

# SAFETY DATA SHEET

Version: 04

Date of Issue: 18 July 2018

Date of First Issue: 13 April 2010




SAFETY DATA SHEET ACCORDING TO EC-REGULATIONS 1907/2006  
(REACH), 1272/2008 (CLP) & 2015/830

www.vishaypg.com

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

<b>1.1 Product identifier</b>	
Product Name	Gagekote 1
Chemical Name	Mixture
CAS No.	Mixture
EINECS No.	Mixture
REACH Registration No.	None assigned.
<b>1.2 Relevant identified uses of the substance or mixture and uses advised against</b>	
Identified Use(s)	Coating - Metal surface treatment products, including galvanic and electroplating products
Uses Advised Against	Anything other than the above.
<b>1.3 Details of the supplier of the safety data sheet</b>	
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
<b>1.4 Emergency telephone number</b>	(00-1) 703-527-3887 CHEMTREC

## SECTION 2: HAZARDS IDENTIFICATION

<b>2.1 Classification of the substance or mixture</b>	
<b>2.1.1 Regulation (EC) No. 1272/2008 (CLP)</b>	Flam. Liq. 3; H226 Asp. Tox. 1; H304 Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE. 3; H336 STOT RE. 2; H373 Repr. 2; H361d Aquatic Chronic 3; H412
<b>2.2 Label elements</b>	According to Regulation (EC) No. 1272/2008 (CLP)
Product Name	Gagekote 1
Hazard Pictogram(s)	  
Signal Word(s)	DANGER
Contains:	Toluene and Xylene
Hazard Statement(s)	H226: Flammable liquid and vapour. H304: May be fatal if swallowed and enters airways. H315: Causes skin irritation. H319: Causes serious eye irritation.

# SAFETY DATA SHEET

Version: 04

Date of Issue: 18 July 2018

Date of First Issue: 13 April 2010

SAFETY DATA SHEET ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830

www.vishaypg.com

H336: May cause drowsiness or dizziness.

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

H361d: Suspected of damaging the unborn child.

H412: Harmful to aquatic life with long lasting effects.

## Precautionary Statement(s)

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P302+P352: IF ON SKIN: Wash with plenty of water.

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P308+P311: IF exposed or concerned: Call a POISON CENTER/doctor.

## Additional Information

Not applicable

## 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
Toluene	< 50	108-88-3	203-625-9	Not yet assigned in the supply chain	Flam. Liq. 2; H225 Skin Irrit. 2; H315 Asp. Tox. 1; H304 STOT SE. 3; H336 STOT RE. 2; H373 Repr. 2; H361d Aquatic Chronic 3; H412
Talc*	< 20	14807-96-6	238-877-9	Not yet assigned in the supply chain	Not classified as hazardous for supply/use.
Polystyrene	< 15	9003-53-6	500-008-9	Not yet assigned in the supply chain	Flam. Liq. 3; H226 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Acute Tox. 4; H332
Xylene	< 10	1330-20-7	215-535-7	Not yet assigned in the supply chain	Flam. Liq. 3; H226 Acute Tox. 4; H312 Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Asp. Tox. 1; H304 STOT SE 3; H335 STOT RE 2; H373 Aquatic Chronic 3; H412

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

\* See Section: 8

# SAFETY DATA SHEET

Version: 04

Date of Issue: 18 July 2018

Date of First Issue: 13 April 2010

SAFETY DATA SHEET ACCORDING TO EC-REGULATIONS 1907/2006  
(REACH), 1272/2008 (CLP) & 2015/830

www.vishaypg.com

## 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. Do not breathe vapour. Avoid contact with skin, eyes or clothing. Contaminated clothing should be laundered before reuse.

Inhalation

IF INHALED: 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. Call a POISON CENTER/doctor if you feel unwell.

Skin Contact

IF ON SKIN: Wash with plenty of water. Take off contaminated clothing and wash before reuse. If skin irritation occurs, 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. If eye irritation persists: Get medical advice/attention.

Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Remove person to fresh air and keep comfortable for breathing. Do not induce vomiting. Give plenty of water to drink. If vomiting occurs spontaneously, keep head below hips to prevent aspiration into the lungs.

