

SAFETY DATA SHEET SYNTHETIC THINNERS CV

This Safety Data Sheet is prepared in accordance with Annex II to Regulation (EC) No 1907/2006 as amended by Regulations (EU) No. 453/2010 and (EU) 2015/830

SECTION 1: Identification of th	e substance/mixture and of the company/undertaking
1.1. Product identifier	
Product name	SYNTHETIC THINNERS CV
Product number	SYNCVTHXX
Product SUMI code	D
Product SUMI version number	1.00
1.2. Relevant identified uses of	the substance or mixture and uses advised against
Identified uses	A volatile, liquid, solvent-based product for industrial and professional use to thin appropriate paints to ease application.
1.3. Details of the supplier of th	e safety data sheet
Supplier	Manor Coating Systems Ltd Otley Road Shipley West Yorkshire BD17 7DP
	Tel: 01274 587351 Fax: 01274531360 chiefchemist@manorcoatingsystems.co.uk
Contact person	Chief Chemist
1.4. Emergency telephone num	iber
Emergency telephone	Manor Coating Systems Ltd. 01274 587351 may be contacted (Office hours only)
National emergency telephone number	Members of the public should contact: 111 in UK, 01 809 2166 in Republic of Ireland
SECTION 2: Hazards identifica	tion
2.1. Classification of the substa	ince or mixture
Classification (EC 1272/2008)	
Physical hazards	Flam. Liq. 3 - H226
Health hazards	Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT SE 3 - H335, H336 STOT RE 2 - H373 Asp. Tox. 1 - H304
Environmental hazards	Aquatic Chronic 2 - H411
2.2. Label elements	

Pictogram







Signal word	Danger
Hazard statements	 H226 Flammable liquid and vapour. H304 May be fatal if swallowed and enters airways. 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. H411 Toxic to aquatic life with long lasting effects.
Precautionary statements	 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P260 Do not breathe vapour/ spray. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P284 [In case of inadequate ventilation] wear respiratory protection. P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P403+P233 Store in a well-ventilated place. Keep container tightly closed.
Contains	HYDROCARBONS C9 AROMATICS, XYLENE, ETHYLBENZENE
Supplementary precautionary statements	 P240 Ground and bond container and receiving equipment. P241 Use explosion-proof electrical equipment. P242 Use non-sparking tools. P243 Take action to prevent static discharges. P261 Avoid breathing vapour/ spray. P264 Wash contaminated skin thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P273 Avoid release to the environment. P302+P352 IF ON SKIN: Wash with plenty of water. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P312 Call a POISON CENTRE/doctor if you feel unwell. P314 Get medical advice/ attention if you feel unwell. P315 Specific treatment (see medical advice on this label). P331 Do NOT induce vomiting. P332+P313 If skin irritation occurs: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before reuse. P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish. P301 Collect spillage. P403+P235 Store in a well-ventilated place. Keep cool. P405 Store locked up. P501 Dispose of contents/ container in accordance with national regulations.
Labelling notes	For full text of Hazard- and EU Hazard-statements: see SECTION 16.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients		
3.2. Mixtures		
HYDROCARBONS C9 AROM	IATICS	50-80%
CAS number: 64742-95-6	EC number: 918-668-5	REACH registration number: 01- 2119455851-35-XXXX
Classification Flam. Liq. 3 - H226 STOT SE 3 - H335, H336 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411		
XYLENE		10-25%
CAS number: 1330-20-7	EC number: 215-535-7	REACH registration number: 01- 2119488216-32-0000
Classification Flam. Liq. 3 - H226 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT SE 3 - H335 STOT RE 2 - H373 Asp. Tox. 1 - H304		
ETHYLBENZENE CAS number: 100-41-4	EC number: 202-849-4	1-5% REACH registration number: 01- 2119489370-35-0000
Classification Flam. Liq. 2 - H225 Acute Tox. 4 - H332 STOT RE 2 - H373 Asp. Tox. 1 - H304		
The full text for all hazard state	ments is displayed in Section 16.	
Composition comments	The data shown are in accordance with the	latest EC Directives.
Ingredient notes	Substances presenting a health or environm (EC) No. 1272/2008, assigned a Community PBT/vPvB or included in the Candidate List.	nental hazard within the meaning of Regulation workplace exposure limit, classified as
SECTION 4: First aid measure	S	
4.1. Description of first aid mea	asures	
General information	In all cases of doubt, or when symptoms per Never give anything by mouth to an unconso If unconscious place in recovery position and	rsist, seek medical attention. cious person. d seek medical advice.
Inhalation	Remove to fresh air, keep patient warm and	at rest.

If breathing is irregular or stopped, administer artificial respiration.

Ingestion	If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.		
Skin contact	Remove contaminated clothing. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.		
Eye contact	Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.		
4.2. Most important symptoms	4.2. Most important symptoms and effects, both acute and delayed		
Inhalation	In case of overexposure, organic solvents may depress the central nervous system causing dizziness and intoxication, and at very high concentrations unconsciousness and death.		
Ingestion	Ingestion may cause nausea, diarrhoea and vomiting.		
Skin contact	Prolonged or repeated contact with skin may cause soreness, irritation or dry skin due to a defatting action.		
Eye contact	The liquid splashed in the eyes may cause irritation and reversible damage.		
4.3. Indication of any immediate medical attention and special treatment needed			
Notes for the doctor	No specific recommendations.		
SECTION 5: Firefighting meas	ures		
5.1. Extinguishing media			
Suitable extinguishing media	recommended: alcohol resistant foam, CO2, powders, water spray/mist		
Unsuitable extinguishing media	Do not use water jet as extinguisher, as this may spread the fire.		
5.2. Special hazards arising fro	om the substance or mixture		
Specific hazards	Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Appropriate breathing apparatus may be required.		
5.3. Advice for firefighters			
Protective actions during firefighting	Cool closed containers exposed to fire with water. Do not allow run-off from fire fighting to enter drains or water courses.		
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.		
SECTION 6: Accidental releas	e measures		
6.1. Personal precautions, prot	ective equipment and emergency procedures		
Personal precautions	Exclude sources of ignition and ventilate the area. Avoid breathing vapours. Refer to protective measures listed in sections 7 and 8.		
6.2. Environmental precautions			
Environmental precautions	Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations.		
6.3. Methods and material for a	containment and cleaning up		

