

SAFETY DATA SHEET

Version: 04

Date of Issue: 18 July 2018

Date of First Issue: 13 April 2010

SAFETY DATA SHEET ACCORDING TO OSHA HCS (29 CFR 1910.1200)

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SECTION 1: IDENTIFICATION

Product identifier

Product Name	Gagekote 1
Product code	Mixture
Product type	Mixture

Recommended use of the chemical and restrictions on use

Identified Use(s)	Coating - Metal surface treatment products, including galvanic and electroplating products
Uses Advised Against	Anything other than the above.

Details of the supplier of the safety data sheet

Name of 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)
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SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture in accordance with paragraph (d) of 29 CFR 1910.1200

Physical hazards	Flammable Liquid, Category 3
Health hazards	Aspiration Hazard, Category 1 Skin Corrosion/Irritation, Category 2 Serious eye damage/irritation, Category 2 Specific target organ toxicity — single exposure, Category 3 Specific target organ toxicity — repeated exposure, Category 2 Reproductive toxicity, Category 2
Environmental hazards	Hazardous to the aquatic environment, Chronic, Category 3

Contains:	Toluene and Xylene
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Hazard Pictogram(s)



Signal Word(s)	Danger
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Hazard Statement(s)	Flammable liquid and vapour. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure. Suspected of damaging the unborn child. Harmful to aquatic life with long lasting effects.
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Precautionary Statement(s)

Obtain special instructions before use.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Wear protective gloves/protective clothing/eye protection/face protection.
Avoid breathing vapours.
Ground and bond container and receiving equipment.
Avoid release to the environment.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
Do NOT induce vomiting.
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.
IF ON SKIN: Wash with plenty of water.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF exposed or concerned: Call a POISON CENTER/doctor.
Store in a well-ventilated place. Keep container tightly closed.
Dispose of contents in accordance with local, state or national legislation.

Additional Information

Not applicable

Other hazards

None known

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substances Not applicable.

Mixtures Substances in preparations / mixtures.

Chemical identity of the substance	%W/W	Synonym(s)	CAS No.	Hazard classification
Toluene	60 - 100	Methylbenzene	108-88-3	Flammable Liquid, Category 3 Aspiration hazard, Category 1 Skin corrosion/irritation, Category 2 Specific target organ toxicity — single exposure, Category 3 Specific target organ toxicity — repeated exposure, Category 2 Reproductive toxicity, Category 2 Hazardous to the aquatic environment, Chronic, Category 3
Talc	10 - 30	trimagnesium dioxido -oxo-silane; hydroxi-oxido-oxo-silane	14807-96-6	Not classified
Polystyrene	10 - 30	Benzene, ethenyl-, homopolymer	9003-53-6	Flammable Liquid, Category 3 Acute toxicity (Inhalation), Category 4 Skin corrosion/irritation, Category 1 Serious eye damage/irritation, Category 2
Xylene	7 - 15	1,2-dimethylbenzene	1330-20-7	Flammable Liquid, Category 3 Acute toxicity (Oral), Category 4 Acute toxicity (Inhalation), Category 4 Aspiration Hazard, Category 1 Skin corrosion/irritation, Category 2 Serious eye damage/irritation, Category 2 Specific target organ toxicity — single exposure, Category 3 Specific target organ toxicity — repeated exposure, Category 2 Hazardous to the aquatic environment, Chronic, Category 3

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SECTION 4: FIRST AID MEASURES



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.

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.

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

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.

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.

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

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.

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.

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Methods and material for containment and cleaning up

Ensure suitable personal protection (including respiratory protection) during 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.

Reference to other sections

See Section: 8, 13

SECTION 7: HANDLING AND STORAGE

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.

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
Storage life
Incompatible materials
Specific end use(s)

Ambient. > -160 °C and < 454 °C
Stable under normal conditions.
Keep away from: Strong oxidising agents
See Section: 1

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

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
Toluene	108-88-3	200	-	300*	-	PEL (OSHA)
		100	375	150	560	NIOSH
		20	-	-	-	ACGIH, A4
Xylene	1330-20-7	100	435	-	-	PEL (OSHA)
		100	435	150	655	NIOSH
		100	-	150	-	ACGIH, A4, BEI
Talc (Not containing: Asbestos)	14807-96-6	20 [^]	-	-	-	PEL (OSHA)
		-	2	-	-	ACGIH, A4

Source: OSHA PELs 1910.1000 TABLE Z-1/2/3 / NIOSH RELs / ACGIH TLVs (American Conference of Governmental Industrial Hygiene)

Note: * Ceiling limit value (10 min)

[^] mppcf - Millions of particles per cubic foot of air

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.

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

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	1.5 g/g Creatinine	End of Shift	ACGIH

Source: BEI: Biological Exposure Indices (ACGIH)

The other components listed in Section 3 do not have biological exposure indices.

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Exposure controls

Appropriate engineering controls

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

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

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.

Eye/face protection



Wear protective eye glasses for protection against liquid splashes. Eye protection with side protection.

