	Environmentally hazardous substance.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable		
Special precautions for user	See Section: 2		

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

US Federal Regulations

TSCA (Toxic Substance Control Act)

Phenol, polymer with formaldehyde, glycidyl ether: Exempt from reporting under CDR

Poly[oxy(methyl-1,2-ethanediyl)], α -(2-oxiranylmethyl)- ω -(2-oxiranylmethoxy)-: Exempt from reporting under CDR

Talc: Subject to 25,000 lb reporting threshold

All chemicals are not listed

EPCRA/SARA Section 302 Extremely Hazardous Substances

EPCRA Section 313 Toxics Release Inventory (TRI) Program

All chemicals are not listed

NIOSH Occupational Carcinogen List

All chemicals are not listed

OSHA List of highly hazardous chemicals, toxics and reactives

All chemicals are not listed

NTP Report on Carcinogens (RoC) List

All chemicals are not listed

Poison Prevention Packaging Act

All chemicals are not listed

US State Regulations

California State, Proposition 65 List

All chemicals are not listed

California State, Safer Consumer Products Regulations

Talc - Candidate Chemicals List

Maine State, Toxic Chemicals in Children's Products Act

All chemicals are not listed

New Jersey State Worker and Community RTK Act

Talc - RTKHSL. SHHSL

Pennsylvania State, Worker and Community RTK Act

Talc - Hazardous Substance List

Rhode Island State, Hazardous Substances RTK Act

Talc - Hazardous Substance List

Non-Regional

IARC Monographs, List of Classifications

Talc - Group 3: Not classifiable as to its carcinogenicity to humans.

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: New SDS Regulation compliant with HazCom 2012 format, all sections have been updated to include new information. Please review SDS with care.

Version 2.0
Revision Date 05 May 2017
Date of First Issue 03 September 2012

References:

Existing Safety Data Sheet (SDS) EU Data: 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).

SAFETY DATA SHEET



Version: 2.0

Date of Issue: 05 May 2017

Date of First Issue: 03 September 2012

www.vishaypg.com

ACCORDING TO OSHA HCS (29 CFR 1910.1200)

GHS Classification of the substance or mixture	Classification Procedure
Skin Corrosion/Irritation, Category 2	Threshold Calculation
Skin Sensitisation, Category 1	Threshold Calculation
Eye Irritation, Category 2	Threshold Calculation
Hazardous to the aquatic environment, Chronic, Category 2	Summation Calculation

LEGEND

ACGIH: American Conference of Governmental Industrial Hygienists

BEI: Biological Exposure Indices (ACGIH)

IARC: International Agency for Research on Cancer

Irr: Irritation

NIOSH: National Institute of Occupational Safety and Health

NTP: National Toxicology Program

OSHA: The Occupational Safety & Health Administration

PBT: Persistent, Bioaccumulative and Toxic

PEL: Permissible exposure limit

REL: Recommended exposure limit

SCL: Specific Concentration Limit

Skin²: Risk of overexposure via dermal contact

STEL: Short Term Exposure Limit

TLV: Threshold Limit value

TSCA: Toxic Substance Control Act

TWA: Time Weighted Average

URT: Upper respiratory tract

vPvB: very Persistent and very Bioaccumulative

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.

Disclaimers

Information contained in this publication or as otherwise supplied to Users is believed to be accurate and is given in good faith, but it is for the Users to satisfy themselves of the suitability of the product for their own particular purpose. Vishay Precision Group gives no warranty as to the fitness of the product for any particular purpose and any implied warranty or condition (statutory or otherwise) is excluded except to the extent that exclusion is prevented by law. Vishay Precision Group accepts no liability for loss or damage (other than that arising from death or personal injury caused by defective product, if proved), resulting from reliance on this information. Freedom under Patents, Copyright and Designs cannot be assumed.

Disclaimer

ALL PRODUCTS, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE.

Vishay Precision Group, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "VPG"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained herein or in any other disclosure relating to any product.

The product specifications do not expand or otherwise modify VPG's terms and conditions of purchase, including but not limited to, the warranty expressed therein.

VPG makes no warranty, representation or guarantee other than as set forth in the terms and conditions of purchase. **To the maximum extent permitted by applicable law, VPG disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.**

Information provided in datasheets and/or specifications may vary from actual results in different applications and performance may vary over time. Statements regarding the suitability of products for certain types of applications are based on VPG's knowledge of typical requirements that are often placed on VPG products. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. You should ensure you have the current version of the relevant information by contacting VPG prior to performing installation or use of the product, such as on our website at vpgsensors.com.

No license, express, implied, or otherwise, to any intellectual property rights is granted by this document, or by any conduct of VPG.

The products shown herein are not designed for use in life-saving or life-sustaining applications unless otherwise expressly indicated. Customers using or selling VPG products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify VPG for any damages arising or resulting from such use or sale. Please contact authorized VPG personnel to obtain written terms and conditions regarding products designed for such applications.

Product names and markings noted herein may be trademarks of their respective owners.

Copyright Vishay Precision Group, Inc., 2014. All rights reserved.