Methods for cleaning up	Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13).
6.4. Deference to other costic	
Reference to other sections	For personal protection, see Section 8. Collect and dispose of spillage as indicated in Section 13.
SECTION 7: Handling and sto	brage
7.1. Precautions for safe hand	lling
Usage precautions	The Manual Handling Operations Regulations may apply to the handling of containers of this product. To assist employers, the following method of calculating the weight for any pack size is given. Take the pack size volume in litres and multiply this figure by the specific gravity value given in Section 9. This will give the net weight of the coating in kilograms. Allowance will then have to be made for the immediate packaging to give an approximate gross weight. Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. Mixture may charge electrostatically: always use earthing leads when transferring from one container to another. Operators should wear anti-static footwear and clothing and floors should be of the conducting type. Isolate from sources of heat, sparks and open flame. Non-sparking tools should be used. Avoid skin and eye contact. Avoid skin and eye contact. Avoid the inhalation of dust, particulates and spray mist arising from the application of this mixture. Avoid inhalation of dust from sanding. Smoking, eating and drinking should be prohibited in application area. For personal protection see Section 8. Never use pressure to empty: container is not a pressure vessel. Always keep in containers of same material as the original one. Comply with the health and safety at work laws. Do not allow to enter drains or water courses. Wash hands before eating and before leaving the site. Remove contaminated clothing and protective equipment before entering eating areas. Information on fire and explosion protection. Vapours may form explosive mixtures with air.
7.2. Conditions for safe storage	ge, including any incompatibilities

Storage precautions	Store in accordance with the Dangerous Substances and Explosive Atmospheres Regulations (DSEAR). The requirements are given in the HSE Approved Code of Practice and Guidance, Storage of Dangerous Substances: DSEAR
	The principles contained in the HSE guidance note Chemical Warehousing: The Storage of
	Packaged Dangerous Substances, should be observed when storing this product. Notes on joint storage.
	Store away from oxidising agents, from strongly alkaline and strongly acid materials.
	Additional information on storage conditions
	Observe label precautions.
	Store between 5 and 25 °C in a dry, well ventilated place away from sources of heat and direct suplight
	Keep container tightly closed
	Keep away from sources of ignition.
	No smoking.
	Prevent unauthorised access.
	Containers which are opened must be carefully resealed and kept upright to prevent leakage.
7.3. Specific end use(s)	

Specific end use(s) The

The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

HYDROCARBONS C9 AROMATICS

Long-term exposure limit (8-hour TWA): OEL 100 mg/m³

XYLENE

Long-term exposure limit (8-hour TWA): WEL 50 ppm 220 mg/m³ Short-term exposure limit (15-minute): WEL 100 ppm 441 mg/m³ Sk

ETHYLBENZENE

Long-term exposure limit (8-hour TWA): WEL 100 ppm 441 mg/m³ Short-term exposure limit (15-minute): WEL 125 ppm 552 mg/m³ Sk

WEL = Workplace Exposure Limit Sk = Can be absorbed through the skin.

Ingredient comments According to EH40 - List of approved workplace exposure limits.

HYDROCARBONS C9 AROMATICS (CAS: 64742-95-6)

DNEL	Industry - Inhalation; Long term systemic effects: 150 mg/m ³ Industry - Dermal; Long term systemic effects: 25 mg/kg/day Consumer - Inhalation; Long term systemic effects: 32 mg/m ³ Consumer - Dermal; Long term systemic effects: 11 mg/kg/day Consumer - Oral; Long term systemic effects: 11 mg/kg/day
PNEC	No data available.
	XYLENE (CAS: 1330-20-7)

Biological limit values 650 mmol methyl hippuric acid/mol creatinine in urine. Post shift sampling