### 4.2 Most important symptoms and effects, both acute and delayed

May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. May cause nausea/vomiting. May cause drowsiness or dizziness. May cause respiratory irritation. May cause damage to organs through prolonged or repeated exposure. Suspected of damaging the unborn child. Consumption of alcohol increases toxic effect.

### 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

IF SWALLOWED: Material may be aspirated into the lungs and cause chemical pneumonitis.

## SECTION 5: FIRE-FIGHTING MEASURES

### 5.1 Extinguishing media

Suitable Extinguishing Media

Foam, water spray or fog. Carbon dioxide may be used for small fires only.

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

Flammable liquid and vapour. Decomposes in a fire giving off toxic fumes: Carbon monoxide, Carbon dioxide. Prevent liquid entering sewers, basements and workpits; vapour may create explosive atmosphere. Vapours are heavier than air and may travel considerable distances to a source of ignition and flashback.

### 5.3 Advice for fire-fighters

Fight fire with normal precautions from a reasonable distance. Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Keep containers cool by spraying with water if exposed to fire. Do not allow run-off from fire fighting to enter drains or water courses.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Caution - spillages may be slippery. Ensure adequate ventilation. Stop leak if safe to do so. Eliminate all ignition sources if safe to do so. Do not breathe vapour. Avoid contact with skin, eyes or clothing. Wear suitable respiratory protection. Use personal protective equipment as required. See Section: 8. Wash contaminated clothing before reuse. The vapour is heavier than air; beware of pits and confined spaces.

### 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

Ensure suitable personal protection (including respiratory protection) during

# SAFETY DATA SHEET

Version: 04

Date of Issue: 18 July 2018

Date of First Issue: 13 April 2010

SAFETY DATA SHEET ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830

www.vishaypg.com

up

removal of spillages. Use non-sparking equipment when picking up flammable spill. Adsorb spillages onto sand, earth or any suitable adsorbent material. Do not adsorb onto sawdust or other combustible materials. Transfer to a lidded container for disposal or recovery. Ventilate the area and wash spill site after material pick-up is complete. Dispose of this material and its container as hazardous waste.

## 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. Do not breathe vapour. In case of inadequate ventilation wear respiratory protection. Avoid contact with skin, eyes or clothing. Do not ingest. Wear protective gloves/eye protection. Take precautionary measures against static discharge. This product should be kept away from naked flames and other sources of ignition. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work.

### 7.2 Conditions for safe storage, including any incompatibilities

Ground and bond container and receiving equipment. Keep container tightly closed. Store in a cool/low-temperature, well-ventilated (dry) place away from heat and ignition sources. Bund storage facilities to prevent soil and water pollution in the event of spillage.

Storage temperature

Ambient. > -160 °C and < 454 °C

Storage life

Stable under normal conditions.

Incompatible materials

Keep away from: Strong oxidising agents

### 7.3 Specific end use(s)

Coating - Metal surface treatment products, including galvanic and electroplating products

## 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/m <sup>3</sup> )	STEL (ppm)	STEL (mg/m <sup>3</sup> )	Note
Toluene	108-88-3	50	192	100*	384*	EU IOELV
		50	191	100	384	WEL, Sk
Xylene	1330-20-7	50	221	100*	442*	EU IOELV
		50	220	100	441	WEL, Sk
Talc	14807-96-6	-	1	-	-	WEL, Respirable Dust

Source: WEL: Workplace Exposure Limit (UK HSE EH40); EU IOELV: Indicative Occupational Exposure Limit Value

Note: \* 15 minutes

Sk - Can be absorbed through skin.

#### 8.1.2 Biological limit value

SUBSTANCE	CAS No.	Biological exposure determinant factors	Biological Exposure Indices	Sampling Time	Note
Xylene, o-,m-,p- or mixed isomers	1330-20-7	o-Cresol / methyl hippuric acid: Urine	650 mmol Creatinine	Post shift	Sk, BMGV

Source: Bmgv: Biological monitoring guidance value (UK HSE EH40)

Note: Sk - Can be absorbed through skin.

