

# Product Data Sheet



## 6OPU77GXX Range: Clear PU Topcoats (633/XXX – 636/XXX – Tinted PU Topcoats)

Code	Description	Code	Description
6OPU77G90	90% Sheen	Catalyst	6CT23
6OPU77G50	50% Sheen	Std. Thinners	6007/000
6OPU77G30	30% Sheen	Fast Thinners	6007/100
6OPU77G20	20% Sheen	Slow Thinners	6007/200
6OPU77G10	10% Sheen	Basecoat	6FPU35

<b>Technical Data</b>	A range of high quality Clear PU topcoats for use coat-on-coat or over 6FPU35 Clear PU Sealer/Basecoat.
<b>Properties</b>	These products exhibit good flow and leveling combined with excellent anti-sag characteristics on edges and profiles to produce a high quality finish straight from the gun. Meets the requirements of BS (FIRA Std) 6250 for horizontal surfaces (excluding kitchen worktops) in General Use.
<b>Mixing Guidelines</b>	<p>2 parts 6OPU77G lacquer must be mixed with 1 part 6CT23 catalyst by either <b>volume</b> or <b>weight</b> prior to use.</p> <p>The catalysed lacquer can be thinned as necessary with the appropriate thinners (upto 20% by volume is recommended).</p> <p>Over-thinning can lead to a reduction in properties and will increase VOC emissions.</p>
<b>Typical Handling</b>	<p>Touch Dry: 20 - 25 minutes @ 18°C</p> <p>Sandable: 40 - 60 minutes @ 18°C. Use 320 or finer Silicone Carbide paper.</p> <p>Recoatable: 60 – 90 minutes minimum @ 18°C</p> <p>Packing Time: Overnight minimum, dependent on conditions.</p> <p>Pot-Life: 3 Hrs @ 20°C</p>
<b>Cleaning</b>	2007/100 or 6007/000 should be used for cleaning equipment.
<b>Coverage</b>	Approximately 40m <sup>2</sup> per 5Lts dependent upon the size, orientation and surface quality of the item being coated.
<b>Tinting</b>	A full range of standard and bespoke colours are available.
<b>System Guidelines</b>	<p>Morrells recommends the following guidance for use of this product:</p> <p><b>Typical Finish:</b> 1-3 coats at 75g/m<sup>2</sup> per coat (Dry Film Thickness ~ 31µ per coat) applied coat-on-coat or over Morrells PU Sealer/Basecoat 6FPU35.</p> <p>Using these products in systems outside these guidelines can lead to immediate and latent problems with the integrity of the finish.</p>

For further technical information contact our Technical Support Team on 0161 406 5300

This information is provided in good faith and without prejudice

<b>Important Information</b>	<ul style="list-style-type: none"> <li>➤ Designed for spray application</li> <li>➤ Morrells do not recommend the mixing of catalysed material with fresh material. Always catalyse enough products for the job and consider the pot-life.</li> <li>➤ Use only with the recommended catalyst– the use of non-recommended catalyst can cause patchy/uneven drying.</li> <li>➤ Under or over catalysing can cause impairment of cure and cracking.</li> <li>➤ Use only the recommended thinner. Use of non-recommended thinner can cause uneven/patchy drying.</li> <li>➤ Excessive coating weights can lead to cracking or lifting.</li> <li>➤ Leave adequate time between coats. Do not apply more than 3 coats in one day. Denib between coats to aid adhesion.</li> <li>➤ Do not overcoat with Acid Catalyst (AC) products.</li> <li>➤ This range is not suitable for 'pulling over'.</li> <li>➤ Product should be stored above 5°C and protected from frost.</li> <li>➤ Optimum application is achieved between 18°C and 22°C with good air movement and ventilation.</li> <li>➤ Finished products should not be subjected to environments with temperatures of &lt; 2°C.</li> <li>➤ Out of scope with 2004/42/EC.</li> </ul>
<b>Health &amp; Safety</b>	<p>Reference should be made to the appropriate MSDS for this product range, which can be found at <a href="http://www.morrells.co.uk">www.morrells.co.uk</a></p> <p>Refer to HSE leaflet INDG 388 – working with 2 pack isocyanate paints before using this product (<a href="http://www.hse.gov.uk/pubns/indg388.pdf">www.hse.gov.uk/pubns/indg388.pdf</a>).</p> <p>The use of correct personal protection equipment (PPE) is strongly recommended when using these products.</p> <p>These products are intended for <b>professional use</b> only.</p>

For further technical information contact our Technical Support Team on 0161 406 5300

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## SAFETY DATA SHEET

**1 - IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING****Identification of the substance or preparation:**

Name: RANGE OF CLEAR PU TOPCOAT MIX 2:1 BY VOLUME WITH 6CT23.

Product code: 6OPU77.

**Company/undertaking identification:**

Registered company name: Morrells Woodfinishes Ltd.

Address: Wellington Works, Mill Lane, Woodley.SK6 1RN.Stockport.Cheshire.

Telephone: 0161 406 5300. Fax:0161 406 6276. Telex:.

enquiries@morrells.co.uk

www.morrells.co.uk

**Emergency telephone: .**

Association/Organisation: .