DNEL	Industry - Inhalation; Short term systemic effects: 289 mg/m ³ Industry - Inhalation; Long term systemic effects: 77 mg/m ³ Industry - Inhalation; Short term local effects: 289 mg/m ³ Industry - Inhalation; Long term local effects: 77 mg/m ³ Industry - Dermal; Short term systemic effects: 174 mg/m ³ Consumer - Inhalation; Long term systemic effects: 14.8 mg/m ³ Consumer - Inhalation; Short term local effects: 174 mg/m ³ Consumer - Inhalation; Short term systemic effects: 174 mg/m ³ Consumer - Inhalation; Short term systemic effects: 174 mg/m ³ Consumer - Inhalation; Short term systemic effects: 174 mg/m ³ Consumer - Dermal; Long term systemic effects: 108 mg/kg/day Consumer - Oral; Long term systemic effects: 1.6 mg/kg/day
PNEC	 Fresh water; 0.327 mg/l Marine water; 0.327 mg/l Intermittent release; 0.327 mg/l Sediment (Freshwater); 12.46 mg/kg Sediment (Marinewater); 12.46 mg/kg Soil; 2.31 mg/kg STP; 6.58 mg/l
	ETHTLBENZENE (CAS. 100-41-4)
DNEL	Industry - Inhalation; Long term : 77 mg/m³ Industry - Inhalation; Short term : 293 mg/m³ Industry - Dermal; Long term : 180 mg/kg/day Consumer - Inhalation; Long term : 15 mg/m³ Consumer - Oral; Long term : 1.6 mg/kg/day
PNEC	- Fresh water; 0.327 mg/l - Marine water; 0.327 mg/l - STP; 6.58 mg/l - Sediment; 12.46 mg/kg - Soil; 2.31 mg/kg
8.2. Exposure controls	
Protective equipment	
Safe use of mixture	This Safety Data Sheet should be read in conjunction with the Safe Use of Mixture (SUMI) report referred to in Section 1. The SUMI provides information collated from exposure scenarios of substances relevant to this product and is provided as part of our obligations under REACH Regulations.
Two-pack product protection	Not applicable
Appropriate engineering controls	Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of solvent vapour below the OEL, suitable respiratory protection must be worn. Dry sanding, flame cutting and/or welding of the dry paint film may give rise to dust and/or hazardous fumes. Wet sanding should be used wherever possible. If exposure cannot be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment should be used. See Respiratory Equipment below.
Personal protection	Requirements for personal protection can only be determined by performing a risk assessment on a case-by-case basis prior to use. This risk assessment should be reviewed regularly.

Eye/face protection	Use safety eyewear, manufactured/tested to EN 166, and designed to protect against splash of liquids.
Hand protection	There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. Wear chemical resistant gloves classified under "Standard EN374: Protective gloves against chemicals and micro-organisms" made from PE, PVA or Viton gloves. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed. Gloves should be replaced regularly and if there is any sign of damage to the glove material. Always ensure that gloves are free from defects and that they are stored and used correctly. The performance or effectiveness of the glove may be reduced by physical/ chemical damage and poor maintenance. Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred.
Other skin and body protection	Wear appropriate clothing to prevent any possibility of skin contact. Personnel should wear anti-static clothing made of natural fibre or of high temperature resistant synthetic fibre.
Hygiene measures	Provide eyewash station. Do not eat, drink or smoke when using this product. Promptly remove any clothing that becomes contaminated. Wash at the end of each work shift and before eating, smoking and using the toilet. Use appropriate skin cream to prevent drying of skin.
Respiratory protection	Selection of any respiratory protective equipment should ensure that it is adequate to reduce exposure to protect the worker's health and is suitable for the wearer, task and environment, including consideration of the facial features of the wearer. * Spraying should be undertaken outdoor or in a vented booth. As a minimum, workers should wear a full face respirator to EN140, fitted with a filter suitable for both particulates and vapours, to EN14387, with an assigned protection factor 20 (e.g. A2/P3). A powered full face respirator with combined filter A2/P3 (APF 40) or compressed air breathing apparatus should be worn if used continuously more than 1 hour. Respirators must be worn by anyone in the booth or room during spraying, gun cleaning (spray-to-dry) and throughout the clearance time, until such time as the particulates and solvent vapour concentration have fallen below the appropriate occupational exposure limits. * Brush or roller applications should be carried out outdoor or in good ventilation areas with 10 to 15 air changes per hour or more. As a minimum, a half face mask respirator with combined filter A2/P3 (APF 20) should be worn. A powered full face respirator with combined filter A2/P3 (APF 40) should be used, if used for more than 1 hour continuously as half face powered respirator are not recommended. * For other operations: If workers could be exposed to concentration above the exposure limit or where ventilation is poor, they must use a respirator to EN 140, fitted with a filter suitable for both particulates and vapours, to EN 14387, with an assigned protection factor of at least 10 (e.g. A2/P3). * Enclosed spaces with little or no ventilation: compressed air breathing apparatus should always be worn Respiratory protection should not be removed until the particulate and solvent vapour concentrations have fallen below the occupational exposure limits or the operator has entered a clean air area. Fit testing and regular servicing is recommended for all respiratory protective equipment. Th
controls	enter drains or water courses.
SECTION 9: Physical and Chemical Properties	

9.1. Information on basic physical and chemical properties

Appearance	Thin liquid.
Colour	Colourless.
Odour	aromatic hydrocarbons
Odour threshold	Not available.
рН	Technically not feasible. The product is a non-aqueous mixture.
Melting point	-50°C
Initial boiling point and range	137 - 182°C @ 760 mm Hg
Flash point	32 - 42°C Setaflash closed cup.
Evaporation rate	Not determined. (Product is a mixture)
Flammability (solid, gas)	Material is not a solid or gas
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 0.6 % Upper flammable/explosive limit: 9 %
Vapour pressure	0.67 kPa @ 20°C
Vapour density	Heavier than air
Relative density	0.865 - 0.875 @ 20°C
Solubility(ies)	Immiscible with water.
Partition coefficient	: >3
Auto-ignition temperature	460°C
Decomposition Temperature	Not determined.
Viscosity	Not determined.
Explosive properties	The product itself is not explosive, but the formation of an explosible mixture of vapour or dust with air is possible.
Oxidising properties	Does not meet the criteria for classification as oxidising.
9.2. Other information	
Volatile organic compound	This product contains a maximum VOC content of 870 g/litre. This product contains a maximum VOC content of 100 g/100 g.
SECTION 10: Stability and rea	ctivity
10.1. Reactivity	
Reactivity	Stable under recommended storage and handling conditions (see section 7). When exposed to high temperatures may produce hazardous decomposition products.
10.2. Chemical stability	
Stability	Stable under recommended storage and handling conditions (see section 7).
10.3. Possibility of hazardous r	reactions
Possibility of hazardous reactions	Keep away from oxidising agents, strongly alkaline and strongly acid materials
10.4. Conditions to avoid	

