



## SAFETY DATA SHEET

### HI-BUILD VINYL SEMI-MATT 2010 (General colours)

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 the substance/mixture and of the company/undertaking**

##### **1.1. Product identifier**

**Product name** HI-BUILD VINYL SEMI-MATT 2010 (General colours)  
**Product number** HV/GENERAL  
**Product SUMI code** E  
**Product SUMI version number** 1.00

##### **1.2. Relevant identified uses of the substance or mixture and uses advised against**

**Identified uses** An air-drying, liquid, solvent-borne, paint for industrial, professional use. For the decoration of buildings, painting articles inside or outside buildings which are out of scope of the VOC Product Directive and for metal and plastic finishing. Apply by manual spray, brush or roller.  
**Uses advised against** Not for sale to or use by the general public.

##### **1.3. Details of the supplier of the 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 number**

**Emergency telephone** Manor Coating Systems Ltd. 01274 587351 may be contacted (Office hours only)

**National emergency telephone** Members of the public should contact: 111 in UK, 01 809 2166 in Republic of Ireland number

#### **SECTION 2: Hazards identification**

##### **2.1. Classification of the substance or mixture**

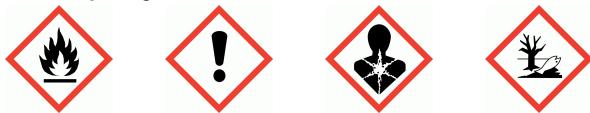
###### **Classification (EC 1272/2008)**

**Physical hazards** Flam. Liq. 3 - H226  
**Health hazards** Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT SE 3 - H335 STOT RE 2 - H373  
**Environmental hazards** Aquatic Chronic 2 - H411

##### **2.2. Label elements**

## HI-BUILD VINYL SEMI-MATT 2010 (General colours)

### Hazard pictograms



### Signal word

Warning

### Hazard statements

H226 Flammable liquid and vapour.  
 H315 Causes skin irritation.  
 H319 Causes serious eye irritation.  
 H335 May cause respiratory irritation.  
 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.  
 P261 Avoid breathing vapour/ spray.  
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P314 Get medical advice/ attention if you feel unwell.  
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
 P284 [In case of inadequate ventilation] wear respiratory protection.

### Contains

XYLENE, HYDROCARBONS C9 AROMATICS

### 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.  
 P260 Do not breathe 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.  
 P321 Specific treatment (see medical advice on this label).  
 P332+P313 If skin irritation occurs: Get medical advice/ attention.  
 P337+P313 If eye irritation persists: 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.  
 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

## HI-BUILD VINYL SEMI-MATT 2010 (General colours)

<b>XYLENE</b>		<b>10-25%</b>
CAS number: 1330-20-7	EC number: 215-535-7	REACH registration number: 01-2119488216-32-XXXX
<b>Classification</b>		
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		
<b>HYDROCARBONS C9 AROMATICS</b>		<b>5-10%</b>
CAS number: 64742-95-6	EC number: 918-668-5	REACH registration number: 01-2119455851-35-XXXX
<b>Classification</b>		
Flam. Liq. 3 - H226 STOT SE 3 - H335, H336 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411		
<b>2-METHOXY-1-METHYLETHYL ACETATE</b>		<b>5-10%</b>
CAS number: 108-65-6	EC number: 203-603-9	REACH registration number: 01-2119475791-29-0000
<b>Classification</b>		
Flam. Liq. 3 - H226		
<b>ETHYLBENZENE</b>		<b>1-5%</b>
CAS number: 100-41-4	EC number: 202-849-4	REACH registration number: 01-2119489370-35-XXXX
<b>Classification</b>		
Flam. Liq. 2 - H225 Acute Tox. 4 - H332 STOT RE 2 - H373 Asp. Tox. 1 - H304		
<b>n-BUTYL ACETATE</b>		<b>1-5%</b>
CAS number: 123-86-4	EC number: 204-658-1	REACH registration number: 01-2119485493-29-XXXX
<b>Classification</b>		
Flam. Liq. 3 - H226 STOT SE 3 - H336		

## HI-BUILD VINYL SEMI-MATT 2010 (General colours)

<b>TRIZINC BIS(ORTHOPHOSPHATE)</b>		1-2.5%
CAS number: 7779-90-0	EC number: 231-944-3	REACH registration number: 01-2119485044-40-0000
M factor (Acute) = 1	M factor (Chronic) = 1	
<b>Classification</b>		
Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410		
<b>Quaternary ammonium compounds, C12-14 (even numbered)-alkylethyldimethyl, ethyl sulphate</b>		0.1 - <1%
CAS number: —	EC number: 939-607-9	REACH registration number: 01-2119977130-42-0000
M factor (Acute) = 1	M factor (Chronic) = 1	
<b>Classification</b>		
Flam. Liq. 3 - H226 Acute Tox. 4 - H302 Acute Tox. 3 - H311 Skin Corr. 1C - H314 Eye Dam. 1 - H318 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410		

The full text for all hazard statements 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 environmental hazard within the meaning of Regulation (EC) No. 1272/2008, assigned a Community workplace exposure limit, classified as PBT/vPvB or included in the Candidate List.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

<b>General information</b>	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious place in recovery position and seek medical advice.
<b>Inhalation</b>	Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration.
<b>Ingestion</b>	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.
<b>Skin contact</b>	Remove contaminated clothing. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
<b>Eye contact</b>	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 and effects, both acute and delayed

## HI-BUILD VINYL SEMI-MATT 2010 (General colours)

<b>Inhalation</b>	May cause irritation of the respiratory system. In case of overexposure, organic solvents may depress the central nervous system causing dizziness and intoxication, and at very high concentrations unconsciousness and death.
<b>Ingestion</b>	Ingestion may cause nausea, diarrhoea and vomiting.
<b>Skin contact</b>	Prolonged or repeated contact with skin may cause soreness, irritation or dry skin due to a defatting action.
<b>Eye contact</b>	The liquid splashed in the eyes may cause irritation and reversible damage.