**Use of the substance/preparation:**

Paint Product. Intended for professional users. Please refer to the Technical data sheet.

**2 - HAZARDS IDENTIFICATION**

This product is classed: Highly flammable liquid.

Possibility of irritation to the skin.

Possibility of noxious effects with symptoms of slight poisoning by inhalation and contact with the skin.

**Preparation classification:**

Harmful.

R 38

R 20/21

R 11



Highly flammable.

Irritating to skin.

Harmful by inhalation and in contact with skin.

Highly flammable.

For professional use only.

**3 - COMPOSITION/INFORMATION ON INGREDIENTS**

Full text of risk phrases appearing in section 3: see section 16.

**Hazardous substances present on their own:**

(present in the preparation at a sufficient concentration to give it the toxicological characteristics it would have in a 100% pure state)

INDEX	CAS	EC	Name	Symb.	R:	%
601-022-00-9	1330-20-7	215-535-7	XYLENE	Xn	Xn; R20/21 Xi; R38 R10	25 <= x % < 50

**Other substances representing a hazard:**

INDEX	CAS	EC	Name	Symb.	R:	%
601-023-00-4	100-41-4	202-849-4	ETHYLBENZENE	Xn F	Xn; R20 F;R11	2.5 <= x % < 10
606-004-00-4	108-10-1	203-550-1	ISOBUTYL METHYL KETONE	Xn F	Xn; R20 Xi; R36/37 F;R11 R66	2.5 <= x % < 10

**Substances present at a concentration below the minimum danger threshold:**

INDEX	CAS	EC	Name	Symb.	R:	%
601-021-00-3	108-88-3	203-625-9	TOLUENE	Xn F	Repr. Cat. 3; R63 Xn; R48/20 R65 Xi; R38 F;R11 R67	2.5 <= x % < 10
606-002-00-3	78-93-3	201-159-0	BUTANONE	Xi F	Xi; R36 F;R11 R66 R67	2.5 <= x % < 10
607-025-00-1	123-86-4	204-658-1	N-BUTYL ACETATE		R10 R66 R67	2.5 <= x % < 10
607-195-00-7	108-65-6	203-603-9	2-METHOXY-1-METHYLETHYL ACETATE	Xi	Xi; R36 R10	2.5 <= x % < 10

**Other substances with occupational exposure limits:**

No known substance in this category present.

**4 - FIRST AID MEASURES**

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing in an unconscious person.

**In the event of exposure by inhalation:**

If a large quantity is inhaled, move the patient into the fresh air and keep him/her warm and still.

If breathing is irregular or has stopped, effect mouth-to-mouth resuscitation and call a doctor.

Do not give the patient anything orally.

**In the event of splashes or contact with eyes:**

Wash thoroughly with soft, clean water for 15 minutes holding the eyelids open.

Refer the patient to an ophthalmologist, in particular if there is any redness, pain or visual impairment.

**In the event of splashes or contact with skin:**

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner.

DO NOT use solvents or thinners.

If the contaminated area is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital

**In the event of swallowing:**

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor.

Keep still. DO NOT induce vomiting.

Call a doctor immediately and show him the label.

**5 - FIRE-FIGHTING MEASURES**

Chemical powders, carbon dioxide and other extinguishing gas are suitable for small fires.

**Suitable extinguishing media:**

Carbon dioxide, chemical powders, foams, and other extinguishing gases.

In the event of fire, use specifically suitable extinguishing agents. Never use water.

**Extinguishing media which must not be used for safety reasons:**

Water is not generally recommended since it can be ineffective; however, it can be used successfully to cool containers exposed to the fire and to disperse fumes.

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

Prevent the effluent of fire-fighting measures from entering drains or waterways.

**Special protective equipment for fire-fighters:**

Fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

## 6 - ACCIDENTAL RELEASE MEASURES

### Personal precautions:

On account of the organic solvents contained in the preparation, eliminate sources of ignition and ventilate the premises.

Avoid inhaling the vapors.

Avoid any contact with the skin and eyes.

Consult the safety measures listed under headings 7 and 8.

### Environmental precautions:

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

Use drums to dispose of waste recovered in accordance with applicable regulations (see heading 13).

If the product contaminates waterways, rivers or drains, alert the relevant authorities in accordance with statutory procedures

### Methods for cleaning up:

Clean preferably with a detergent, do not use solvents.

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## 7 - HANDLING AND STORAGE

The regulations relating to storage premises apply to workshops where the product is handled.

### Handling:

Handle in well-ventilated areas.

The vapors are denser than air. They can spread along the ground and form explosive mixtures with air

Prevent the formation of flammable or explosive concentrations in air and avoid vapor concentrations higher than the occupational exposure limits.

### Fire prevention:

Prevent the accumulation of electrostatic charges with connections to earth

The preparation may become electrostatically charged; always place on the ground during transfer. Wear antistatic shoes and clothes and make floors of conductive materials.

Use the product in premises where there are no naked flames or other sources of ignition and have protected electrical equipment

Keep packages tightly closed and away from sources of heat, sparks and naked flames.

Do not use tools which may produce sparks. Do not smoke.