Conditions to avoid	Avoid heat, flames and other sources of ignition. When exposed to high temperatures may produce hazardous decomposition products.
10.5. Incompatible materials	
Materials to avoid	Keep away from oxidising agents, strongly alkaline and strongly acid materials
10.6. Hazardous decompositio	n products
Hazardous decomposition products	such as carbon monoxide and dioxide, smoke, oxides of nitrogen etc.
SECTION 11: Toxicological inf	formation
11.1. Information on toxicologi	cal effects
<u>Acute toxicity - dermal</u> ATE dermal (mg/kg)	5,176.47
Acute toxicity - inhalation	
ATE inhalation (gases ppm)	24,968.94
ATE inhalation (vapours mg/l)	90.02
ATE inhalation (dusts/mists mg/l)	21.62
Skin corrosion/irritation Skin corrosion/irritation	Causes skin irritation. Repeated exposure may cause skin dryness or cracking.
Serious eye damage/irritation Serious eye damage/irritation	Causes serious eye irritation.
Respiratory sensitisation Respiratory sensitisation	Based on available data the classification criteria are not met.
Skin sensitisation Skin sensitisation	Based on available data the classification criteria are not met.
Germ cell mutagenicity	
Genotoxicity - in vitro	Based on available data the classification criteria are not met.
Genotoxicity - in vivo	Based on available data the classification criteria are not met.
Carcinogenicity Carcinogenicity	Based on available data the classification criteria are not met.
Reproductive toxicity Reproductive toxicity - fertility	Based on available data the classification criteria are not met.
Reproductive toxicity - development	Based on available data the classification criteria are not met.
Specific target organ toxicity -	single exposure
STOT - single exposure	May cause respiratory irritation. Vapours may cause drowsiness and dizziness.
Target organs	Central nervous system Liver Kidneys
Specific target organ toxicity -	repeated exposure
STOT - repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Target organs	Liver Kidneys

Aspiration hazard	
Aspiration hazard	If swallowed accidentally, the product may enter the lungs due to its low viscosity and lead to the rapid development of very serious inhalation pulmonary lesions (medical survey during 48 hours)
General information	There are no data available on the mixture itself. The mixture has been assessed following the method according to the "Classification, labelling and packaging of substances and mixtures" EC 1272/2008 and ensuing amendments and classified for toxicological hazards accordingly. See sections 2 and 3 for details.
Inhalation	Exposure to component solvent vapours concentration in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system.
Ingestion	Ingestion may cause nausea, diarrhoea and vomiting.
Skin contact	Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin.
Eye contact	Irritating to eyes. Symptoms following overexposure may include the following: Redness. Pain. The liquid splashed in the eyes may cause irritation and reversible damage.
Medical symptoms	Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin.
Medical considerations	This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Toxicological information on ingredients.

HYDROCARBONS C9 AROMATICS

Acute toxicity - oral	
Acute toxicity oral (LD₅₀ mg/kg)	3,492.0
Species	Rat
ATE oral (mg/kg)	3,492.0
Acute toxicity - dermal	
Acute toxicity dermal (LD₅₀ mg/kg)	3,161.0
Species	Rabbit
ATE dermal (mg/kg)	3,161.0
Acute toxicity - inhalation	
Acute toxicity inhalation (LC₅ vapours mg/l)	6.193
Species	Rat
Skin corrosion/irritation	
Animal data	Mild skin irritation (rabbit)
Serious eye damage/irritatio	on

Serious eye damage/irritation	No eye irritation OECD 405 rabbit
Skin sensitisation	
Skin sensitisation	- Guinea pig: Not sensitising.
Germ cell mutagenicity	
Genotoxicity - in vitro	Chromosome aberration: Negative. Based on available data the classification criteria are not met.
Genotoxicity - in vivo	Chromosome aberration: Negative. Based on available data the classification criteria are not met.
Carcinogenicity	
Carcinogenicity	Scientifically unjustified.
Reproductive toxicity	
Reproductive toxicity - fertility	Fertility: - NOAEC 1500 ppm, Inhalation, Rat P
Reproductive toxicity - development	Developmental toxicity: - NOAEC: 100 ppm, Inhalation, Mouse
Specific target organ toxicit	y - single exposure
STOT - single exposure	Vapours may cause drowsiness and dizziness. May cause respiratory irritation.
Target organs	Central nervous system Respiratory system, lungs
Specific target organ toxicit	y - repeated exposure
STOT - repeated exposure	Based on available data the classification criteria are not met.
Aspiration hazard	
Aspiration hazard	Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.
	XYLENE
Acute toxicity - oral	
Acute toxicity oral (LD₅₀ mg/kg)	3,523.0
Species	Rat
ATE oral (mg/kg)	3,523.0
Acute toxicity - dermal	
Acute toxicity dermal (LD₅₀ mg/kg)	4,200.0
Species	Rabbit
ATE dermal (mg/kg)	1,100.0

Acute toxicity - inhalation

Acute toxicity inhalation 6,700.0 (LC₅₀ gases ppmV)

