

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **Date of compilation:** 07.06.2014
- **1.1 Product identifier**
- **Trade name:** UV Crystal Hardener 10/20 15/25 25/35
- **Article number(s):** 82000 / 83000 / 84000
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the preparation:** Hardening agent / Curing agent
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer / Supplier:**  
Quartz Refinish Limited, Morleys Group  
250 Osmaston Road, Derby  
DE23 8LB, England
- **Phone:** +44 1332 611893  
**Fax:** +44 1332 331611
- **E-mail address of the competent person responsible for the Safety Data Sheet:** info@spraygunsdirect.co.uk
- **Informing department:** Sprayguns Direct Limited Morleys Group
- **1.4 Emergency telephone number:** +44 1332 611893

## SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



GHS07

Skin Sens. 1 H317 May cause an allergic skin reaction.

STOT SE 3 H336 May cause drowsiness or dizziness.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Xi; Sensitising

R43: May cause sensitisation by skin contact.

R10-66-67: Flammable. Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness.

- **Classification system:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

- **2.2 Label elements**

- **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

- **Hazard pictograms**



GHS02 GHS07

- **Signal word** Warning

- **Hazard-determining components of labelling:**

Hexane, 1,6-diisocyanato-, homopolymer

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*n*-Butyl acetate*p*-toluenesulphonyl isocyanate· **Hazard statements**

H226 Flammable liquid and vapour.

H317 May cause an allergic skin reaction.

H336 May cause drowsiness or dizziness.

· **Precautionary statements**

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P243 Take precautionary measures against static discharge.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

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

P312 Call a POISON CENTER/doctor if you feel unwell.

· **Additional information:**

EUH066 Repeated exposure may cause skin dryness or cracking.

Contains isocyanates. May produce an allergic reaction.

· **2.3 Other hazards**· **Results of PBT and vPvB assessment**· **PBT:** Not applicable.· **vPvB:** Not applicable.

\*

### SECTION 3: Composition/information on ingredients

· **3.2 Chemical characterization: Mixtures**· **Description:** Mixture of the substances listed below with nonhazardous additions.· **Dangerous components:**

CAS: 123-86-4 EINECS: 204-658-1 Index number: 607-025-00-1	<i>n</i> -Butyl acetate R10-66-67 ⚠ Flam. Liq. 3, H226; ⚠ STOT SE 3, H336	25 - 50%
CAS: 28182-81-2 NLP: 500-060-2	Hexane, 1,6-diisocyanato-, homopolymer ⚠ Xi R43 ⚠ Skin Sens. 1, H317	25 - 50%
CAS: 108-65-6 EINECS: 203-603-9 Index number: 607-195-00-7	1-Methoxy-2-propyl acetate R10 ⚠ Flam. Liq. 3, H226	10-<25%
CAS: 4083-64-1 EINECS: 223-810-8 Index number: 615-012-00-7	<i>p</i> -toluenesulphonyl isocyanate ⚠ Xi R36/37/38; ⚠ Xn R42 R14 ⚠ Resp. Sens. 1, H334; ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	≤2.5%

· **Additional information:** For the wording of the listed risk phrases refer to section 16.

### SECTION 4: First aid measures

· **4.1 Description of first aid measures**· **General information:**

Immediately remove any clothing contaminated by the product.

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Symptoms of poisoning may occur after several hours. Medical observation for at least 48 hours after the accident is recommended.

· **After inhalation:**

Supply fresh air and call for doctor for safety reasons.

In case of unconsciousness bring patient into stable side position for transport.

· **After skin contact:**

Instantly wash with water and soap and rinse thoroughly.

Consult a doctor for safety reasons.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.

· **After swallowing:**

Rinse out mouth and then drink plenty of water.

If swallowed, seek medical advice immediately and show this container or label.

· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

· **4.3 Indication of any immediate medical attention and special treatment needed** symptomatic treatment

### SECTION 5: Firefighting measures

· **5.1 Extinguishing media**

· **Suitable extinguishing agents**

Carbon dioxide (CO<sub>2</sub>), extinguishing powder or water spray/fog. Fight larger fires with water spray/fog or alcohol-resistant foam.

· **For safety reasons unsuitable extinguishing agents** Water with a full water jet.

· **5.2 Special hazards arising from the substance or mixture**

Nitrogen oxides (NO<sub>x</sub>)

Carbon monoxide (CO) and Carbon dioxide (CO<sub>2</sub>)

· **5.3 Advice for firefighters**

· **Protective equipment:** Wear self-contained breathing apparatus.

· **Additional information** Collect contaminated fire fighting water separately. It must not enter drains.

### SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**

Remove all ignition sources.

Avoid contact with skin and eyes.

· **6.2 Environmental precautions:**

Do not allow to enter drainage system, surface or ground water.

Inform respective authorities in case product reaches water or sewage system.

· **6.3 Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose of contaminated material as waste according to item 13.

Ensure adequate ventilation.

· **6.4 Reference to other sections**

See Section 8 for information on personal protection equipment.

### SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.

Ensure good interior ventilation, especially at floor level (fumes are heavier than air).

Avoid contact with skin and eyes.

Do not breathe vapour/spray.