Prevent access by unauthorised personnel.

### Recommended equipment and procedures:

For personal safety, see §8.

Observe precautions stated on label and also industrial safety regulations

Avoid inhaling solvent vapors and spray-gun aerosols

Packages which have been opened must be reclosed carefully and stored in an upright position

Avoid inhaling vapors.

Where the personnel must carry out work in a booth, whether for spraying or otherwise, the ventilation may be inadequate to control particles and solvent vapors in every case.

It is therefore recommended that personnel wear masks with a compressed air supply during spraying operations until the concentration of particles and solvent vapors has fallen below the exposure limits.

Avoid contact of product with the skin and eyes

### Prohibited equipment and procedures:

Smoking, eating and drinking are prohibited in premises where the preparation is used

Never open the packages under pressure

### Storage:

Keep the container tightly closed in a dry, well-ventilated place

Keep away from all sources of ignition - do not smoke.

Keep well away from all sources of ignition, heat and direct sunlight

The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area.

## 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION



Use personal protection equipment as per Directive 89/686/EEC.

### Technical measures:

Ensure adequate ventilation, if possible with extractor fans at work posts and appropriate general extraction.

If this ventilation is insufficient to maintain the concentration of solvent vapors below the exposure limits, wear breathing apparatus

### Exposure limit values (2003-2006):

UK/WELs	TWA:	STEL:	Ceiling:	Definition:	Criterion:
108-65-6	50 ppm	100 ppm	-	-	-
123-86-4	150 ppm	200 ppm	-	-	-
108-10-1	50 ppm	100 ppm	-	-	-
78-93-3	200 ppm	300 ppm	-	-	-
100-41-4	100 ppm	125 ppm	-	-	-
1330-20-7	50 ppm	100 ppm	-	-	-
108-88-3	50 ppm	150 ppm	-	-	-
UK/OES	TWA:	STEL:	Ceiling:	Definition:	Criterion:
108-65-6	50 ppm	100 ppm	-	-	-
123-86-4	150 ppm	200 ppm	-	-	-
108-10-1	50 ppm	100 ppm	-	-	-
78-93-3	200 ppm	300 ppm	-	-	-
100-41-4	100 ppm	125 ppm	-	-	-
1330-20-7	50 ppm	100 ppm	-	-	-
108-88-3	50 ppm	150 ppm	-	-	-

### Respiratory protection:

With this preparation, avoid in particular any inhalation of vapors.

Anti-aerosol filters

- P2 (white)

Anti-gas filters :

- A2 (brown)

### Hand protection:

Protective creams may be used for exposed skin, but they should not be applied after contact with the product.

In the event of prolonged or repeated contact with the hands, use appropriate gloves.

Type of gloves recommended :

- PVA (polyvinylalcohol)

### Eye and face protection:

Avoid contact with the skin and eyes. Wear safety goggles

Provide eye washes in workshops where the product is constantly handled

### Skin protection:

For further information, see § 11 of S.D.S. - Toxicological information.

## 9 - PHYSICAL AND CHEMICAL PROPERTIES

### General information:

Physical state:

viscous liquid

**Important health, safety and environmental information:**

pH of the substance or preparation:	neutral.
When a pH measure is possible, it has a value of:	not stated.
Boiling point/boiling range:	not specified.
Flash point interval:	Flash point: <= 21°C.
Flash point:	-4.00 °C.
vapour pressure:	Below 110 kPa (1.10 bar).
Density:	> 1
water solubility:	Insoluble.

**Other information:**

melting point/melting range:	not specified.
Self-ignition temperature:	not specified.
Decomposition point/decomposition range :	not specified.
VOC (g/l):	547

**10 - STABILITY AND REACTIVITY**

When exposed to high temperatures, the preparation may release dangerous decomposition products such as carbon monoxide and dioxide, smoke and nitrogen oxide

Any apparatus likely to produce a flame or to have a metallic surface at high temperature (burners, electric arcs, furnaces etc.) must not be allowed on the premises.

**11 - TOXICOLOGICAL INFORMATION**

No data is available regarding the preparation itself.

Exposure to vapors from solvents contained in the preparation beyond the exposure limits stated may produce effects harmful to health, such as:

Irritation of mucous membrane and respiratory system, kidneys, liver and central nervous system.

Symptoms produced will include headaches, numbness, dizziness, fatigue, muscular asthenia and, in extreme cases, loss of consciousness.

Prolonged or repeated contact with the preparation may strip the skin of its natural oil and thus cause non-allergic dermatitis on contact and absorption through the epidermis.

Splashes in the eyes may cause irritation and reversible damage

It is generally agreed that substances contained are likely to cause significant irritation which lasts for at least twenty four hours after application to the healthy, unbroken skin of an animal for a period of up to 4 hours.

**Other data:**

CAS 108-88-3 : IARC Group 3 (The agent is not classifiable as to its carcinogenicity to humans).

CAS 1330-20-7 : IARC Group 3 (The agent is not classifiable as to its carcinogenicity to humans).

CAS 100-41-4 : IARC Group 2B (The agent is possibly carcinogenic to humans)

**12 - ECOLOGICAL INFORMATION**

No ecological data on the product itself is available.