Species Rat

Acute toxicity inhalation (LC ₅₀ vapours mg/l)	27.6
Species	Rat
Acute toxicity inhalation (LC∞ dust/mist mg/l)	10.0
Species	Rat
ATE inhalation (gases ppm)	6,700.0
ATE inhalation (vapours mg/l)	27.6
ATE inhalation (dusts/mists mg/l)	10.0
Skin corrosion/irritation	
Animal data	Dose: 24 and, 72 hours, Rabbit Irritating to skin.
Serious eye damage/irritation	
Serious eye damage/irritation	Causes serious eye irritation.
Respiratory sensitisation	
Respiratory sensitisation	Not sensitising
Skin sensitisation	
Skin sensitisation	- Mouse: Not sensitising.
Germ cell mutagenicity	
Genotoxicity - in vitro	Chromosome aberration: Negative. Ames test: Negative. Gene mutation: Negative.
Genotoxicity - in vivo	Dominant lethal assay, intraperitoneal: Negative.
Carcinogenicity	
Carcinogenicity	NOAEL 500 mg/kg, Oral, Rat, male/female Did not show carcinogenic effects in animal experiments.
IARC carcinogenicity	IARC Group 3 Not classifiable as to its carcinogenicity to humans.
Reproductive toxicity	
Reproductive toxicity - fertility	One-generation study - NOAEL >=500 ppm, Inhalation, Rat, male/female P Two- generation study - NOAEL 500 ppm, Inhalation, Rat, male/female P Two-generation study - NOAEL >500 ppm, Inhalation, male/female F1 Two-generation study - NOAEL >500 ppm, Inhalation, Rat, male/female F2 This substance has no evidence of toxicity to reproduction.
Reproductive toxicity - development	Maternal toxicity: - NOAEL: 500 ppm, Inhalation, Rat, female
Specific target organ toxicity	y - single exposure
STOT - single exposure	May cause respiratory irritation.
Target organs	Central nervous system Liver Kidneys
Specific target organ toxicity	y - repeated exposure

	STOT - repeated exposure	NOAEL 150 mg/kg, (3 months), Oral, Rat NOAEL >3.5 mg/l, (3 months), Inhalation, Rat, Dog	
	Target organs	Kidneys Liver	
	Aspiration hazard		
	Aspiration hazard	Aspiration hazard - Category 1 If swallowed accidentally, the product may enter the lungs due to its low viscosity and lead to the rapid development of very serious inhalation pulmonary lesions (medical survey during 48 hours)	
		ETHYLBENZENE	
	Skin corrosion/irritation		
	Animal data	Dose: 15 mg, 24 hours , Rabbit Slightly irritating.	
	Serious eye damage/irritati	e damage/irritation	
	Serious eye damage/irritation	Severe eye irritant (500 mg dose)	
	Aspiration hazard		
	Aspiration hazard	Aspiration hazard - Category 1 If swallowed the product may aspirate into the lungs	
SECTION 12	2: Ecological Information		
Ecotoxicity	There a the meth mixtures propertie courses	There are no data available on the mixture itself. The mixture has been assessed following the method according to the "Classification, labelling and packaging of substances and mixtures" EC1272/2008 and ensuing amendments and is classified for ecotoxicological properties accordingly. See sections 2 and 3 for details. Do not allow to enter drains or water courses.	
12.1. Toxicit	<u>y</u>		
Toxicity	There is	no toxicity data for the mixture itself.	
Ecological information on ingredients.			
		HYDROCARBONS C9 AROMATICS	
	Acute aquatic toxicity		

Acute toxicity - fish	$LC_{50},96$ hours: 9.2 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EL50, 48 hours: 3.2 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC₅₀, 72 hours: 2.9 mg/l, Pseudokirchneriella subcapitata
Chronic aquatic toxicity	
Chronic toxicity - aquatic invertebrates	NOELR, 21 days: 2.14 mg/l, Daphnia magna
	XYLENE
Acute aquatic toxicity	

Acute toxicity - fish	$LC_{50},96$ hours: 2.6 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EC₅₀, 48 hours: 3.82 mg/l, Daphnia magna

Acute toxicity - aquatic plants	IC₅₀, 72 hours: 2.2 mg/l, Freshwater algae
Acute toxicity - microorganisms	EC₅₀, 24 hours: 96 mg/l, Bacteria
Chronic aquatic toxicity	
Chronic toxicity - aquatic invertebrates	NOEC, 48 hours: 6.8 mg/l, Daphnia magna
	ETHYLBENZENE

Acute aquatic toxicity

Acute toxicity - fish	LC₅₀, 96 hours: 4.2 mg/l,
Acute toxicity - aquatic invertebrates	EC₅₀, 48 hours: 1.8 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC₅₀, 96 hours: 3.6 mg/l, Pseudokirchneriella subcapitata
Chronic aquatic toxicity	
Chronic toxicity - aquatic invertebrates	NOEC, 7 days: 1 mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability There is no data for the mixture itself.

Ecological information on ingredients.

HYDROCARBONS C9 AROMATICS

Persistence and degradability	The product is readily biodegradable
Phototransformation	Scientifically unjustified.
Stability (hydrolysis)	Not hydrolysable
Biodegradation	Water - Degradation (%) 78%: in 28 days

XYLENE

Persistence and	Readily biodegradable
degradability	
Biodegradation	- Degradation % >60: 28 days
	Readily biodegradable

ETHYLBENZENE

Persistence and degradability	The product is readily biodegradable
Biodegradation	- Degradation % 66: 10 days

12.3. Bioaccumulative potential

Bioaccumulative potential There is no data for the mixture itself.