Skin protection



Hand protection

Wear impervious gloves. 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.

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.

Respiratory protection



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

For large quantities - A suitable mask with filter type A may be appropriate.

Thermal hazards

Not applicable.

Environmental Exposure Controls

Avoid release to the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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.

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Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	Not available.
Decomposition Temperature	Not available.
Viscosity	Not available.
Other information	
Specific Gravity	13 lbs/gal
Volatile Organic Compounds:	327 g/l
Explosive properties	Not available.
Oxidising properties	Not oxidising.

SECTION 10: STABILITY AND REACTIVITY

Reactivity	Stable under normal conditions.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	Flammable liquid and vapour. The vapour may be invisible, heavier than air and spread along ground.
Conditions to avoid	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Incompatible materials	Keep away from: Strong oxidising agents
Hazardous decomposition product(s)	Decomposes in a fire giving off toxic fumes: Carbon monoxide, Carbon dioxide, Nitrogen oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

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.
Inhalation	Based upon the available data, the classification criteria are not met. Acute Toxicity Estimate Mixture Calculation: Estimated LC50 > 20 mg/l.
Xylene	Acute toxicity (Inhalation), Category 4
Polystyrene	No data
Skin Contact	Acute toxicity (Inhalation), Category 4
Xylene	No data
Skin corrosion/irritation	Based upon the available data, the classification criteria are not met. Acute Toxicity Estimate Mixture Calculation: Estimated LC50 > 2000 mg/kg bw/day.
Toluene	Acute toxicity (Dermal), Category 4
Xylene	No data
Polystyrene	Skin Corrosion/Irritation, Category 2; Causes skin irritation.
Serious eye damage/irritation	Skin Corrosion/Irritation, Category 2
Xylene	Irritating to skin. (rabbit) (EU Method B.4)
Polystyrene	Skin Corrosion/Irritation, Category 2
Respiratory or skin sensitization	ECHA Registration Endpoint summary: Irritating to eyes, respiratory system and skin.
Germ cell mutagenicity	Skin Corrosion/Irritation, Category 2
Carcinogenicity	No data
Reproductive toxicity	Serious eye damage/irritation, Category 2; Causes serious eye irritation.
Toluene	Serious eye damage/irritation, Category 2
	ECHA Registration Endpoint summary: Irritating to eyes, respiratory system and skin.
	Serious eye damage/irritation, Category 2
	No data
	Based upon the available data, the classification criteria are not met.
	Based upon the available data, the classification criteria are not met.
	Based upon the available data, the classification criteria are not met.
	Reproductive toxicity, Category 2; Suspected of damaging the unborn child.
	Reproductive toxicity, Category 2

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	Reproductive toxicity: NOAEC (rat)(inhalation exposure) mg/m ³ 2261. (Ono, 1996)
	Developmental toxicity: NOAEC (rat)(inhalation exposure) mg/m ³ 4522. (Thiel, 1997)
STOT - single exposure	Specific target organ toxicity — single exposure, Category 3; May cause drowsiness and dizziness.
Toluene	Specific target organ toxicity — single exposure, Category 3 LC50 (inhalation, rat) mg/l/4h: 28.1. Narcosis. (OECD 403)
Xylene	Specific target organ toxicity — single exposure, Category 3 ECHA Registration Endpoint summary: Irritating to eyes, respiratory system and skin.
STOT - repeated exposure	Specific target organ toxicity — repeated exposure, Category 2; May cause damage to organs through prolonged or repeated exposure.
Toluene	Specific target organ toxicity — repeated exposure, Category 2 Oral: Adverse effects observed - NOAEL (rat) mg/kg bw/day 625 (EU Method B.26)
Xylene	Inhalation: NOAEC (rat) mg/m ³ 1131 (OECD 453) Dermal: No data Specific target organ toxicity — repeated exposure, Category 2 Oral: Adverse effects observed – NOAEL (rat) 250 mg/kg bw/day Inhalation: Adverse effects observed – NOAEC (rat) 3515 mg/m ³ Dermal: No data
Aspiration hazard	Aspiration hazard, Category 1; May be fatal if swallowed and enters airways.
Toluene	Aspiration hazard, Category 1 Hydrocarbon
Xylene	Aspiration hazard, Category 1 Hydrocarbon
Information on likely routes of exposure	
Inhalation	Possible – 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. Causes severe eye damage. May be fatal if swallowed and enters airways.
Delayed health effects from exposure	May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure. Suspected of damaging the unborn child.
Exposure levels and health effects	See Section: 8
Interactive effects	None known
Other information	
NTP Report on Carcinogens	No components of the mixture are listed
IARC Monographs	Toluene: IARC Classification: Group 3. Xylene: IARC Classification: Group 3. Polystyrene: IARC Classification: Group 3. Talc: Containing: Asbestos - IARC Classification: Group 1. Not containing: Asbestos - IARC Classification: Group 3.
OSHA Designated Carcinogen	No components of the mixture are listed