#### 8.1.3 PNECs and DNELs

Not established.

### 8.2 Exposure controls

#### 8.2.1 Appropriate engineering controls

Ensure adequate ventilation or use appropriate containment. Ensure adequate ventilation. Atmospheric levels should be controlled in compliance with the

# SAFETY DATA SHEET

Version: 04

Date of Issue: 18 July 2018

Date of First Issue: 13 April 2010

SAFETY DATA SHEET ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830

www.vishaypg.com

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

Eye/face protection



Skin protection



Respiratory protection



Thermal hazards

occupational exposure limit.

General hygiene measures for the handling of chemicals are applicable. Avoid breathing vapours. Avoid contact with skin, eyes or clothing. Wash hands before breaks and after work. Keep work clothes separately. Do not eat, drink or smoke at the work place. Wash contaminated clothing before reuse. Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

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

### Hand protection

Wear impervious gloves (EN374). The gloves type used must be chosen based on the work activity and duration as well as concentration/quantity of material being handled. Breakthrough time of the glove material: refer to the information provided by the gloves' producer. Protective index 6, corresponding > 480 minutes of permeation time according to EN 374.

Recommended: Nitrile rubber (Minimum thickness: 0.35mm); Butyl rubber (Minimum thickness: 0.5), Polyvinyl chloride - PVC.

### Body protection

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

Use only in well-ventilated areas. In case of inadequate ventilation wear respiratory protection.

For large quantities - A suitable mask with filter type A (EN141 or EN405) may be appropriate.

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	Liquid
Odour	Benzene-like Odour
Odour Threshold	Not available.
pH	Not available.
Melting Point/Freezing Point	Not available.
Initial boiling point and boiling range	93.3°C
Flash point	Not available.
Evaporation Rate	Not available.
Flammability (solid, gas)	Not applicable - Liquid
Upper/lower flammability or explosive limits	Not available.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	Not available.
Solubility(ies)	Immiscible with water.
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	Not available.
Decomposition Temperature	Not available.

# SAFETY DATA SHEET

Version: 04

Date of Issue: 18 July 2018

Date of First Issue: 13 April 2010



SAFETY DATA SHEET ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830

www.vishaypg.com

Viscosity	Not available.
Explosive properties	Not available.
Oxidising properties	Not oxidising.

## 9.2 Other information

Specific Gravity	13 lbs/gal
Volatile Organic Compounds:	327 g/l

## 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	Flammable liquid and vapour. The vapour may be invisible, heavier than air and spread along ground.
10.4 Conditions to avoid	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
10.5 Incompatible materials	Keep away from: Strong oxidising agents
10.6 Hazardous decomposition product(s)	Decomposes in a fire giving off toxic fumes: Carbon monoxide, Carbon dioxide, Nitrogen oxides.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 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.

Inhalation

Based upon the available data, the classification criteria are not met.  
Acute Toxicity Estimate Mixture Calculation: Estimated LC50 > 20 mg/l.

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

Toluene

Skin Irrit. 2; Causes skin irritation.

Xylene

Skin Irrit. 2; H315

Irritating to skin. (rabbit) (EU Method B.4)

Polystyrene

Skin Irrit. 2; H315

ECHA Registration Endpoint summary: Irritating to eyes, respiratory system and skin.

Skin Irrit. 2; H315

No data

#### Serious eye damage/irritation

Xylene

Eye Irrit. 2; Causes serious eye irritation.

Polystyrene

Eye Irrit. 2; H319

ECHA Registration Endpoint summary: Irritating to eyes, respiratory system and skin.

Eye Irrit. 2; H319

No data

#### Respiratory or skin sensitization

##### 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.

Toluene

Repr. 2; Suspected of damaging the unborn child.

Repr. 2; H361d

Reproductive toxicity: NOAEC (rat)(inhalation exposure) mg/m<sup>3</sup> 2261. (Ono, 1996)

Developmental toxicity: NOAEC (rat)(inhalation exposure) mg/m<sup>3</sup> 4522. (Thiel, 1997)

#### STOT - single exposure

Toluene

STOT SE 3; May cause drowsiness and dizziness.