Partition coe	fficient :	>3
Ecological in	formation on ingred	ients.
		HYDROCARBONS C9 AROMATICS
	Bioaccumulative po	otential Substance is a UVCB. Standard tests for this endpoint are not appropriate.
	Partition coefficient	Not applicable.
		XYLENE
	Bioaccumulative po	otential Not expected to bioaccumulate. BCF: 25.9,
	Partition coefficient	log Pow: 3.15
		ETHYLBENZENE
	Bioaccumulative po	otential Potential for bioaccumulation is low.
	Partition coefficient	log Pow: 3.1 @ 20°C
12.4. Mobility	y in soil	
Mobility	٦ t	The product contains volatile solvents which are immiscible with water and will evaporate into he atmosphere.
Ecological in	formation on ingred	ients.
		HYDROCARBONS C9 AROMATICS
	Mobility	Substance is a UVCB. Standard tests for this endpoint are not appropriate.
		XYLENE
	Mobility	The product contains volatile solvents which are immiscible with water and will evaporate into the atmosphere. In soil the product has only slight mobility and will partially evaporate
		ETHYLBENZENE
	Mobility	The product contains volatile solvents which are immiscible with water and will evaporate into the atmosphere. In soil the product has only slight mobility and will partially evaporate
12.5. Results	s of PBT and vPvB a	assessment
Results of Pl assessment	BT and vPvB ☐	This product does not contain any substances classified as PBT or vPvB.
12.6. Other a	adverse effects	
Other advers	se effects	Not determined.
SECTION 13	3: Disposal consider	ations
13.1. Waste	treatment methods	
General info	rmation [Do not allow to enter drains or water courses.
Disposal me	thods \	Naste and emptied containers are controlled wastes and should be disposed of in accordance with The Environment Protection (Duty of Care) Regulations" (in England, Scotland, Wales) or The Controlled Waste (Duty of Care) Regulations (in Northern Ireland).

Waste classThe European List of Wastes classification of this product, when disposed of as waste is:
Waste Code: Name of Waste (according to Decision 2000/532/EC):
08 01 11 Waste paint and varnish containing organic solvents or other dangerous substances
If this product is mixed with other wastes, the original waste product code may no longer apply
and the appropriate code should be assigned. For further information contact your local waste
authority. Using information provided in this safety data sheet, advice should be obtained from
the local waste authority on the classification of empty containers. Empty containers must be
scrapped or reconditioned. Dispose of empty containers contaminated by the product in
accordance with local or national legal provisions.

Additional information

SECTION 14: Transport information

General

This section contains basic classification information; specific information is not provided for all transport modes if not relevant for the product as supplied. Relevant modal regulations should be consulted if the product is transported onwards.

14.1. UN number

UN 1263

14.2. UN proper shipping name

PAINT RELATED MATERIAL Solvent Naphtha

14.3. Transport hazard class(es)

3

ADR/RID label 3

Transport labels



14.4. Packing group

PG III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

Transport within the user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of accident or spillage.

EmS F-E, S-E

Tunnel restriction code (D/E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Not relevant. Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: Regulatory information

15.1. Safety, health and enviro	onmental regulations/legislation specific for the substance or mixture
National regulations	The information in this Safety Data Sheet is required pursuant to the provisions of the Health and Safety at Work etc. Act and the Control of Substances Hazardous to Health Regulations which apply to the use of this product at work. Control of Pollution Act 1974. The Environmental Protection (Duty of Care) Regulations 1992 and amendments The Waste (England and Wales) Regulations 2011 (SI 2011 No. 988) The Dangerous Substances & Explosive Atmospheres Regulations 2002(SI 2002:2776). The Manual Handling Operations Regulations 1992, (SI 1992:2793)and amendment, The Stationery Office. The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].
EU legislation	Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). Waste Framework Directive (Directive 2008/98/EC on waste) and amendments Commission Decision 2000/532/EC as amended by Decision 2001/118/EC establishing a list of wastes and hazardous waste pursuant to Council Directive 75/442/EEC on waste and Directive 91/689/EEC on hazardous waste with amendments. ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. This product may add to the calculation for determining whether a site is within scope of the Seveso Directive on major accident hazards.
Guidance	COSHH Essentials: easy steps to control chemicals, on-line guidance at http://www.hse.gov.uk/coshh/essentials/index.htm Chemical Warehousing: Storage of Flammable Liquids in Containers, HSG51, HSE Storage: Packaged Dangerous Substances HSG71, HSE. Working with solvents: A guide to safe working practices, INDG273(rev1), HSE Best Practice Guideline 5 "Safe Use of Gloves (June 2010) published by the European Solvents Industry Group (ESIG) available at www.esig.org/en/library/publications/best- practice-guides Control of Substances Hazardous to Health (Fifth Edition) (HSE Books L5) Dangerous Substances and Explosive Atmospheres Regulations 2002, (HSE Books L138) Safe use and handling of flammable liquids HSG140 (Second edition), HSE A step by step guide to COSHH assessment HSG97, HSE Respiratory protective equipment at work: A practical guide, HSG53, HSE BS EN 14042:2003 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