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

<b>Notes for the doctor</b>	Treat symptomatically.
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## **SECTION 5: Firefighting measures**

### **5.1. Extinguishing media**

<b>Suitable extinguishing media</b>	recommended: alcohol resistant foam, CO <sub>2</sub> , powders, water spray/mist
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<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
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### **5.2. Special hazards arising from the substance or mixture**

<b>Specific hazards</b>	Vapour is denser than air – flashback may be possible over considerable distances. Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Appropriate breathing apparatus may be required.
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### **5.3. Advice for firefighters**

<b>Protective actions during firefighting</b>	Cool closed containers exposed to fire with water. Do not allow run-off from fire fighting to enter drains or water courses.
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<b>Special protective equipment for firefighters</b>	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.
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## **SECTION 6: Accidental release measures**

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

<b>Personal precautions</b>	Exclude non-essential personnel. Exclude sources of ignition and ventilate the area. Avoid breathing vapours. Refer to protective measures listed in sections 7 and 8.
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### **6.2. Environmental precautions**

<b>Environmental precautions</b>	Vapours are heavier than air. They will spread along the ground and collect in low or confined areas (sewers, basements, tanks). Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations.
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### **6.3. Methods and material for containment and cleaning up**

<b>Methods for cleaning up</b>	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). Clean preferably with a detergent - avoid use of solvents.
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### **6.4. Reference to other sections**

<b>Reference to other sections</b>	See Section 12 for additional ecological information.
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## **SECTION 7: Handling and storage**

## HI-BUILD VINYL SEMI-MATT 2010 (General colours)

### 7.1. Precautions for safe handling

#### 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 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 are heavier than air and may spread along floors.

Vapours may form explosive mixtures with air.

### 7.2. Conditions for safe storage, 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 sunlight.

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 identified uses for this product are detailed in Section 1.2.

### SECTION 8: Exposure controls/Personal protection

## HI-BUILD VINYL SEMI-MATT 2010 (General colours)

### 8.1. Control parameters

#### Occupational exposure limits

##### **XYLENE**

Long-term exposure limit (8-hour TWA): WEL 50 ppm 220 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 100 ppm 441 mg/m<sup>3</sup>

Sk

##### **HYDROCARBONS C9 AROMATICS**

Long-term exposure limit (8-hour TWA): OEL 100 mg/m<sup>3</sup>

##### **2-METHOXY-1-METHYLETHYL ACETATE**

Long-term exposure limit (8-hour TWA): WEL 50 ppm 274 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 100 ppm 548 mg/m<sup>3</sup>

Sk

##### **ETHYLBENZENE**

Long-term exposure limit (8-hour TWA): WEL 100 ppm 441 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 125 ppm 552 mg/m<sup>3</sup>

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##### **n-BUTYL ACETATE**

Long-term exposure limit (8-hour TWA): WEL 150 ppm 724 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 200 ppm 966 mg/m<sup>3</sup>

WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.

<b>Ingredient comments</b>	According to EH40 - List of approved workplace exposure limits. For dust the 8 hour TWA's are:-
Respirable dust	4 mg/cu.m (WEL)
Total inhalable dust	10 mg/cu.m (WEL)

### 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<sup>3</sup>

Industry - Inhalation; Long term systemic effects: 77 mg/m<sup>3</sup>

Industry - Inhalation; Short term local effects: 289 mg/m<sup>3</sup>

Industry - Inhalation; Long term local effects: 77 mg/m<sup>3</sup>

Industry - Dermal; Short term systemic effects: 174 mg/m<sup>3</sup>

Consumer - Inhalation; Long term systemic effects: 14.8 mg/m<sup>3</sup>

Consumer - Inhalation; Short term local effects: 174 mg/m<sup>3</sup>

Consumer - Inhalation; Short term systemic effects: 174 mg/m<sup>3</sup>

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

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

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<b>DNEL</b>	Industry - Inhalation; Long term systemic effects: 150 mg/m <sup>3</sup> Industry - Dermal; Long term systemic effects: 25 mg/kg/day Consumer - Inhalation; Long term systemic effects: 32 mg/m <sup>3</sup> Consumer - Dermal; Long term systemic effects: 11 mg/kg/day Consumer - Oral; Long term systemic effects: 11 mg/kg/day
<b>PNEC</b>	No data available.

### 2-METHOXY-1-METHYLETHYL ACETATE (CAS: 108-65-6)

<b>DNEL</b>	Industry - Inhalation; Long term systemic effects: 275 mg/kg/day Industry - Dermal; Long term systemic effects: 153.5 mg/kg/day Consumer - Inhalation; Long term systemic effects: 33 mg/m <sup>3</sup> Consumer - Dermal; Long term systemic effects: 54.8 mg/kg/day Consumer - Oral; Long term systemic effects: 1.67 mg/kg/day
<b>PNEC</b>	<ul style="list-style-type: none"> <li>- Fresh water; 0.635 mg/l</li> <li>- marine water; 0.0635 mg/l</li> <li>- Intermittent release; 6.35 mg/l</li> <li>- STP; 100 mg/l</li> <li>- Sediment (Freshwater); 3.29 mg/kg</li> <li>- Sediment (Marinewater); 0.329 mg/kg</li> <li>- Soil; 0.29 mg/kg</li> </ul>

### ETHYLBENZENE (CAS: 100-41-4)

<b>DNEL</b>	Industry - Inhalation; Long term : 77 mg/m <sup>3</sup> Industry - Inhalation; Short term : 293 mg/m <sup>3</sup> Industry - Dermal; Long term : 180 mg/kg/day Consumer - Inhalation; Long term : 15 mg/m <sup>3</sup> Consumer - Oral; Long term : 1.6 mg/kg/day
<b>PNEC</b>	<ul style="list-style-type: none"> <li>- Fresh water; 0.327 mg/l</li> <li>- marine water; 0.327 mg/l</li> <li>- STP; 6.58 mg/l</li> <li>- Sediment; 12.46 mg/kg</li> <li>- Soil; 2.31 mg/kg</li> </ul>