STOT SE 3; H336

Xylene

LC50 (inhalation, rat) mg//4h: 28.1. Narcosis. (OECD 403)

STOT SE 3; H335

# SAFETY DATA SHEET

Version: 04

Date of Issue: 18 July 2018

Date of First Issue: 13 April 2010



SAFETY DATA SHEET ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830

www.vishaypg.com

	ECHA Registration Endpoint summary: Irritating to eyes, respiratory system and skin.
<b>STOT - repeated exposure</b>	STOT RE. 2; May cause damage to organs through prolonged or repeated exposure.
Toluene	STOT RE. 2; H373 Oral: Adverse effects observed - NOAEL (rat) mg/kg bw/day 625 (EU Method B.26) Inhalation: NOAEC (rat) mg/m <sup>3</sup> 1131 (OECD 453) Dermal: No data
Xylene	STOT RE. 2; H373 Oral: Adverse effects observed – NOAEL (rat) 250 mg/kg bw/day Inhalation: Adverse effects observed – NOAEC (rat) 3515 mg/m <sup>3</sup> Dermal: No data
<b>Aspiration hazard</b>	Asp. Tox. 1; May be fatal if swallowed and enters airways.
Toluene	Asp. Tox. 1; H304 Hydrocarbon
Xylene	Asp. Tox. 1; H304 Hydrocarbon
<b>11.2 Other information</b>	None.

## SECTION 12: ECOLOGICAL INFORMATION

<b>12.1 Toxicity</b>	Aquatic Chronic 3; Harmful to aquatic life with long lasting effects.
Toluene	Aquatic Chronic 3; H412 Acute Toxicity: Not classified - LC50 (fish) mg/l (96 hour) 5.5 (Moles, 1981) Chronic Toxicity: NOEC (Fish) mg/l (40 days) 1.4 (Moles, 1981)
Xylene	Aquatic Chronic 3; H412 Acute Toxicity: Not classified - LC50 (fish) mg/l 2.6 (OECD 203) Chronic Toxicity: NOEC (Fish) mg/l >1.3 (Walsh et al, 1977)
<b>12.2 Persistence and degradability</b>	No data for the mixture as a whole.
Toluene	Readily biodegradable (according to OECD criteria).
Xylene	Readily biodegradable. (10 Days) (OECD 301 F)
Polystyrene	No data
<b>12.3 Bioaccumulative potential</b>	No data for the mixture as a whole.
Toluene	BCF = 90 - The substance has low potential for bioaccumulation. ECHA registration dossier
Xylene	The substance has low potential for bioaccumulation. ECHA registration dossier
Polystyrene	No data
<b>12.4 Mobility in soil</b>	No data for the mixture as a whole.
Toluene	The product is predicted to have high mobility in soil. ECHA registration dossier
Xylene	The substance is predicted to have moderate mobility in soil. ECHA registration dossier
Polystyrene	No data
<b>12.5 Results of PBT and VPVB assessment</b>	Not classified as PBT or vPvB. None of the substances in this product fulfil the criteria for being regarded as a PBT or vPvB substance.
<b>12.6 Other adverse effects</b>	Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009). None of the known components is included in the list of fluorinated greenhouse gases (Regulation (EC) No 517/2014).
Toluene	This chemical is known to leach through soil into ground water under certain conditions.

## SECTION 13: DISPOSAL CONSIDERATIONS

<b>13.1 Waste treatment methods</b>	This material and its container must be disposed of as hazardous waste. Dispose of wastes in an approved waste disposal facility.
<b>13.2 Additional Information</b>	Dispose of contents in accordance with local, state or national legislation.