The product must not be allowed to run into drains or waterways.

**Other adverse effects:**

Germany: WGK 2 (VwVwS vom 17/05/99, KBws)

**13 - DISPOSAL CONSIDERATIONS**

Do not pour into drains or waterways.

**Waste:**

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

**Soiled packaging:**

Empty container completely. Keep label(s) on container.  
Give to a certified disposal contractor.

**14 - TRANSPORT INFORMATION**

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2007 - IMDG 2006 - ICAO/IATA 2007).

UN1263=PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning and reducing compound)

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.
	3	F1	II	3	33	LQ6	163 640D 650



IMDG	Class	2° Label	Pack gr.	LQ	EMS	Provis.
	3	-	II	5 L	F-E,S-E	163 944

IATA	Class	2° Label	Pack gr.	Passager	Passager	Cargo	Cargo	note
	3	-	II	305	5 L	307	60 L	A3 A72
	3	-	II	Y305	1 L	-	-	-

**15 - REGULATORY INFORMATION**

This preparation was classified in compliance with the directive known as <All preparations> 1999/45/EC and its adaptations

In addition directive 2004/73/EC with the 29° adaptation of directive 67/548/EEC (Hazardous substances) have been taken into account.

**Preparation classification:**

Harmful.



Highly flammable.

**Contains:**

215-535-7	XYLENE
202-849-4	ETHYLBENZENE
203-550-1	ISOBUTYL METHYL KETONE

**Particular hazards associated with the preparation and safety recommendations:**

R 38	Irritating to skin.
R 20/21	Harmful by inhalation and in contact with skin.
R 11	Highly flammable.
	For professional use only.
S 23	Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
S 36/37	Wear suitable protective clothing and gloves.
S 16	Keep away from sources of ignition - No smoking.
S 25	Avoid contact with eyes.
S 9	Keep container in a well-ventilated place.
	Product submitted to restrictions on the marketing and use: see Directive 76/769/EEC and its ensuing adaptations.

**Particular provisions:**

Product not to be sold to the general public. (Dir 76/769/EC) - For professional use only.

Germany: WGK 2 (VwVwS vom 17/05/99, KBws)

## 16 - OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The product must not be used for any purposes other than those specified under heading 1 without first obtaining written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information given on this safety data sheet must be regarded as a description of the safety requirements relating to our product and not a guarantee of its properties

### Full text of risk phrases appearing in section 3:

R 10	Flammable.
R 11	Highly flammable.
R 20	Harmful by inhalation.
R 20/21	Harmful by inhalation and in contact with skin.
R 36	Irritating to eyes.
R 36/37	Irritating to eyes and respiratory system.
R 38	Irritating to skin.
R 48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R 63.G3	Possible risk of harm to the unborn child.
R 65	Harmful: may cause lung damage if swallowed.
R 66	Repeated exposure may cause skin dryness or cracking.
R 67	Vapours may cause drowsiness and dizziness.

# Product Data Sheet



## 6CT23: Catalyst/Hardener for Clear and Tinted PU Lacquers

Code	Description
6CT23	Polyurethane Catalyst/Hardener for Clear and Tinted PU Lacquers
For use with	6OPU77GXX PU Topcoats and 633/XXX – 636/XXX Tinted PU Topcoats

<b>Technical Data</b>	A high quality polyisocyanate hardener/catalyst for use with Morrells Clear PU topcoats.
<b>Properties</b>	Formulated to provide a high level of flexibility and speed of cure.
<b>Mixing Guidelines</b>	Mix 2 parts Lacquer to 1 part Catalyst by <b>volume</b> or <b>weight</b> prior to use. The products should be mixed well, and under normal conditions will have a workable pot-life of 3 hours after catalysis at 20°C.
<b>Cleaning</b>	2007/100 or 6007/000 should be used for cleaning equipment.
<b>Handling, Coverage &amp; System Guidelines</b>	Consult Product Data Sheet for 6OPU77GXX Range.
<b>Important Information</b>	<ul style="list-style-type: none"> <li>➤ Morrells do not recommend the mixing of catalysed material with fresh material. Always catalyse enough products for the job and consider the pot-life.</li> <li>➤ Use only with the recommended lacquers– use with non-recommended lacquer can cause patchy/uneven drying.</li> <li>➤ Under or over catalysing can cause impairment of cure and cracking.</li> <li>➤ Product should be stored between 5°C and 28°C, and protected from frost.</li> <li>➤ Optimum application is achieved between 18°C and 22°C with good air movement and ventilation.</li> <li>➤ This product has a shelf-life of 12 months from date of manufacture in original, unopened packaging.</li> <li>➤ Polyisocyanates catalysts are affected by moisture. Always ensure part used cans are sealed air-tight. It is recommended that catalysts are used within 1 week of opening, to ensure optimum properties.</li> <li>➤ Finished products should not be subjected to environments with temperatures &lt; 2°C.</li> <li>➤ Out of scope with 2004/42/EC.</li> </ul>
<b>Health &amp; Safety</b>	<p>Reference should be made to the appropriate MSDS for this product, which can be found at <a href="http://www.morrells.co.uk">www.morrells.co.uk</a></p> <p>Refer to HSE leaflet INDG 388 – working with 2 pack isocyanate paints before using this product (<a href="http://www.hse.gov.uk/pubns/indg388.pdf">www.hse.gov.uk/pubns/indg388.pdf</a>).</p> <p>The use of correct personal protection equipment (PPE) is strongly recommended when using this product.</p> <p>This product is intended for <b>professional use</b> only.</p>

For further technical information contact our Technical Support Team on 0161 406 5300

This information is provided in good faith and without prejudice



## SAFETY DATA SHEET

### 1 - IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Identification of the substance or preparation:**

Name: CATALYST FOR CLEAR PU CATALYST.  
Product code: 6CT23.