### n-BUTYL ACETATE (CAS: 123-86-4)

<b>DNEL</b>	Industry - Inhalation; Short term systemic effects: 960 mg/m <sup>3</sup> Industry - Inhalation; Short term local effects: 960 mg/m <sup>3</sup> Industry - Inhalation; Long term systemic effects: 480 mg/m <sup>3</sup> Industry - Inhalation; Long term local effects: 480 mg/m <sup>3</sup> Consumer - Inhalation; Short term systemic effects: 859.7 mg/m <sup>3</sup> Consumer - Inhalation; Short term local effects: 859.7 mg/m <sup>3</sup> Consumer - Inhalation; Long term systemic effects: 102.34 mg/m <sup>3</sup> Consumer - Inhalation; Long term local effects: 102.34 mg/m <sup>3</sup>
<b>PNEC</b>	<ul style="list-style-type: none"> <li>- Fresh water; 0.18 mg/l</li> <li>- marine water; 0.018 mg/l</li> <li>- STP; 35.6 mg/l</li> <li>- Sediment (Freshwater); 0.981 mg/kg</li> <li>- Sediment (Marinewater); 0.0981 mg/kg</li> <li>- Soil; 0.0903 mg/kg</li> <li>- Intermittent release; 0.36 mg/l</li> </ul>

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### DIOCTYL ADIPATE (CAS: 103-23-1)

**DNEL** Industry - Dermal; Long term : 25.5 mg/kg/day  
 Industry - Inhalation; Long term : 17.8 mg/m<sup>3</sup>  
 Consumer - Dermal; Long term : 13 mg/kg/day  
 Consumer - Inhalation; Long term : 4.4 mg/m<sup>3</sup>  
 Consumer - Oral; Long term : 1.3 mg/kg/day

**PNEC** - Fresh water; 0.0032 mg/l  
 - marine water; 0.0032 mg/l  
 - STP; 35 mg/l  
 - Sediment; 15.6 mg/kg  
 - Soil; 0.865 mg/kg

### TRIZINC BIS(ORTHOPHOSPHATE) (CAS: 7779-90-0)

**DNEL** Industry - Inhalation; Long term systemic effects: 5 mg/m<sup>3</sup>  
 Industry - Dermal; Long term systemic effects: 83 mg/kg/day  
 Consumer - Inhalation; Long term systemic effects: 2.5 mg/m<sup>3</sup>  
 Consumer - Oral; Long term : 0.83 mg/kg/day  
 Consumer - Dermal; Long term systemic effects: 83 mg/kg/day

**PNEC** - Fresh water; 20.6 µg Zn/L  
 - marine water; 6.1 µg Zn/L  
 - Sediment (Freshwater); 117.8 mg Zn/kg dry weight  
 - Sediment (Marinewater); 56.5 mg Zn/kg dry weight  
 - Soil; 35.6 mg Zn/kg dry weight  
 - STP; 100 µg Zn/L

### Quaternary ammonium compounds, C12-14 (even numbered)-alkylethyldimethyl, ethyl sulphate

**DNEL** Workers - Inhalation; Long term systemic effects: 3.32 mg/m<sup>3</sup>  
 Workers - Dermal; Long term systemic effects: 4.7 mg/kg/day  
 Consumer - Oral; Long term systemic effects: 2.83 mg/kg/day  
 Consumer - Dermal; Long term systemic effects: 2.83 mg/kg/day  
 Consumer - Inhalation; Long term systemic effects: 0.98 mg/m<sup>3</sup>

**PNEC** - Fresh water; 0.00068 mg/l  
 - Sediment (Freshwater); 9.27 mg/kg  
 - STP; 0.9 mg/l

### 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

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<b>Appropriate engineering controls</b>	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.
<b>Personal protection</b>	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.
<b>Eye/face protection</b>	Use safety eyewear, manufactured/tested to EN 166, and designed to protect against splash of liquids.
<b>Hand protection</b>	Use chemical resistant gloves classified under "Standard EN374: Protective gloves against chemicals and micro-organisms" made from Viton or PVA barrier material. The breakthrough time must be greater than the end use time of the product. 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 and 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.
<b>Other skin and body protection</b>	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.
<b>Hygiene measures</b>	Provide eyewash station. Do not smoke in work area. Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

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<b>Respiratory protection</b>	<p>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.</p> <p>* 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.</p> <p>* 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.</p> <p>* For other operations: The use of HSE website is strongly recommended in selecting the most appropriate RPE <a href="http://www.happyworkinglives.com/rpe-selector">http://www.happyworkinglives.com/rpe-selector</a></p> <p>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).</p> <p>* Enclosed spaces with little or no ventilation: compressed air breathing apparatus should always be worn.</p> <p>. 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.</p> <p>Fit testing and regular servicing is recommended for all respiratory protective equipment. The use of HSE website is strongly recommended in selecting the most appropriate RPE <a href="http://www.happyworkinglives.com/rpe-selector">http://www.happyworkinglives.com/rpe-selector</a></p>
<b>Environmental exposure controls</b>	Refer to the Environmental Protection Act and the Control of Pollution Act. Do not allow to enter drains or water courses.