# SAFETY DATA SHEET

Version: 04

Date of Issue: 18 July 2018

Date of First Issue: 13 April 2010



SAFETY DATA SHEET ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830

www.vishaypg.com

## SECTION 14: TRANSPORT INFORMATION

	Road/Rail (ADR/RID)	Sea transport (IMDG)	Air (ICAO/IATA)
14.1 UN number	UN 1993	UN 1993	UN 1993
14.2 UN proper shipping name	FLAMMABLE LIQUIDS N.O.S. (Toluene/Xylene)	FLAMMABLE LIQUIDS N.O.S. (Toluene/Xylene)	FLAMMABLE LIQUIDS N.O.S. (Toluene/Xylene)
14.3 Transport hazard class(es)	3	3	3
14.4 Packing group	II	II	II
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 MARPOL73/78 and the IBC Code	Not applicable.		
14.8 Additional Information	None.		

## 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	Toluene: Entry 48: Restricted as a substance or in mixtures > 0.1% w/w used in adhesives or spray paints for the general public
CoRAP Substance Evaluation	Toluene: Substance evaluated in XXXX evaluating Member State has concluded that no additional information is required.
	Xylene: Substance identified for evaluation in 2019
Volatile Organic Compound Content:	327 g/l
15.1.2 National regulations	
Wassergefährdungsklasse (Germany)	Water hazard class: 2
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: Not applicable - V1.0.

**References:** Existing Safety Data Sheet (SDS), Harmonised Classification(s) for Toluene (CAS No. 108-88-3), Xylene (CAS No. 1330-20-7), Existing ECHA registration(s) for Toluene (CAS No. 108-88-3), Xylene (CAS No. 1330-20-7), Talc (CAS No. 14807-96-6), EU classification and labelling inventory Polystyrene (CAS No. 9003-53-6).

### Literature References:

1. Ono A, Sekita K, Ogawa Y, Hirose A, Suzuki S, Saito M, Naito K, Kaneko T, Furuya T, Kawashima K, Yasuhara K, Matsumoto K, Tanaka S, Inoue T and Kurokawa Y. 1996. Reproductive and developmental toxicity studies of toluene II. Effects of inhalation exposure on fertility in rats. Journal of Environmental Pathology Toxicology and Oncology 15, 9-20.
2. Thiel R and Chahoud I. 1997. Postnatal development and behaviour of Wistar rats after prenatal toluene exposure. Arch Toxicol (1997) 71, 258-265.
3. Moles A, Bates S, Rice SD, Korn S. 1981. Reduced growth of Coho salmon fry exposed to two petroleum components, Toluene and naphthalene in fresh water. Transactions A. Fish. Soc. 110, 430-436.
4. Walsh, Armstrong, Bartley, Salman and Frank, 1977, Residues of emulsified xylene in aquatic weed control and their impact on rainbow trout, Appl. Sci. Branch, Eng. Res. Cent. Denver, CO: 15p.

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
Flam. Liq. 3; H226	Expert judgement
Asp. Tox. 1; H304	Expert judgement
Skin Irrit. 2; H315	Threshold Calculation
Eye Irrit. 2; H319	Threshold Calculation
STOT SE 3; H336	Threshold Calculation



# SAFETY DATA SHEET

Version: 04

Date of Issue: 18 July 2018

Date of First Issue: 13 April 2010



SAFETY DATA SHEET ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830

www.vishaypg.com

STOT RE 3; H373	Threshold Calculation
Repr. 2; H361d	Threshold Calculation
Aquatic Chronic 3; H412	Summation Calculation

## LEGEND

LTEL: Long Term Exposure Limit

STEL: Short Term Exposure Limit

DNEL: Derived No Effect Level

NOAEL: no observed adverse effect level

PNEC: Predicted No Effect Concentration

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NOAEC: no observed adverse effect concentration

## Hazard classification / Classification code:

Flam. Liq. 3; Flammable Liquid, Category 3

Skin Irrit. 2; Skin Irritation, Category 2

Eye Irrit. 2; Eye Irritation, Category 2

STOT SE 3; Specific target organ toxicity — single exposure, Category 3

STOT SE 3; Specific target organ toxicity — single exposure, Category 3

STOT RE 2; Specific target organ toxicity — repeated exposure, Category 2

Aquatic Chronic 3; Hazardous to the aquatic environment, Chronic, Category 3

## Hazard Statement(s)

H226: Flammable liquid and vapour.

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

H336: May cause drowsiness or dizziness.

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

H412: Harmful 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.

## 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](http://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.