**Company/undertaking identification:**

Registered company name: Morrells Woodfinishes Ltd.  
Address: Wellington Works, Mill Lane, Woodley, SK6 1RN, Stockport, Cheshire.  
Telephone: 0161 406 5300. Fax: 0161 406 6276. Telex: .  
enquiries@morrells.co.uk  
www.morrells.co.uk

**Emergency telephone: .**

Association/Organisation: .

**Use of the substance/preparation:**

Paint Product. Intended for professional users. Please refer to the Technical data sheet.

### 2 - HAZARDS IDENTIFICATION

This product is classed: Highly flammable liquid.

Possibility of serious noxious effects in the event of repeated or prolonged exposure and by inhalation.

Possibility of irritation to the eyes and skin.

The preparation causes sensitisation of the skin and respiratory organs. It also irritates the skin and prolonged contact may aggravate this effect.

Possibility of category three toxic effects on reproduction.

Possibility of noxious effects with symptoms of slight poisoning by inhalation.

Possible risk of harm to the unborn child.

**Preparation classification:**



Harmful.

R 42/43  
R 36/38  
R 20  
R 48/20  
R 11  
R 63



Highly flammable.

May cause sensitization by inhalation and skin contact.  
Irritating to eyes and skin.  
Harmful by inhalation.  
Harmful: danger of serious damage to health by prolonged exposure through inhalation.  
Highly flammable.  
Possible risk of harm to the unborn child.  
Contains isocyanates. See information supplied by the manufacturer.  
For professional use only.

### 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Full text of risk phrases appearing in section 3: see section 16.

**Hazardous substances present on their own:**

(present in the preparation at a sufficient concentration to give it the toxicological characteristics it would have in a 100% pure state)

INDEX	CAS	EC	Name	Symb.	R:	%
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601-021-00-3	108-88-3	203-625-9	TOLUENE	Xn F	Repr. Cat. 3; R63 Xn; R48/20 R65 Xi; R38 F;R11 R67	25 <= x % < 50
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**Other substances representing a hazard:**

INDEX	CAS	EC	Name	Symb.	R:	%
606-002-00-3	78-93-3	201-159-0	BUTANONE	Xi F	Xi; R36 F;R11 R66 R67	10 <= x % < 25
607-022-00-5	141-78-6	205-500-4	ETHYL ACETATE	Xi F	Xi; R36 F;R11 R66 R67	10 <= x % < 25
607-025-00-1	123-86-4	204-658-1	N-BUTYL ACETATE		R10 R66 R67	10 <= x % < 25
615-006-00-4	26471-62-5	247-722-4	M-TOLYLIDENE DIISOCYANATE	T+	Carc. Cat. 3; R40 T+; R26 Xn; R42/43 Xi;R36/37/38 R52/53	0 <= x % < 2.5
	9017-01-0		AROMATIC POLYISOCYANATE	Xi	Xi;R43	25 <= x % < 50

**Substances present at a concentration below the minimum danger threshold:**

No known substance in this category present.

**Other substances with occupational exposure limits:**

No known substance in this category present.

#### 4 - FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing in an unconscious person.

**In the event of exposure by inhalation:**

If a large quantity is inhaled, move the patient into the fresh air and keep him/her warm and still.

If breathing is irregular or has stopped, effect mouth-to-mouth resuscitation and call a doctor.

Do not give the patient anything orally.

If the person is unconscious, place in the recovery position and call an ambulance.

**In the event of splashes or contact with eyes:**

Wash thoroughly with soft, clean water for 15 minutes holding the eyelids open.

Refer the patient to an ophthalmologist, in particular if there is any redness, pain or visual impairment.

**In the event of splashes or contact with skin:**

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner.

DO NOT use solvents or thinners.

**In the event of swallowing:**

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor.

Keep still. DO NOT induce vomiting.

Call a doctor immediately and show him the label.

#### 5 - FIRE-FIGHTING MEASURES

Chemical powders, carbon dioxide and other extinguishing gas are suitable for small fires.

**Suitable extinguishing media:**

Carbon dioxide, chemical powders, foams, and other extinguishing gases.

In the event of fire, use specifically suitable extinguishing agents. Never use water.

**Extinguishing media which must not be used for safety reasons:**

Water is not generally recommended since it can be ineffective; however, it can be used successfully to cool containers exposed to the fire and to disperse fumes.

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.  
Do not breathe in smoke.  
Prevent the effluent of fire-fighting measures from entering drains or waterways.