### **SECTION 9: Physical and chemical properties**

#### **9.1. Information on basic physical and chemical properties**

<b>Appearance</b>	Viscous liquid.
<b>Colour</b>	Various
<b>Odour</b>	aromatic hydrocarbons
<b>Odour threshold</b>	Not determined.
<b>pH</b>	Not applicable. The product is a non-aqueous mixture.
<b>Melting point</b>	-24°C
<b>Initial boiling point and range</b>	137 - 180°C @ 760 mm Hg
<b>Flash point</b>	23 - 32°C Setaflash closed cup.
<b>Evaporation rate</b>	Not determined.
<b>Flammability (solid, gas)</b>	Material is not a solid or gas
<b>Upper/lower flammability or explosive limits</b>	Lower flammable/explosive limit: 0.6 % Upper flammable/explosive limit: 11 %
<b>Vapour pressure</b>	0.67 kPa @ 20°C

## HI-BUILD VINYL SEMI-MATT 2010 (General colours)

<b>Vapour density</b>	Heavier than air
<b>Relative density</b>	1.35 - 1.45 @ 20°C
<b>Solubility(ies)</b>	Immiscible with water. Soluble in the following materials: Aromatic solvents.
<b>Partition coefficient</b>	Not determined. See Section 12 for partition coefficient data on individual components.
<b>Auto-ignition temperature</b>	465 - 525°C
<b>Decomposition Temperature</b>	Not determined.
<b>Viscosity</b>	350 - 500 mPa·s @ 20°C Rotothinner
<b>Explosive properties</b>	The product itself is not explosive, but the formation of an explosive mixture of vapour or dust with air is possible.
<b>Oxidising properties</b>	- The product is not expected to be oxidising.

### 9.2. Other information

<b>Volatile organic compound</b>	This product contains a maximum VOC content of 490 - 500 g/litre. This product contains a maximum VOC content of 35 - 37 g/100 g.
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

<b>Reactivity</b>	Stable under recommended storage and handling conditions (see section 7). When exposed to high temperatures may produce hazardous decomposition products.
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### 10.2. Chemical stability

<b>Stability</b>	Stable under recommended storage and handling conditions (see section 7).
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### 10.3. Possibility of hazardous reactions

<b>Possibility of hazardous reactions</b>	Keep away from oxidising agents, strongly alkaline and strongly acid materials
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### 10.4. Conditions to avoid

<b>Conditions to avoid</b>	Avoid heat, flames, static electricity and other sources of ignition. When exposed to high temperatures may produce hazardous decomposition products.
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### 10.5. Incompatible materials

<b>Materials to avoid</b>	Keep away from oxidising agents, strongly alkaline and strongly acid materials
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### 10.6. Hazardous decomposition products

<b>Hazardous decomposition products</b>	such as carbon monoxide and dioxide, smoke, oxides of nitrogen etc.
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## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity - dermal

<b>ATE dermal (mg/kg)</b>	5,716.94
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#### Acute toxicity - inhalation

<b>ATE inhalation (gases ppm)</b>	29,072.61
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<b>ATE inhalation (vapours mg/l)</b>	104.82
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<b>ATE inhalation (dusts/mists mg/l)</b>	25.18
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## HI-BUILD VINYL SEMI-MATT 2010 (General colours)

### Skin corrosion/irritation

**Skin corrosion/irritation** Causes skin irritation.

### 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.

**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** Based on available data the classification criteria are not met.

### 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. Contains butanoneoxime - may produce an allergic reaction.

### 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.

### Route of exposure

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.

## HI-BUILD VINYL SEMI-MATT 2010 (General colours)

**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.

**Toxicological information on ingredients.**

### XYLENE

**Acute toxicity - oral**

Acute toxicity oral (LD<sub>50</sub> 3,523.0 mg/kg)

Species Rat

ATE oral (mg/kg) 3,523.0

**Acute toxicity - dermal**

Acute toxicity dermal (LD<sub>50</sub> 4,200.0 mg/kg)

Species Rabbit

ATE dermal (mg/kg) 1,100.0

**Acute toxicity - inhalation**

Acute toxicity inhalation (LC<sub>50</sub> gases ppmV) 6,700.0

Species Rat

Acute toxicity inhalation (LC<sub>50</sub> vapours mg/l) 27.6

Species Rat

Acute toxicity inhalation (LC<sub>50</sub> 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**

## HI-BUILD VINYL SEMI-MATT 2010 (General colours)

<b>Skin sensitisation</b>	- Mouse: Not sensitising.
<b><u>Germ cell mutagenicity</u></b>	
<b>Genotoxicity - in vitro</b>	Chromosome aberration: Negative. Ames test: Negative. Gene mutation: Negative.
<b>Genotoxicity - in vivo</b>	Dominant lethal assay, intraperitoneal: Negative.
<b><u>Carcinogenicity</u></b>	
<b>Carcinogenicity</b>	NOAEL 500 mg/kg, Oral, Rat, male/female Did not show carcinogenic effects in animal experiments.
<b>IARC carcinogenicity</b>	IARC Group 3 Not classifiable as to its carcinogenicity to humans.
<b><u>Reproductive toxicity</u></b>	
<b>Reproductive toxicity - fertility</b>	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.
<b>Reproductive toxicity - development</b>	Maternal toxicity: - NOAEL: 500 ppm, Inhalation, Rat, female
<b><u>Specific target organ toxicity - single exposure</u></b>	
<b>STOT - single exposure</b>	May cause respiratory irritation.
<b>Target organs</b>	Central nervous system Liver Kidneys
<b><u>Specific target organ toxicity - repeated exposure</u></b>	
<b>STOT - repeated exposure</b>	NOAEL 150 mg/kg, (3 months), Oral, Rat NOAEL >3.5 mg/l, (3 months), Inhalation, Rat, Dog
<b>Target organs</b>	Kidneys Liver
<b><u>Aspiration hazard</u></b>	
<b>Aspiration hazard</b>	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)

### HYDROCARBONS C9 AROMATICS

#### Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> 3,492.0 mg/kg)

Species Rat

ATE oral (mg/kg) 3,492.0

#### Acute toxicity - dermal

Acute toxicity dermal (LD<sub>50</sub> 3,161.0 mg/kg)