SECTION 16: Other information

Abbreviations and acronyms	ADR: European Agreement concerning the International Carriage of Dangerous Goods by
used in the safety data sheet	Road.
	ATE: Acute Toxicity Estimate.
	BCF: Bioconcentration Factor.
	CAS: Chemical Abstracts Service.
	CLP: Classification, Labelling, Packaging Regulation; Regulation (EC) No. 1272/2008
	CMR: Carcinogen, Mutagen or Reproductive Toxicant
	COSHH: Control of Substances Hazardous to Health Regulations
	DNEL: Derived No Effect Level.
	EC: European Community
	ECHA: European Chemicals Agency
	EC No.: EINECS (European Inventory of Existing Commercial Substances) and ELINCS
	(European List of Notified Substances) Number
	EC₅₀: 50% of maximal Effective Concentration.
	EmS: Emergency Schedule (IMDG)
	EU: European Union
	GHS: Globally Harmonized System.
	IATA: International Air Transport Association.
	ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air.
	IMDG: International Maritime Dangerous Goods.
	Kow: Octanol-water partition coefficient.
	LC_{50} : Lethal Concentration to 50 % of a test population.
	LD_{50} : Lethal Dose to 50% of a test population (Median Lethal Dose).
	LOAEC: Lowest Observed Adverse Effect Concentration.
	LOAEL: Lowest Observed Adverse Effect Level.
	LOEC: Lowest Observed Effect Concentration.
	NOAEC: No Observed Adverse Effect Concentration.
	NOAEL: No Observed Adverse Effect Level.
	NOEC: No Observed Effect Concentration.
	OECD: Organisation for Economic Co-operation and Development
	OEL: Occupational Exposure Limit
	PBT: Persistent, Bioaccumulative and Toxic substance.
	PNEC: Predicted No Effect Concentration.
	REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.
	RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail
	SDS: Safety Data Sheet
	STOT: Specific Target Organ Toxicity
	(STOT) RE: Repeated Exposure
	(STOT) SE: Single Exposure
	STP: Sewage Treatment Plant
	SVHC: Substances of Very High Concern.
	UN: United Nations.
	VOC: Volatile Organic Compound
	vPvB: Very Persistent and Very Bioaccumulative.
General information	The product should not be used for purposes other than those shown in Section 1.
Key literature references and sources for data	Raw material supplier's Safety Data Sheets. Reference to ECHA Registered Substance dossiers.
Classification procedures according to Regulation (EC) 1272/2008	Unless indicated elsewhere in this safety data sheet, the classification of this mixture has been determined using a combination of test data, bridging principles and calculation.

Legal obligations

Revision comments	CLP 1.02 Safe use of mixture information added. NOTE: Lines within the margin indicate significant changes from the previous revision.
Issued by	Chief Chemist
Revision date	02/07/2018
Revision	CLP 1.02
Supersedes date	31/03/2016
SDS number	10410
Hazard statements in full	 H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H304 May be fatal if swallowed and enters airways. H312 Harmful in contact with skin. H315 Causes skin irritation. H319 Causes serious eye irritation. H332 Harmful if inhaled. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H373 May cause damage to organs through prolonged or repeated exposure. H373 May cause damage to organs (Hearing organs) through prolonged or repeated exposure. H411 Toxic to aquatic life with long lasting effects.

The information of this SDS is based on the present state of our knowledge and on current legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications. The product should not to be used for purposes other than those shown in section 1 without first referring to the supplier and obtaining written handling instructions. As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the

requirements of relevant legislation are complied with.

The information in this safety data sheet does not constitute the user's own assessment of workplace risks as required by other health and safety legislation.

Manor Coating Systems Limited Safe Use of Mixtures Report



Our SUMI Code: D Version Number: 1.00 Issue Date: 08/09/2017

Purpose

This Safe Use of Mixtures Report has been compiled from information (including exposure scenarios) that we have received from our suppliers. We are obligated to pass information that is relevant to the safe use of our products (when they are used for their intended purpose and in line with our recommendations shown on our Product Data Sheet) down the supply chain. In general we manufacture mixtures and do not supply substances so we have reviewed the information provided to us and produced this Safe Use of Mixtures Report which should be read in conjunction with the relevant material safety Data Sheet and Product Data Sheet, best practice, process knowledge and guidance notes from the HSE and others when preparing risk assessments and designing safe systems of work. This information is passed down the chain as part of our obligations under REACH.

This report is prepared with our best reasonable endeavour using the information and knowledge in our possession at the date of publication.

SU3 Title	Uses in coatings - Industrial	
SU3 Process Category	PROC1, PROC2, PROC3, PROC4, PROC5, PROC7, PROC8a, PROC8b, PROC10, PROC13, PROC15	
SU3 Frequency and duration of use	Covers daily exposures up to 8 hours (unless stated)	
SU3 Processes, tasks, activities covered	Covers the use in coatings/paints including exposures during use (including materials receipt, storage, preparation and transfer from bulk and semi-bulk, application by spray, roller, spreader, dip, and film formation) and equipment cleaning, maintenance and associated laboratory activities.	
SU3 Other Operational Conditions affecting worker exposure	Assumes use at not more than 20°C above ambient temperature (unless stated differently). Assumes a good basic standard of occupational hygiene is implemented.	
SU3 General exposures (closed systems)	Handle substance within a closed system.	
SU3 Mixing operations (closed systems) General exposures (closed systems)	Handle substance within a closed system. Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).	
SU3 Film formation - air drying	Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).	
SU3 Preparation of material for application. Mixing operations (open systems)	Provide a good standard of controlled ventilation (10 to 15 air changes per hour)	
SU3 Spraying	Automatic/robotic: Carry out in a vented booth or extracted enclosure. Manual Provide a good standard of controlled ventilation (10 to 15 air changes per hour). Wear a respirator conforming to EN140 with Type A/P2 filter or better. Use suitable eye protection and gloves tested to EN374.	
SU3 Material transfers. Non-dedicated facility	Ensure material transfers are under containment or extract ventilation.	
SU3 Material transfers. Dedicated facility	Ensure material transfers are under containment or extract ventilation.	