**Special protective equipment for fire-fighters:**

Fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

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## 6 - ACCIDENTAL RELEASE MEASURES

**Personal precautions:**

On account of the organic solvents contained in the preparation, eliminate sources of ignition and ventilate the premises.  
Avoid inhaling the vapors.  
Avoid any contact with the skin and eyes.  
Consult the safety measures listed under headings 7 and 8.

If a large quantity has been spilt, evacuate all personnel and only allow intervention by trained operators equipped with safety apparatus.

**Environmental precautions:**

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.  
Prevent any material from entering drains or waterways.  
Use drums to dispose of waste recovered in accordance with applicable regulations (see heading 13).  
If the product contaminates waterways, rivers or drains, alert the relevant authorities in accordance with statutory procedures

**Methods for cleaning up:**

Clean preferably with a detergent, do not use solvents.  
Contaminated areas must be cleaned very quickly.  
A possible decontaminant for flammable products may be: (expressed by volume) water (45 parts), ethanol or isopropanol (50 parts), concentrated ammonia (d-0.880) (5 parts). For non-flammable products: sodium carbonate (5 parts), water (95 parts).  
These residues must be stored for disposal in accordance with applicable regulations (see 13).

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## 7 - HANDLING AND STORAGE

The regulations relating to storage premises apply to workshops where the product is handled.  
Anyone with a history of asthma, allergies, chronic or periodic respiratory problems must on no account use these preparations  
Anyone with a history of skin sensitisation must on no account handle such products  
Avoid exposure to pregnant women and warn women of child-bearing age of the possible risks

**Handling:**

Handle in well-ventilated areas.  
The vapors are denser than air. They can spread along the ground and form explosive mixtures with air  
Prevent the formation of flammable or explosive concentrations in air and avoid vapor concentrations higher than the occupational exposure limits.

**Fire prevention:**

Prevent the accumulation of electrostatic charges with connections to earth  
The preparation may become electrostatically charged; always place on the ground during transfer. Wear antistatic shoes and clothes and make floors of conductive materials.  
Use the product in premises where there are no naked flames or other sources of ignition and have protected electrical equipment  
Keep packages tightly closed and away from sources of heat, sparks and naked flames.  
Do not use tools which may produce sparks. Do not smoke.  
Prevent access by unauthorised personnel.

**Recommended equipment and procedures:**

For personal safety, see §8.  
Observe precautions stated on label and also industrial safety regulations  
Avoid inhaling solvent vapors and spray-gun aerosols

Avoid exposure - obtain special instructions before use.

Packages which have been opened must be reclosed carefully and stored in an upright position

Avoid inhaling vapors. Carry out any industrial operation which may give rise to this in a sealed apparatus.

In all cases, recover emissions at source

Provide vapor extraction at the emission source and also general ventilation of the premises

Also provide breathing apparatus for certain short tasks of an exceptional nature and for emergency interventions

Where the personnel must carry out work in a booth, whether for spraying or otherwise, the ventilation may be inadequate to control particles and solvent vapors in every case.

It is therefore recommended that personnel wear masks with a compressed air supply during spraying operations until the concentration of particles and solvent vapors has fallen below the exposure limits.

In the case of paints, also avoid inhaling dust, particles and fumes during treatment of surfaces coated with this preparation by dry sand blasting or by heating operations (welding, soldering, cutting etc.)

Avoid contact of product with the skin and eyes

#### Prohibited equipment and procedures:

Smoking, eating and drinking are prohibited in premises where the preparation is used

Never open the packages under pressure

#### Storage:

Keep the container tightly closed in a dry, well-ventilated place

Keep away from all sources of ignition - do not smoke.

Keep well away from all sources of ignition, heat and direct sunlight

The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area.

## 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION



Use personal protection equipment as per Directive 89/686/EEC.

Anyone with a history of skin sensitisation, asthma, allergies, chronic or periodic respiratory problems must on no account use these preparations

#### Technical measures:

Ensure adequate ventilation, if possible with extractor fans at work posts and appropriate general extraction.

Check the atmosphere periodically.

If this ventilation is insufficient to maintain the concentration of vapors below the exposure limits, wear breathing apparatus

#### Exposure limit values (2003-2006):

UK/WELs	TWA:	STEL:	Ceiling:	Definition:	Criterion:
26471-62-5	0.02 mg/m <sup>3</sup>	0.07 mg/m <sup>3</sup>	-	-	-
123-86-4	150 ppm	200 ppm	-	-	-
141-78-6	200 ppm	400 ppm	-	-	-
78-93-3	200 ppm	300 ppm	-	-	-
108-88-3	50 ppm	150 ppm	-	-	-
UK/MEL	TWA:	STEL:	Ceiling:	Definition:	Criterion:
26471-62-5	0.02 mg/m <sup>3</sup>	0.07 mg/m <sup>3</sup>	-	-	-
UK/OES	TWA:	STEL:	Ceiling:	Definition:	Criterion:
123-86-4	150 ppm	200 ppm	-	-	-
141-78-6	200 ppm	400 ppm	-	-	-
78-93-3	200 ppm	300 ppm	-	-	-
108-88-3	50 ppm	150 ppm	-	-	-

#### Respiratory protection:

With this preparation, avoid in particular any inhalation of vapors.