Species Rabbit

ATE dermal (mg/kg) 3,161.0

#### Acute toxicity - inhalation

## HI-BUILD VINYL SEMI-MATT 2010 (General colours)

<b>Acute toxicity inhalation</b>	6.193
<b>(LC<sub>50</sub> vapours mg/l)</b>	
<b>Species</b>	Rat
<b><u>Skin corrosion/irritation</u></b>	
<b>Animal data</b>	Mild skin irritation (rabbit)
<b><u>Serious eye damage/irritation</u></b>	
<b>Serious eye damage/irritation</b>	No eye irritation OECD 405 rabbit
<b><u>Skin sensitisation</u></b>	
<b>Skin sensitisation</b>	- Guinea pig: Not sensitising.
<b><u>Germ cell mutagenicity</u></b>	
<b>Genotoxicity - in vitro</b>	Chromosome aberration: Negative. Based on available data the classification criteria are not met.
<b>Genotoxicity - in vivo</b>	Chromosome aberration: Negative. Based on available data the classification criteria are not met.
<b><u>Carcinogenicity</u></b>	
<b>Carcinogenicity</b>	Scientifically unjustified.
<b><u>Reproductive toxicity</u></b>	
<b>Reproductive toxicity - fertility</b>	Fertility: - NOAEC 1500 ppm, Inhalation, Rat P
<b>Reproductive toxicity - development</b>	Developmental toxicity: - NOAEC: 100 ppm, Inhalation, Mouse
<b><u>Specific target organ toxicity - single exposure</u></b>	
<b>STOT - single exposure</b>	Vapours may cause drowsiness and dizziness. May cause respiratory irritation.
<b>Target organs</b>	Central nervous system Respiratory system, lungs
<b><u>Specific target organ toxicity - repeated exposure</u></b>	
<b>STOT - repeated exposure</b>	Based on available data the classification criteria are not met.
<b><u>Aspiration hazard</u></b>	
<b>Aspiration hazard</b>	Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.
<b><u>2-METHOXY-1-METHYLETHYL ACETATE</u></b>	
<b><u>Acute toxicity - oral</u></b>	
<b>Acute toxicity oral (LD<sub>50</sub> mg/kg)</b>	8,532.0
<b>Species</b>	Rat
<b>ATE oral (mg/kg)</b>	8,532.0
<b><u>Acute toxicity - dermal</u></b>	
<b>Acute toxicity dermal (LD<sub>50</sub> mg/kg)</b>	2,000.0

## HI-BUILD VINYL SEMI-MATT 2010 (General colours)

<b>Species</b>	Rat
<b><u>Acute toxicity - inhalation</u></b>	
<b>Acute toxicity inhalation (LC<sub>50</sub> vapours mg/l)</b>	10.8
<b><u>Species</u></b>	
<b>Notes (inhalation LC<sub>50</sub>)</b>	LC0 value - no mortality in test. Based on available data the classification criteria are not met.
<b>ATE inhalation (vapours mg/l)</b>	10.8
<b><u>Skin corrosion/irritation</u></b>	
<b>Animal data</b>	Erythema/eschar score: No erythema (0). Oedema score: No oedema (0). Not irritating.
<b><u>Serious eye damage/irritation</u></b>	
<b>Serious eye damage/irritation</b>	Slightly irritating - may cause slight corneal injury
<b><u>Respiratory sensitisation</u></b>	
<b>Respiratory sensitisation</b>	No information available.
<b><u>Skin sensitisation</u></b>	
<b>Skin sensitisation</b>	Guinea pig maximization test (GPMT) - : Not sensitising.
<b><u>Germ cell mutagenicity</u></b>	
<b>Genotoxicity - in vitro</b>	Ames test: Not mutagenic in AMES Test. Based on available data the classification criteria are not met.
<b>Genotoxicity - in vivo</b>	Not determined.
<b><u>Carcinogenicity</u></b>	
<b>Carcinogenicity</b>	NOAEL 300 ppm, Inhalation,
<b><u>Reproductive toxicity</u></b>	
<b>Reproductive toxicity - fertility</b>	Two-generation study - NOAEL 300 ppm, Inhalation, Rat, male/female P Two-generation study - NOAEL 1000 ppm, Inhalation, Rat, male/female F1 Two-generation study - NOAEL 1000 ppm, Inhalation, Rat, male/female F2 Based on available data the classification criteria are not met.
<b>Reproductive toxicity - development</b>	Teratogenicity: - NOAEL: 1500 ppm, Inhalation, Rat, female Maternal toxicity: - NOAEL: 1500 ppm, Inhalation, Rat, female Based on available data the classification criteria are not met.
<b><u>Specific target organ toxicity - single exposure</u></b>	
<b>STOT - single exposure</b>	Based on available data the classification criteria are not met.
<b><u>Specific target organ toxicity - repeated exposure</u></b>	
<b>STOT - repeated exposure</b>	Based on available data the classification criteria are not met.
<b><u>Aspiration hazard</u></b>	
<b>Aspiration hazard</b>	Based on available data the classification criteria are not met.

### ETHYLBENZENE

## HI-BUILD VINYL SEMI-MATT 2010 (General colours)

### Skin corrosion/irritation

**Animal data** Dose: 15 mg, 24 hours , Rabbit Slightly irritating.

### Serious eye 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

## n-BUTYL ACETATE

### Acute toxicity - oral

**Acute toxicity oral (LD<sub>50</sub> mg/kg)** 10,760.0

**Species** Rat

### Acute toxicity - dermal

**Acute toxicity dermal (LD<sub>50</sub> mg/kg)** 14,112.0

**Species** Rabbit

### Acute toxicity - inhalation

**Acute toxicity inhalation (LC<sub>50</sub> vapours mg/l)** 23.4

**Species** Rat

**ATE inhalation (vapours mg/l)** 23.4

### Skin corrosion/irritation

**Animal data** OECD Test Guideline 404 No skin irritation (rabbit)

### Serious eye damage/irritation

**Serious eye damage/irritation** No eye irritation OECD 405 rabbit

### Respiratory sensitisation

**Respiratory sensitisation** No information available.

### Skin sensitisation

**Skin sensitisation** Guinea pig maximization test (GPMT) - : 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 - micronucleus assay: Negative. Based on available data the classification criteria are not met.