SU3 Roller, spreader, flow application	Minimise exposure by partial enclosure of the operation or equipment and provide extract ventilation at openings.	
SU3 Dipping, immersion and pouring	Provide a good standard of controlled ventilation (10 to 15 air changes per hour).	
SU3 Laboratory activities	No other specific measures identified.	
SU3 Material transfers. Drum/batch transfers. Transfer from/pouring from containers	Provide a good standard of controlled ventilation (10 to 15 air changes per hour). Wear suitable gloves tested to EN374. Avoid splashing. Clear lines prior to decoupling.	
SU3 Production of preparation or articles by tabletting, compression, extrusion or pelletisation	Provide a good standard of controlled ventilation (10 to 15 air changes per hour). Wear suitable coveralls to prevent exposure to the skin.	
SU3 Equipment cleaning and maintenance	Drain or remove substance from equipment prior to break-in or maintenance.	
SU3 Storage	Handle substance within a closed system.	
SU22 Title	Uses in coatings - Professional	
SU22 Process Category	PROC1, PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC10, PROC11, PROC13, PROC15, PROC19	
SU22 Processes, tasks, activities covered	Covers the use in coatings/paints including exposures during use (including materials receipt, storage, preparation and transfer from bulk and semi-bulk, application by spray, roller, spreader, dip, and film formation) and equipment cleaning, maintenance and associated laboratory activities.	
SU22 Frequency and duration of use	Covers daily exposures up to 8 hours (unless stated)	
SU22 Human factors not influenced by risk management	None identified for this scenario	
SU22 Other Operational Conditions affecting worker exposure	Assumes use at not more than 20°C above ambient temperature (unless stated differently). Assumes a good basic standard of occupational hygiene is implemented.	
SU22 General exposures (closed systems)	Handle substance within a closed system. Ensure material transfers are under containment or extract ventilation.	
SU22 Filling/preparation of equipment from drums or containers. Handle substance within a closed sys	Ensure material transfers are under containment or extract ventilation.	
SU22 Preparation of material for application	Minimise exposure by partial enclosure of the operation or equipment and provide extract ventilation at openings.	
SU22 Film formation - air drying	Indoor: Provide extract ventilation to points where emissions occur. Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). Outdoor: Ensure operation is undertaken outdoors. Avoid carrying out activities involving exposure for more than 1 hour. Wear suitable gloves tested to EN374.	

SU22 Preparation of material for application.	Indoor: Provide a good standard of controlled ventilation (10 to 15 air changes per hour). Avoid carrying out activities involving exposure for more than 1 hour. Outdoor: Ensure operation is undertaken outdoors. Avoid carrying out activities involving exposure for more than 1 hour.	
SU22 Material transfers. Drum/batch transfers	Dedicated facilities: Ensure transfer points are supplied with extract ventilation. Non-dedicated facilities: Provide enhanced general ventilation by mechanical means. Avoid carrying out operation for more than 1 hour.	
SU22 Brush, Roller, spreader, flow application	Indoor. Provide a good standard of controlled ventilation (10 to 15 air changes per hour). Wear a respirator conforming to EN140 with Type A/P2 filter or better. Outdoor. Ensure operation is undertaken outdoors. Wear a respirator conforming to EN140 with Type A/P2 filter or better.	
SU22 Spraying. Manual	Indoor: Carry out in a vented booth or extracted enclosure. Limit the substance content in the product to 25%. Avoid carrying out operation for more than 15 minutes. Outdoor: Ensure operation is undertaken outdoors. Limit the substance content in the product to 5%. Avoid carrying out operation for more than 15 minutes. Or: Ensure operation is undertaken outdoors. Limit the substance content in the product to 25%. Avoid carrying out operation for more than 1 minutes. Or: Ensure operation is undertaken outdoors. Limit the substance content in the product to 25%. Avoid carrying out operation for more than 1 minutes. Or: Ensure operation is undertaken outdoors. Limit the substance content in the product to 25%. Avoid carrying out operation for more than 1 hour. Wear a respirator conforming to EN140 with Type A/P2 filter or better.	
SU22 Dipping, immersion and pouring.	Indoor. Provide extract ventilation to points where emissions occur. Avoid carrying out activities involving exposure for more than 4 hours Outdoor. Ensure operation is undertaken outdoors. Wear a respirator conforming to EN140 with Type A/P2 filter or better. Wear suitable eye protection	
SU22 Laboratory activitie	Provide a good standard of general ventilation. Natural ventilation is from doors, windows etc. Controlled ventilation means air is supplied or removed by a powered fan.	
SU22 Equipment cleaning and maintenance	Drain down system prior to equipment break-in or maintenance. Avoid carrying out activities involving exposure for more than 4 hours.	
SU22 Storage	Handle substance within a closed system. Provide a good standard of controlled ventilation (10 to 15 air changes per hour).	

Sectors of Use (SU) and Process Codes (PROC)

Sectors of Use (SU) and Process Codes (PROC) are defined in various regulations.

For the paint industry SU 3 - Industrial Use of Coatings (eg within a factory on a production line) SU22 - Use of Coatings by Professional Users (eg a painter and decorator) Are the most relevant

Method of Preparation

In preparing this Safe Use of Mixtures Report we have relied heavily on the LCID. Specifically contained in Safe Use Information for Mixtures under REACH and the Lead Component (LCID) Methodology - A Brief Description (March 2016) published by CEFIC and their supporting spreadsheets published in 2017.

This approach has been endoursed by the European paint association (CEPE) and the British Coatings Federation (BCF).

The CEFIC approach uses information published by suppliers and in generally available sources including DNELs and PNECs and ECETOC-TRA data.

Further advice, support or assistance

If you require further advice, information, support or assistance please contact us.

Lead Component Identifcation (LCID) information

LC INHALATION	XYLENE
LC DERMAL	HYDROCARBONS, C9, aromatics
EYE HAZ 1	XYLENE