Anti-aerosol filters

- P2 (white)

Anti-gas filters :

- A2 (brown)

**Hand protection:**

Protective creams may be used for exposed skin, but they should not be applied after contact with the product.

In the event of prolonged or repeated contact with the hands, use appropriate gloves.

Type of gloves recommended :

- PVA (polyvinylalcohol)

**Eye and face protection:**

Avoid contact with eyes.

Wear safety goggles.

Provide eye washes in workshops where the product is constantly handled

**Skin protection:**

Wear antistatic clothing made of natural fibre or synthetic fibre resistant to high temperatures.

After contact with the product, any contaminated part of the body shall be washed

For further information, see § 11 of S.D.S. - Toxicological information.

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**9 - PHYSICAL AND CHEMICAL PROPERTIES**

**General information:**

Physical state: viscous liquid

**Important health, safety and environmental information:**

pH of the substance or preparation: neutral.  
When a pH measure is possible, it has a value of: not stated.  
Boiling point/boiling range: not specified.  
Flash point interval: Flash point: <= 21°C.  
Flash point: -4.00 °C.  
vapour pressure: Below 110 kPa (1.10 bar).  
Density: > 1  
water solubility: Insoluble.

**Other information:**

melting point/melting range: not specified.  
Self-ignition temperature: not specified.  
Decomposition point/decomposition range : not specified.  
VOC (g/l): 703

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**10 - STABILITY AND REACTIVITY**

When exposed to high temperatures, the preparation may release dangerous decomposition products such as carbon monoxide and dioxide, smoke and nitrogen oxide

It may also release hydrogen cyanide, amines and alcohols.

Keep away from oxidising agents and strongly acidic or basic materials to avoid exothermic reactions

Exothermic reactions occur with amines and alcohols. The preparations react slowly with water and give off carbonic gas which may produce pressure increases in closed packages

Any apparatus likely to produce a flame or to have a metallic surface at high temperature (burners, electric arcs, furnaces etc.) must not be allowed on the premises.

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**11 - TOXICOLOGICAL INFORMATION**

No data is available regarding the preparation itself.

Exposure to vapors from solvents contained in the preparation beyond the exposure limits stated may produce effects harmful to health, such as:

Irritation of mucous membrane and respiratory system, kidneys, liver and central nervous system.

Symptoms produced will include headaches, numbness, dizziness, fatigue, muscular asthenia and, in extreme cases, loss of consciousness.

Prolonged or repeated contact with the preparation may strip the skin of its natural oil and thus cause non-allergic dermatitis on contact and absorption through the epidermis.

Splashes in the eyes may cause irritation and reversible damage

It is generally agreed that substances contained are likely to cause the appearance of major lesions which persist for at least twenty-four hours after application to the eye of an animal

and are likely to cause significant irritation which lasts for at least twenty four hours after application to the healthy, unbroken skin of an animal for a period of up to 4 hours.

It is generally agreed that substances contained are likely to cause, among certain predisposed subjects, a sensitisation reaction in the event of inhalation and exposure to the skin.

Based on the properties of isocyanates and taking into account toxicological data for similar preparations, this preparation may cause irritation and/or sensitisation of the respiratory system.

It may also lead to asthma, respiratory problems and angina

Those susceptible may display asthmatic symptoms when exposed to atmospheres with an isocyanate concentration well below those of the VLE: exposure limits.

Repeated exposure may cause permanent respiratory problems.

It is generally agreed that substances contained are likely to cause category 3 teratogenic effects.

**Other data:**

CAS 108-88-3 : IARC Group 3 (The agent is not classifiable as to its carcinogenicity to humans).

CAS 26471-62-5 : IARC Group 2B (The agent is possibly carcinogenic to humans)

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**12 - ECOLOGICAL INFORMATION**

No ecological data on the product itself is available.

The product must not be allowed to run into drains or waterways.

**Other adverse effects:**

Germany: WGK 2 (VwVwS vom 17/05/99, KBws)

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**13 - DISPOSAL CONSIDERATIONS**

Do not pour into drains or waterways.

**Waste:**

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

**Soiled packaging:**

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

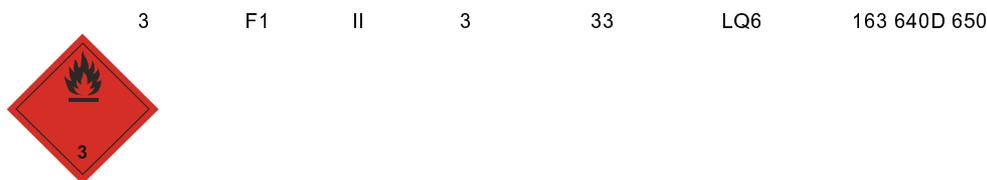
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**14 - TRANSPORT INFORMATION**

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2007 - IMDG 2006 - ICAO/IATA 2007).