### Carcinogenicity

**Carcinogenicity** Did not show carcinogenic effects in animal experiments.

### Reproductive toxicity

## HI-BUILD VINYL SEMI-MATT 2010 (General colours)

**Reproductive toxicity - fertility** Fertility: - NOAEC 3615 mg/m<sup>3</sup>, Inhalation, Rat

**Reproductive toxicity - development** Developmental toxicity: - LOAEC: 7230 mg/m<sup>3</sup>, Inhalation, Rat

**Specific target organ toxicity - single exposure**

**STOT - single exposure** No information available.

**Specific target organ toxicity - repeated exposure**

**STOT - repeated exposure** NOAEC 500 ppmV/6hr/day, Inhalation, Rat

**Aspiration hazard**

**Aspiration hazard** Based on available data the classification criteria are not met.

**TRIZINC BIS(ORTHOPHOSPHATE)**

**Acute toxicity - oral**

**Acute toxicity oral (LD<sub>50</sub> mg/kg)** 5,001.0

**Species** Rat

**ATE oral (mg/kg)** 5,001.0

**Acute toxicity - inhalation**

**ATE inhalation (dusts/mists mg/l)** 5.8

**Skin corrosion/irritation**

**Animal data** No skin irritation

**Serious eye damage/irritation**

**Serious eye damage/irritation** Not irritating.

**Respiratory sensitisation**

**Respiratory sensitisation** No information available.

**Skin sensitisation**

**Skin sensitisation** No information available.

**Germ cell mutagenicity**

**Genotoxicity - in vitro** No information available.

**Genotoxicity - in vivo** No information available.

**Carcinogenicity**

**Carcinogenicity** No information available.

**Reproductive toxicity**

**Reproductive toxicity - fertility** No information available.

**Reproductive toxicity - development** No information available.

**Specific target organ toxicity - repeated exposure**

## HI-BUILD VINYL SEMI-MATT 2010 (General colours)

**STOT - repeated exposure** No information available.

### SECTION 12: Ecological information

**Ecotoxicity** 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.

#### 12.1. Toxicity

**Toxicity** There is no toxicity data for the mixture itself.

#### Ecological information on ingredients.

#### XYLENE

##### Acute aquatic toxicity

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: 2.6 mg/l, Oncorhynchus mykiss (Rainbow trout)

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours: 3.82 mg/l, Daphnia magna

**Acute toxicity - aquatic plants** IC<sub>50</sub>, 72 hours: 2.2 mg/l, Freshwater algae

**Acute toxicity - microorganisms** EC<sub>50</sub>, 24 hours: 96 mg/l, Bacteria

##### Chronic aquatic toxicity

**Chronic toxicity - aquatic invertebrates** NOEC, 48 hours: 6.8 mg/l, Daphnia magna

#### HYDROCARBONS C9 AROMATICS

##### Acute aquatic toxicity

**Acute toxicity - fish** LC<sub>50</sub>, 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** EC<sub>50</sub>, 72 hours: 2.9 mg/l, Pseudokirchneriella subcapitata

##### Chronic aquatic toxicity

**Chronic toxicity - aquatic invertebrates** NOELR, 21 days: 2.14 mg/l, Daphnia magna

#### 2-METHOXY-1-METHYLETHYL ACETATE

##### Acute aquatic toxicity

**Acute toxicity - fish** LC<sub>100</sub>, 96 hours: 180 mg/l, Oncorhynchus mykiss (Rainbow trout)  
NOEC, 96 hours: 100 mg/l, Oncorhynchus mykiss (Rainbow trout)

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours: 508 - 500 mg/l, Daphnia magna

**Acute toxicity - aquatic plants** NOEC, 96 hours: > 1000 mg/l, Selenastrum capricornutum  
ErC50, 72 hours: >1000 mg/l, Pseudokirchneriella subcapitata

## HI-BUILD VINYL SEMI-MATT 2010 (General colours)

**Acute toxicity - microorganisms** EC<sub>20</sub>, 30 minutes: > 1000 mg/l, Activated sludge

### ETHYLBENZENE

#### Acute aquatic toxicity

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: 4.2 mg/l,

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours: 1.8 mg/l, Daphnia magna

**Acute toxicity - aquatic plants** EC<sub>50</sub>, 96 hours: 3.6 mg/l, Pseudokirchneriella subcapitata

#### Chronic aquatic toxicity

**Chronic toxicity - aquatic invertebrates** NOEC, 7 days: 1 mg/l, Daphnia magna

### n-BUTYL ACETATE

#### Acute aquatic toxicity

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: 18 mg/l, Pimephales promelas (Fat-head Minnow)  
OECD Guideline for Testing of Chemicals, No.203

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours: 44 mg/l, Daphnia magna

**Acute toxicity - aquatic plants** EC<sub>50</sub>, 72 hours: 647.7 mg/l, Scenedesmus subspicatus  
NOEC, 72 hours: 200 mg/l, Scenedesmus subspicatus

### TRIZINC BIS(ORTHOPHOSPHATE)

#### Acute aquatic toxicity

**LE(C)<sub>50</sub>** 0.1 < L(E)C50 ≤ 1

**M factor (Acute)** 1

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: 780 µg/L, Oncorhynchus mykiss (Rainbow trout)

**Acute toxicity - aquatic invertebrates** NOEC, 48 hours: 2.34 mg/l, Daphnia magna

**Acute toxicity - aquatic plants** IC<sub>50</sub>, 72 hours: 136 µg Zn/L, Pseudokirchneriella subcapitata

**Acute toxicity - microorganisms** NOEC, 4 hours: 0.1 mg/l, Activated sludge

#### Chronic aquatic toxicity

**M factor (Chronic)** 1

### 12.2. Persistence and degradability

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

### Ecological information on ingredients.

### XYLENE

## HI-BUILD VINYL SEMI-MATT 2010 (General colours)

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

### HYDROCARBONS C9 AROMATICS

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

### 2-METHOXY-1-METHYLETHYL ACETATE

<b>Persistence and degradability</b>	Readily biodegradable
<b>Stability (hydrolysis)</b>	pH4 - Half-life : 10 days @ 50°C pH7 - Half-life : 10 days @ 50°C pH9 - Half-life : 8.1 days @ 25°C The substance is effectively stable to degradation by hydrolysis .under any environmental conditions likely to be experienced.
<b>Biodegradation</b>	Water - Degradation (%) >90%: 28 days Activated sludge as inoculum The substance is readily biodegradable.

