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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 11
Chemical Name Mixture
CAS No. Mixture
EINECS No. Mixture
REACH Registration No. None assigned.

1.2 Relevant identified uses of the substance or mixture

and uses advised against

Identified Use(s)

Metal surface treatment products, including galvanic and electroplating products.

Uses Advised Against None known.

1.3 Details of the supplier of the safety data sheet

Company Identification VISHAY MEASUREMENTS GROUP UK LTD

Stroudley Road Basingstoke Hampshire United Kingdom RG24 8FW

 Telephone
 +44 (0) 1256 462131

 Fax
 +44 (0) 1256 471441

 E-Mail (competent person)
 mm.uk@vishaypg.com

1.4 Emergency telephone number (00-1) 703-527-3887

CHEMTREC

2. SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

2.1.1 Regulation (EC) No. 1272/2008 (CLP) Flam. Liq. 2; H225 Asp. Tox. 1; H304 Skin Irrit. 2; H315 Eye Irrit. 2; H319

> STOT SE 3; H336 Repr. 2; H361d STOT RE 2; H373

2.2 Label elements According to Regulation (EC) No. 1272/2008 (CLP)

Product Name Gagekote 11

Hazard Pictogram(s)







Signal Word(s) Danger

Contains: Toluene, Propan-2-ol, Stoddard solvent and Xylene.

Hazard Statement(s)

H225: Highly flammable liquid and vapour.

H304: May be fatal if swallowed and enters airways.

11304. May be latal if Swallowed and efficies all ways.

H315: Causes skin irritation.
H319: Causes serious eye irritation.
H336: May cause drowsiness or dizziness.
H361d: Suspected of damaging the unborn child.

H373: May cause damage to organs through prolonged or repeated exposure:

Inhalation.

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Precautionary Statement(s) P201: Obtain special instructions before use.

P210: Keep away from heat, hot surfaces, sparks, open flames and other

ignition sources. No smoking. P260: Do not breathe vapour.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or

doctor/physician.

P331: Do NOT induce vomiting.

Additional Information None.

2.3 Other hazards None.

3. 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
Toluene		108-88-3	203-625-9	None assigned	Flam. Liq. 2; H225
					Asp. Tox. 1; H304
	30 - 50				Skin Irrit. 2; H315
	30 - 30				STOT SE 3; H336
					Repr. 2; H361d
					STOT RE 2; H373
Propan-2-ol		67-63-0	200-661-7	None assigned	Flam. Liq. 2; H225
	< 10				Eye Irrit. 2; H19
					STOT SE 3; H336
Stoddard solvent		8052-41-3	232-489-3	None assigned	Asp. Tox. 1; H304
	< 10				STOT RE 1; H372
					*
		1330-20-7	215-535-7	None assigned	Flam. Liq. 3; H226
					Asp. Tox. 1; H304
Xylene					Acute Tox. 4; H312
	< 10				Skin Irrit. 2; H315
	< 10				Eye Irrit. 2; H19
					Acute Tox. 4; H332
					STOT SE 3; H335
					STOT RE 2; H373
Zirconium 2-Ethylhexanoate	< 100	22464-99-9	245-018-1	None assigned	Repr. 2; H361d

For full text of H/P Statements see section 16.

*Mixture: %W/W Benzene < 0.0001%

4. SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures

Self-protection of the first aider

Inhalation

Do not breathe vapour. Wear suitable protective clothing. Wear suitable respiratory protective equipment if exposure to high levels of material are likely. IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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Skin Contact

Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. Apply artificial respiration if breathing has ceased or shows signs of failing. IF exposed or concerned: Get medical advice/attention.

IF ON SKIN: Remove contaminated clothing and wash all affected areas with plenty of water. Contaminated clothing should be thoroughly cleaned. If skin irritation occurs: Get medical advice/attention. IF exposed or concerned: Get medical advice/attention.

Eye Contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if eye

Ingestion

irritation develops or persists.

IF SWALLOWED: Do NOT induce vomiting. Rinse mouth. Drink two glasses of water. Do not give milk or alcoholic beverages. Do not give anything by mouth to

4.2 Most important symptoms and effects, both acute and delayed

an unconscious person. Immediately call a POISON CENTER/doctor. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. Suspected of damaging the unborn child. May cause damage to organs through prolonged or

4.3 Indication of any immediate medical attention and special treatment needed repeated exposure.

Treat symptomatically.

Do NOT induce vomiting, if vomiting does occur, have victim lean forward to reduce risk of aspiration. If Gastric Lavage is performed: Endotracheal control and/or esophagoscopy is recommended. Give a slurry of activated charcoal in water to drink. (240mL Water / 30 g Activated charcoal).

5. SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

5.3

6.4

7.

Suitable Extinguishing media

As appropriate for surrounding fire. Extinguish preferably with dry chemical, sand or carbon dioxide.