SECTION 12: ECOLOGICAL INFORMATION

Toxicity	Hazardous to the aquatic environment, Chronic, Category 3; Harmful to aquatic life with long lasting effects.
Toluene	Hazardous to the aquatic environment, Chronic, Category 3 Acute Toxicity: Not classified - LC50 (fish) mg/l (96 hour) 5.5 (Moles, 1981)

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Xylene	Chronic Toxicity: NOEC (Fish) mg/l (40 days) 1.4 (Moles, 1981) Hazardous to the aquatic environment, Chronic, Category 3 Acute Toxicity: Not classified - LC50 (fish) mg/l 2.6 (OECD 203) Chronic Toxicity: NOEC (Fish) mg/l >1.3 (Walsh et al, 1977)
Persistence and degradability	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
Bioaccumulative potential	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
Mobility in soil	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
Results of PBT and VPvB assessment	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.
Other adverse effects	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

Waste treatment methods

This material and its container must be disposed of as hazardous waste. Dispose of wastes in an approved waste disposal facility. Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point. Dispose of contents in accordance with local, state or national legislation.

SECTION 14: TRANSPORT INFORMATION

	Road/Rail (ADR/RID)	Sea transport (IMDG)	Air (ICAO/IATA)
UN number	UN 1993	UN 1993	UN 1993
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)
Transport hazard class(es)	3	3	3
Packing group	II	II	II
Environmental hazards	Environmentally hazardous substance	Classified as a Marine Pollutant.	Environmentally hazardous substance
Special precautions for user	See Section: 2		
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.		
Additional Information	None.		

SECTION 15: REGULATORY INFORMATION

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

US Federal Regulations

TSCA Chemical Data Reporting (CDR) Rule

Toluene: Subject to 25,000 lb reporting threshold

Xylene: Subject to 25,000 lb reporting threshold

Polystyrene: Exempt from reporting

Talc: Subject to 25,000 lb reporting threshold

No components of the mixture are listed

EPCRA/SARA Section 302 Extremely Hazardous Substances

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EPCRA Section 313 Toxics Release Inventory (TRI) Program CAA List of Hazardous Air Pollutants	Toluene – De minimis limit: 1% Xylene – De minimis limit: 1% Toluene Xylene
NIOSH Occupational Carcinogen List OSHA List of highly hazardous chemicals, toxics and reactives NTP Report on Carcinogens (RoC) List Poison Prevention Packaging Act	No components of the mixture are listed No components of the mixture are listed No components of the mixture are listed Toluene – Substance requiring special packaging: Solvents for paint or other similar surface-coating material Xylene – Substance requiring special packaging: Solvents for paint or other similar surface-coating material
US State Regulations California State, Proposition 65 List California State, Safer Consumer Products Regulations	Toluene – Safe harbour level – MADL: 7,000 ug/day Toluene – Initial Candidate Chemicals List Xylene – Initial Candidate Chemicals List Talc – Candidate Chemicals List
Maine State, Toxic Chemicals in Children's Products Act New Jersey State Worker and Community RTK Act	Toluene – COC List and CHC List. Toluene – RTKHSK and SHHSL. Xylene – RTKHSK and SHHSL. Talc - RTKHSK and SHHSL.
Pennsylvania State, Worker and Community RTK Act	Toluene – Hazardous Substance List and Environmental Hazard List Xylene – Hazardous Substance List and Environmental Hazard List Talc - Hazardous Substance List
Rhode Island State, Hazardous Substances RTK Act	Toluene – Hazardous Substance List Xylene – Hazardous Substance List Talc - Hazardous Substance List
Non-Regional IARC Monographs, List of Classifications	Toluene - Group 3: Not classifiable as to its carcinogenicity to humans. Xylene - Group 3: Not classifiable as to its carcinogenicity to humans. Talc: Containing: Asbestos - Group 1: Carcinogenic to humans. Not containing: Asbestos - Group 3: Not classifiable as to its carcinogenicity to humans.

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.

GHS Classification of the substance or mixture	Classification Procedure
Flammable Liquid, Category 2	Expert judgement
Aspiration hazard, Category 1	Expert judgement
Skin Corrosion/Irritation, Category 2	Threshold Calculation
Serious eye damage/irritation, Category 2	Threshold Calculation
Specific target organ toxicity — single exposure, Category 3	Threshold Calculation

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Specific target organ toxicity — repeated exposure, Category 2	Threshold Calculation
Reproductive toxicity, Category 2	Threshold Calculation
Hazardous to the aquatic environment, Chronic, Category 3	Summation Calculation

LEGEND

LTEL: Long Term Exposure Limit

STEL: Short Term Exposure Limit

DNEL: Derived No Effect Level

NOAEL: no observed adverse effect level

OSHA = Occupational Safety and Health Administration

PNEC: Predicted No Effect Concentration

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NOAEC: no observed adverse effect concentration

ACGIH: American Conference of Governmental Industrial Hygiene

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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