### ETHYLBENZENE

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

### n-BUTYL ACETATE

<b>Persistence and degradability</b>	Readily biodegradable
<b>Biodegradation</b>	Water - Degradation (%) 83: 28 days

### 12.3. Bioaccumulative potential

<b>Bioaccumulative potential</b>	There is no data for the mixture itself.
<b>Partition coefficient</b>	Not determined. See Section 12 for partition coefficient data on individual components.

### Ecological information on ingredients.

### XYLENE

<b>Bioaccumulative potential</b>	Not expected to bioaccumulate. BCF: 25.9,
<b>Partition coefficient</b>	log Pow: 3.15

## HI-BUILD VINYL SEMI-MATT 2010 (General colours)

### HYDROCARBONS C9 AROMATICS

**Bioaccumulative potential** Substance is a UVCB. Standard tests for this endpoint are not appropriate.

**Partition coefficient** Not applicable.

### 2-METHOXY-1-METHYLETHYL ACETATE

**Bioaccumulative potential** Potential for bioaccumulation is low.

**Partition coefficient** log Pow: 1.2 @ 20°C

### ETHYLBENZENE

**Bioaccumulative potential** Potential for bioaccumulation is low.

**Partition coefficient** log Pow: 3.1 @ 20°C

### n-BUTYL ACETATE

**Bioaccumulative potential** The product is not bioaccumulating.

**Partition coefficient** log Kow: 2.3 OECD Test Guideline 117

#### 12.4. Mobility in soil

**Mobility** There is no data on the mobility of the mixture itself.

#### Ecological information on ingredients.

### 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

### HYDROCARBONS C9 AROMATICS

**Mobility** Substance is a UVCB. Standard tests for this endpoint are not appropriate.

### 2-METHOXY-1-METHYLETHYL ACETATE

**Mobility** Potential for mobility in soil is very high.

**Adsorption/desorption coefficient** Scientifically unjustified.

### 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

### n-BUTYL ACETATE

**Surface tension** 61.3 mN/m @ 20°C OECD Test Guideline 115

#### 12.5. Results of PBT and vPvB assessment

## HI-BUILD VINYL SEMI-MATT 2010 (General colours)

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

### 12.6. Other adverse effects

**Other adverse effects** Not determined.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**General information** Do not allow to enter drains or water courses.

**Disposal methods** Waste 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 class** The 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.

**Road transport notes** VISCOUS FLAMMABLE LIQUID DEROGATION  
In pack sizes of 5 Litres or less, under the terms of 2.2.3.1.5.1 and 2.2.3.1.5.2, this product is not subject to the provisions of ADR.

### 14.1. UN number

UN 1263

### 14.2. UN proper shipping name

PAINT

### 14.3. Transport hazard class(es)

3

**ADR/RID classification code** 3

**ADR/RID label** 3

### Transport labels



### 14.4. Packing group

PG III

## HI-BUILD VINYL SEMI-MATT 2010 (General colours)

### 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

ADR transport category 3

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 applicable.

Annex II of MARPOL 73/78

and the IBC Code

## SECTION 15: Regulatory information

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

<b>National regulations</b>	<p>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.</p> <p>The Control of Substances Hazardous to Health Regulations 2002(SI 2002:1689) and amendments.</p> <p>Control of Pollution Act 1974.</p> <p>The Environmental Protection (Duty of Care) Regulations 1992 and amendments</p> <p>The Dangerous Substances &amp; Explosive Atmospheres Regulations 2002(SI 2002:2776).</p> <p>The Manual Handling Operations Regulations 1992, (SI 1992:2793)and amendment, The Stationery Office.</p> <p>The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].</p>
<b>EU legislation</b>	<p>Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).</p> <p>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).</p> <p>Waste Framework Directive (Directive 2008/98/EC on waste) and amendments</p> <p>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.</p> <p>ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.</p>

## HI-BUILD VINYL SEMI-MATT 2010 (General colours)

<b>Guidance</b>	<p>COSHH Essentials: easy steps to control chemicals, on-line guidance at <a href="http://www.hse.gov.uk/coshh/essentials/index.htm">http://www.hse.gov.uk/coshh/essentials/index.htm</a></p> <p>Chemical Warehousing: Storage of Flammable Liquids in Containers, HSG51, HSE</p> <p>Storage: Packaged Dangerous Substances HSG71, HSE.</p> <p>Working with solvents: A guide to safe working practices, INDG273(rev1), HSE</p> <p>Workplace Exposure Limits EH40.</p> <p>Best Practice Guideline 5 "Safe Use of Gloves (June 2010) published by the European Solvents Industry Group (ESIG) available at <a href="http://www.esig.org/en/library/publications/best-practice-guides">www.esig.org/en/library/publications/best-practice-guides</a></p> <p>Control of Substances Hazardous to Health (Fifth Edition) (HSE Books L5)</p> <p>Dangerous Substances and Explosive Atmospheres Regulations 2002, (HSE Books L138)</p> <p>Safe use and handling of flammable liquids HSG140 (Second edition), HSE</p> <p>A step by step guide to COSHH assessment HSG97, HSE</p> <p>BS EN 14042:2003 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents</p>
<b>Paints Directive 2004/42/EC</b>	VOC Content: EU limit for this product (Cat A/i) is: 500 g/litre. This product contains maximum 500 g/litre VOC.