Unsuitable extinguishing media

Advice for fire-fighters

Do not use water.

5.2 Special hazards arising from the substance or mixture

Highly flammable liquid and vapour. May decompose in a fire giving off toxic fumes. Carbon dioxide and Carbon monoxide. Vapours are heavier than air and may travel considerable distances to a source of ignition and flashback.

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.

6. SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures Ensure adequate ventilation. Stop leak if safe to do so. Eliminate all ignition sources if safe to do so. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not breathe vapour. Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. See Section: 8.

6.2 Environmental precautions

Avoid release to the environment. Do not allow to enter drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be alerted to the Environment Agency or other appropriate regulatory body.

6.3 Methods and material for containment and cleaning up

SECTION 7: HANDLING AND STORAGE

Ensure suitable personal protection during removal of spillages. Use non-sparking equipment when picking up flammable spill. Contain spillages. Adsorb spillages onto sand, earth or any suitable adsorbent material. Transfer to a container for disposal. Ventilate the area and wash spill site after material pickup is complete. Dispose of this material and its container as hazardous waste

(2008/98/EEC). See Section: 8, 13

Reference to other sections

7.1 Precautions for safe handling

Ensure adequate ventilation. Do not breathe vapour. Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. See Section: 8.

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Conditions for safe storage, including any

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incompatibilities

7.2

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Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge. Do not use sparking tools. Do not eat, drink or smoke when using this product.

Wash hands before breaks and after work.

Ground/bond container and receiving equipment. Store in a well-ventilated place. Keep container tightly closed. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from direct sunlight. Vapor space above stored liquid may be flammable/explosive unless blanketed with inert gas. Opened containers should be carefully resealed and stored in an upright position.

Keep away from: Acids, Alkalis and Strong oxidising agents.

Storage temperature Ambient.

Storage life Stable under normal conditions.

7.3 Specific end use(s) Metal surface treatment products, including galvanic and electroplating products.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION 8.

- 8.1 **Control parameters**
- 8.1.1 **Occupational Exposure Limits**

Incompatible materials

SUBSTANCE	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m³)	STEL (ppm)	STEL (mg/m³)	Note
Toluene	108-88-3	50	191	100	384	WEL
Propan-2-ol	67-63-0	400	999	500	1250	WEL
Xylene, o-, m-, p- or mixed isomers	1330-20-7	50	220	100	441	WEL

Note: 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**
- Appropriate engineering controls 8.2.1

Ensure adequate ventilation or use appropriate containment. Atmospheric levels should be controlled in compliance with the occupational exposure limit. Use non-sparking ventilation systems, approved explosion-proof equipment, and intrinsically safe electrical systems. Have available eyewash bottle with clean water.

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

General hygiene measures for the handling of chemicals are applicable. Avoid contact with skin, eyes or clothing. Do not breathe vapour. Wash hands before breaks and after work. Keep work clothes separately. Contaminated clothing should be thoroughly cleaned. Do not eat, drink or smoke at the work place.

Eye/ face protection



Skin protection



Respiratory protection

Wear protective eye glasses for protection against liquid splashes. Wear eye protection with side protection (EN166).

Hand protection: Wear impervious gloves (EN374). Gloves should be changed regularly to avoid permeation problems. Breakthrough time of the glove material: refer to the information provided by the gloves' producer.

Body protection: Wear impervious protective clothing, including boots, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Work in well ventilated zones or use proper respiratory protection. Open system(s): Wear suitable respiratory protection. Prolonged exposure: A self

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contained breathing apparatus may be appropriate.

Thermal hazards Not applicable.

8.2.3 Environmental Exposure Controls Avoid release to the environment.

9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance Clear/cloudy Liquid

Odour Aromatic.

Odour threshold Not available.
pH Not established.
Melting point/freezing point Not established.

Initial boiling point and boiling range 110 - 140°C Flash point 10°C

Evaporation rate Not available.

Flammability (solid, gas)

Not applicable - Liquid

Upper/lower flammability or explosive limits Flammable Limits (Lower) (%v/v): 1.2

Flammable Limits (Upper) (%v/v): Not available.

Vapour pressure 22 mmHg @ 20°C Vapour density Not available. Relative density Not available.

Solubility(ies) Solubility (Water): Negligible

Partition coefficient: n-octanol/water

Auto-ignition temperature

Decomposition Temperature

Viscosity

Viscosity

Explosive properties

Oxidising properties

Not available.

Not explosive.

Not oxidising.

9.2 Other information Organic solvents: 30 - 50 (%)

10. SECTION 10: STABILITY AND REACTIVITY

10.1 Stability and reactivity
 10.2 Chemical stability
 Stable under normal conditions.
 Stable under normal conditions.

10.3 Possibility of hazardous reactions Highly flammable liquid and vapour. Vapours are heavier than air and may travel

considerable distances to a source of ignition and flashback.