UN1263=PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning and reducing compound)

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.
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IMDG	Class	2° Label	Pack gr.	LQ	EMS	Provis.		
	3	-	II	5 L	F-E,S-E	163 944		
IATA	Class	2° Label	Pack gr.	Passager	Passager	Cargo	Cargo	note
	3	-	II	305	5 L	307	60 L	A3 A72
	3	-	II	Y305	1 L	-	-	-

## 15 - REGULATORY INFORMATION

This preparation was classified in compliance with the directive known as <All preparations> 1999/45/EC and its adaptations. In addition directive 2004/73/EC with the 29° adaptation of directive 67/548/EEC (Hazardous substances) have been taken into account.

Contains compounds with an isocyanate base - refer to the information supplied by the manufacturer. This information is found on this safety data sheet

### Preparation classification:



Harmful.



Highly flammable.

### Contains:

203-625-9	TOLUENE
247-722-4	M-TOLYLIDENE DIISOCYANATE
	AROMATIC POLYISOCYANATE

### Particular hazards associated with the preparation and safety recommendations:

R 42/43	May cause sensitization by inhalation and skin contact.
R 36/38	Irritating to eyes and skin.
R 20	Harmful by inhalation.
R 48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R 11	Highly flammable.
R 63	Possible risk of harm to the unborn child.
	Contains isocyanates. See information supplied by the manufacturer.
	For professional use only.
S 23	Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
S 36/37	Wear suitable protective clothing and gloves.
S 45	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S 16	Keep away from sources of ignition - No smoking.
S 26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 38	In case of insufficient ventilation, wear suitable respiratory equipment.
S 9	Keep container in a well-ventilated place.
	Product submitted to restrictions on the marketing and use: see Directive 76/769/EEC and its ensuing adaptations.

### Particular provisions:

Product not to be sold to the general public. (Dir 76/769/EC) - For professional use only.  
 Germany: WGK 2 (VwVwS vom 17/05/99, KBws)

## 16 - OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The product must not be used for any purposes other than those specified under heading 1 without first obtaining written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information given on this safety data sheet must be regarded as a description of the safety requirements relating to our product and not a guarantee of its properties

### Full text of risk phrases appearing in section 3:

R 10	Flammable.
R 11	Highly flammable.
R 26	Very toxic by inhalation.
R 36	Irritating to eyes.
R 36/37/38	Irritating to eyes, respiratory system and skin.
R 38	Irritating to skin.
R 40.C3	Limited evidence of a carcinogenic effect.
R 42/43	May cause sensitization by inhalation and skin contact.
R 43	May cause sensitisation by skin contact.
R 48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R 52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R 63.G3	Possible risk of harm to the unborn child.
R 65	Harmful: may cause lung damage if swallowed.
R 66	Repeated exposure may cause skin dryness or cracking.
R 67	Vapours may cause drowsiness and dizziness.

# Product Data Sheet



## 6007/ Range: Polyurethane Thinners

Code	Description
6007/000	Standard Polyurethane Thinners
6007/100	Fast Polyurethane Thinners
6007/200	Slow Polyurethane Thinners

<b>Technical Data</b>	A range of quality thinners formulated with 'virgin' solvents and with no addition of recycled solvents. Each type is specifically designed so as not to adversely affect the solvent balance of the product ranges it can be used with.
<b>6007/000</b>	Formulated for optimum viscosity reduction of most Polyurethane topcoats, sealers and primers.
<b>6007/100</b>	Designed to increase drying speed in colder operating conditions. It should not be used under normal or warm conditions as its faster evaporation may lead to patchy drying and potential cracking of the film.
<b>6007/200</b>	A blend of slower evaporating solvents designed to keep the surface of the film 'open' a little longer than normal to help improve flow and leveling when applied in warm conditions or where high airflow over the coated surface can also cause problems. <b>This is the recommended thinner for the 6LPU132 and 6LPP253NC Wet Look Lacquers</b>
<b>Important Information</b>	<ul style="list-style-type: none"> <li>➤ The use of non-recommended and/or inappropriate thinners can cause problems such as uneven/patchy drying, cracking, lifting and whitening of the lacquer film.</li> <li>➤ As most our product range when catalysed is 'ready for use' but can be thinned as necessary with the appropriate thinners. Maximum recommended levels are provided on specific lacquer data sheets.</li> <li>➤ Optimum application is achieved between 18°C and 22°C with good air movement and ventilation.</li> <li>➤ Product should be stored above 5°C and protected from frost.</li> <li>➤ Finished products should not be subjected to environments with temperatures of &lt; 2°C.</li> <li>➤ Out of scope with 2004/42/EC.</li> </ul>
<b>Health &amp; Safety</b>	<p>Reference should be made to the appropriate MSDS for this product range, which can be found at <a href="http://www.morrells.co.uk">www.morrells.co.uk</a></p> <p>Refer to HSE leaflet INDG 388 – working with 2 pack isocyanate paints before using these products (<a href="http://www.hse.gov.uk/pubns/indg388.pdf">www.hse.gov.uk/pubns/indg388.pdf</a>).</p> <p>The use of correct personal protection equipment (PPE) is strongly recommended when using these products.</p> <p>These products are intended for <b>professional use</b> only.</p>

For further technical information contact our Technical Support Team on 0161 406 5300

This information is provided in good faith and without prejudice