### 15.2. Chemical safety assessment

### **SECTION 16: Other information**

## HI-BUILD VINYL SEMI-MATT 2010 (General colours)

**Abbreviations and acronyms used in the safety data sheet**

ADR: European Agreement concerning the International Carriage of Dangerous Goods by 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.  
 ECHA: European Chemicals Agency  
 EC No.: EINECS (European Inventory of Existing Commercial Substances) and ELINCS (European List of Notified Substances) Number  
 EC<sub>50</sub>: 50% of maximal Effective Concentration.  
 EmS: Emergency Schedule (IMDG)  
 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<sub>50</sub>: Lethal Concentration to 50 % of a test population.  
 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.  
 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 1.06 Revised transport data.

CLP 1.05 Reclassified for environmental hazard. CLP 1.04 Safe use of mixture information added. CLP 1.03 Amended information in Section 8.

## HI-BUILD VINYL SEMI-MATT 2010 (General colours)

<b>Issued by</b>	Chief Chemist
<b>Revision date</b>	19/03/2019
<b>Revision</b>	CLP 1.06
<b>Supersedes date</b>	23/03/2018
<b>SDS number</b>	10692
<b>Hazard statements in full</b>	<p>H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H311 Toxic in contact with skin. H312 Harmful in contact with skin. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H318 Causes serious eye damage. 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. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects.</p>

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: E**

**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.

<b>SU3 Title</b>	Uses in coatings - Industrial
<b>SU3 Process Category</b>	PROC1, PROC2, PROC3, PROC4, PROC5, PROC7, PROC8a, PROC8b, PROC10, PROC13, PROC15
<b>SU3 Frequency and duration of use</b>	Covers daily exposures up to 8 hours (unless stated)
<b>SU3 Processes, tasks, activities covered</b>	Covers the use in coatings (paints, inks, adhesives, etc) including exposures during use (including materials receipt, storage, preparation and transfer from bulk and semi-bulk, application by spray, roller, spreader, dip, flow, fluidised bed on production lines and film formation) and equipment cleaning, maintenance and associated laboratory activities.
<b>SU3 Other Operational Conditions affecting worker exposure</b>	Assumes use at not more than 20°C above ambient temperature (unless stated differently) Indoor use PROC 7 - Provide extract ventilation to points where emissions occur. Effectiveness of LEV (local exhaust ventilation): 95 % (inhalative).
<b>SU3 General exposures (closed systems)</b>	Handle substance within a closed system. Film formation - force drying (50 - 100°C). Stoving (>100°C). UV/EB radiation curing. Handle substance within a closed system.
<b>SU3 Mixing operations (closed systems) General exposures (closed systems)</b>	Handle substance within a closed system. Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).
<b>SU3 Preparation of material for application. Mixing operations (open systems)</b>	Provide a good standard of controlled ventilation (10 to 15 air changes per hour)
<b>SU3 Spraying</b>	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.
<b>SU3 Material transfers. Non-dedicated facility</b>	Ensure material transfers are under containment or extract ventilation.
<b>SU3 Material transfers. Dedicated facility</b>	Ensure material transfers are under containment or extract ventilation.

<b>SU3 Roller, spreader, flow application</b>	Provide extract ventilation to points where emissions occur.
<b>SU3 Dipping, immersion and pouring</b>	Provide a good standard of controlled ventilation (10 to 15 air changes per hour).
<b>SU3 Material transfers. Drum/batch transfers. Transfer from/pouring from containers</b>	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.
<b>SU3 Equipment cleaning and maintenance</b>	Drain or remove substance from equipment prior to break-in or maintenance.
<b>SU22 Title</b>	Use in coatings - Professional
<b>SU22 Process Category</b>	PROC1, PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC10, PROC11, PROC13, PROC15, PROC19
<b>SU22 Processes, tasks, activities covered</b>	Covers the use in coatings (paints, inks, adhesives, etc) within closed or contained systems including incidental exposures during use (including materials receipt, storage, preparation and transfer from bulk and semi-bulk, application activities and film formation) and equipment cleaning, maintenance and associated laboratory activities. Butyl acetate concentration up to <25% for PROC5, PROC8a, PROC10, PROC13, PROC19.
<b>SU22 Frequency and duration of use</b>	Covers daily exposures up to 8 hours (unless stated)
<b>SU22 Other Operational Conditions affecting worker exposure</b>	Assumes use at not more than 20°C above ambient temperature (unless stated differently) Indoor and outdoor use
<b>SU22 General exposures (closed systems)</b>	Handle substance within a closed system. Ensure material transfers are under containment or extract ventilation.
<b>SU22 Filling/preparation of equipment from drums or containers. Handle substance within a closed sys</b>	Ensure material transfers are under containment or extract ventilation.
<b>SU22 Preparation of material for application</b>	Handle substance within a closed system. Provide a good standard of controlled ventilation (10 to 15 air changes per hour).
<b>SU22 Film formation - air drying</b>	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.
<b>SU22 Preparation of material for application.</b>	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.
<b>SU22 Material transfers. Drum/batch transfers</b>	Transfer via enclosed lines. Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). Wear suitable gloves tested to EN374. Avoid splashing. Clear lines prior to decoupling.
<b>SU22 Brush, Roller, spreader, flow application</b>	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.  
Outdoor: Ensure operation is undertaken outdoors. Avoid carrying out activities involving exposure for more than 4 hours. Wear suitable gloves tested to EN374. 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.

**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.

**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 endorsed 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 Identification (LCID) information**

LC INHALATION

XYLENE

LC DERMAL

Butyl Acetate

EYE HAZ 1

XYLENE