10.4 Conditions to avoid Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking. Keep away from direct sunlight.

10.5 Incompatible materials
Keep away from: Acids, Alkalis and Strong oxidising agents.

10.6 Hazardous decomposition product(s) May decompose in a fire giving off toxic fumes. Carbon dioxide and Carbon

monoxide

11. SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects (Substances in preparations / mixtures)

Acute toxicity

Skin Contact

Ingestion Based upon the available data, the classification criteria are not met.

Acute Toxicity Estimate Mixture Calculation: Estimated LC50 > 2000 mg/kg

bw/day.

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.

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Skin corrosion/irritationSkin Irrit. 2: Causes skin irritation.Serious eye damage/irritationEye Irrit. 2: Causes serious eye irritation.

Respiratory or skin sensitizationBased upon the available data, the classification criteria are not met.Germ cell mutagenicityBased upon the available data, the classification criteria are not met.CarcinogenicityBased upon the available data, the classification criteria are not met.

Reproductive toxicity Repr. 2: May damage the unborn child.

STOT - single exposure STOT SE 3: May cause drowsiness or dizziness.

STOT - repeated exposure STOT RE 2: May cause damage to organs through prolonged or repeated

exposure.

Aspiration hazard Asp. Tox. 1: May be fatal if swallowed and enters airways.

11.2 Other information None.

12. SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity Based upon the available data, the classification criteria are not met.

Estimated Mixture LC50 >100 mg/l (Fish)

12.2 Persistence and degradability
 12.3 Bioaccumulative potential
 Part of the components are poorly biodegradable.
 The product has low potential for bioaccumulation.

12.4 Mobility in soil The product is predicted to have low mobility in soil. (The product is essentially

insoluble in water.)

12.5 Results of PBT and vPvB assessment Not classified as PBT or vPvB.

12.6 Other adverse effects None known.

13. SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods This material and its container must be disposed of as hazardous waste

(2008/98/EEC). Containers of this material may be hazardous when empty since they retain product residue. Dispose of wastes in an approved waste disposal

facility.

13.2 Additional Information Dispose of contents in accordance with local, state or national legislation.

14. SECTION 14: TRANSPORT INFORMATION

ADR/RID / IMDG / IATA

14.1 UN number UN 1993

14.2 UN proper shipping name FLAMMABLE LIQUIDS N.O.S. (Toluene and Propan-2-ol)

14.3 Transport hazard class(es)
14.4 Packing group

14.5 Environmental hazards Not 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 Not applicable.

73/78 and the IBC Code

73/76 and the IBC Code

14.8 Additional Information None.

15. SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental

regulations/legislation specific for the substance or

mixture

15.1.1 EU regulations

Substance(s) of Very High Concern (SVHCs)

None

Authorisations and/or Restrictions On Use REACH: ANNEX XVII restrictions on the manufacture, placing on the market

and use of certain dangerous substances, preparations and articles.

Toluene (CAS# 108-88-3) - Entry number: 48.

15.1.2 National regulations

Wassergefährdungsklasse (Germany) Water hazard class: 2

15.2 Chemical Safety Assessment Not available.

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16. SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

References: Existing Safety Data Sheet (SDS), Harmonised Classification(s) for Toluene (CAS# 108-88-3), Propan-2-ol (CAS# 67-63-0), Stoddard solvent (CAS# 8052-41-3) and Xylene (CAS# 1330-20-7). Existing ECHA registration(s) for Toluene (CAS# 108-88-3), Propan-2-ol (CAS# 67-63-0) and Xylene (CAS# 1330-20-7).

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	Classification Procedure		
Regulation (EC) No. 1272/2008 (CLP)			
Flam. Liq. 2; H225	Flash Point [Closed cup] Test Result/ Boiling Point (°C)		
Asp. Tox. 1; H304	Estimated Viscosity		
Skin Irrit. 2; H315	Threshold Calculation		
Eye Irrit. 2; H319	Threshold Calculation		
STOT SE 3; H336	Threshold Calculation		
Repr. 2; H361d	Threshold Calculation		
STOT RE 2; H373	Threshold Calculation		

LEGEND

LTEL: Long Term Exposure Limit

STEL: Short Term Exposure Limit

DNEL: Derived No Effect Level

PNEC: Predicted No Effect Concentration

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Hazard Statement(s)

H225: Highly flammable liquid and vapour.

H332: Harmful if inhaled.

H226: Flammable liquid and vapour.

H335: May cause respiratory irritation.

H304: May be fatal if swallowed and enters airways.

H336: May cause drowsiness or dizziness.

H312: Harmful in contact with skin.

H361d: Suspected of damaging the unborn child.

H315: Causes skin irritation. H372: Causes damage to organs through prolonged or repeated

exposure.

H319: Causes serious eye irritation.

H373: May cause damage to organs through prolonged or repeated

exposure.

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

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Annex to the extended Safety Data Sheet (eSDS)

No information available.