Make sure that all applicable workplace limits are observed.

· **Information about protection against explosions and fires:**

Fumes can combine with air to form an explosive mixture.

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Flammable fume/air mixtures may be formed in empty containers.  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.

· **7.2 Conditions for safe storage, including any incompatibilities**

· **Storage**

· **Requirements to be met by storerooms and containers:**

Provide solvent resistant, sealed floor.

Observe all local and national regulations for storage of water polluting products.

· **Information about storage in one common storage facility:** Store away from oxidizing agents.

· **Further information about storage conditions:**

Store container in a well ventilated position.

Store in cool, dry conditions in well sealed containers.

Protect from heat and direct sunlight.

· **7.3 Specific end use(s)** No further relevant information available.

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**SECTION 8: Exposure controls/personal protection**

· **Additional information about design of technical systems:** No further data; see item 7.

· **8.1 Control parameters**

· **Components with critical values that require monitoring at the workplace:**

**123-86-4 n-Butyl acetate**

WEL (Great Britain)

Short-term value: 966 mg/m<sup>3</sup>, 200 ppm

Long-term value: 724 mg/m<sup>3</sup>, 150 ppm

**108-65-6 1-Methoxy-2-propyl acetate**

WEL (Great Britain)

Short-term value: 548 mg/m<sup>3</sup>, 100 ppm

Long-term value: 274 mg/m<sup>3</sup>, 50 ppm

Sk

IOELV (European Union)

Short-term value: 550 mg/m<sup>3</sup>, 100 ppm

Long-term value: 275 mg/m<sup>3</sup>, 50 ppm

Skin

· **DNELs**

**108-65-6 1-Methoxy-2-propyl acetate**

Oral

DNEL long-term exposure - systemic effects

1.67 mg/kg bw/d (general population)

Dermal

DNEL long-term exposure - systemic effects

54.8 mg/kg bw/d (general population)

153.5 mg/kg bw/d (worker)

Inhalative

DNEL long-term exposure - systemic effects

33 mg/m<sup>3</sup> (general population)

275 mg/m<sup>3</sup> (worker)

· **PNECs**

**108-65-6 1-Methoxy-2-propyl acetate**

PNEC

0.635 mg/l (aqua (freshwater))

6.35 mg/l (aqua (intermittent releases))

0.0635 mg/l (aqua (marine water))

3.29 mg/kg (sediment (freshwater))

0.329 mg/kg (sediment (marine water))

0.29 mg/kg (soil)

100 mg/l (STP (sewage treatment plant))

· **Additional information:** The lists that were valid during the compilation were used as basis.

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- **8.2 Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**  
Keep away from foodstuffs, beverages and food.  
Instantly remove any contaminated garments.  
Do not inhale gases / fumes / aerosols.  
Avoid contact with the eyes and skin.  
Wash hands during breaks and at the end of the work.
- **Breathing equipment:**  
If all workplace limits are observed and good ventilation is ensured, no special precautions necessary.
- **Protection of hands:**  
Protective gloves  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
- **Material of gloves**  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Tightly sealed safety glasses
- **Body protection:** Protective work clothing

### SECTION 9: Physical and chemical properties

· <b>9.1 Information on basic physical and chemical properties</b>	
· <b>General Information</b>	
· <b>Appearance:</b>	
Form:	liquid
Colour:	colourless
· Smell:	solvent-like
· Odour threshold:	not determined
· pH-value:	not determined
· <b>Change in condition</b>	
Melting point/Melting range:	not determined
Boiling point/Boiling range:	not determined
· Flash point:	> 23 °C
· Inflammability (solid, gaseous)	not applicable
· Ignition temperature:	not determined
· Decomposition temperature:	not determined
· Self-inflammability:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapour mixtures is possible.
· <b>Critical values for explosion:</b>	
Lower:	1.1 Vol %
Upper:	10.8 Vol %
· Oxidizing properties	none

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· <b>Vapor pressure:</b>	<i>not determined</i>
· <b>Density at 20 °C:</b>	<i>~ 1 g/cm<sup>3</sup></i>
· <b>Bulk density:</b>	<i>not applicable</i>
· <b>Relative density</b>	<i>not determined</i>
· <b>Vapour density (AIR = 1):</b>	<i>not determined</i>
· <b>Evaporation rate</b>	<i>not determined</i>
· <b>Solubility in / Miscibility with Water:</b>	<i>not miscible or difficult to mix</i>
· <b>Partition coefficient (n-octanol/water):</b>	<i>not determined</i>
· <b>Viscosity:</b>	
dynamic:	<i>not determined</i>
kinematic at 20 °C:	<i>&lt; 40 s (ISO 6 mm)</i>
· <b>9.2 Other information</b>	<i>No further relevant information available.</i>

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** see 10.3
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** *No decomposition if used according to specifications.*
- **10.3 Possibility of hazardous reactions**  
*Flammable vapour-air mixtures may develop.*  
*Used empty containers may contain product gases which form explosive mixtures with air.*
- **10.4 Conditions to avoid** *No further relevant information available.*
- **10.5 Incompatible materials:** *Strong oxidizing agents*
- **10.6 Hazardous decomposition products:**  
*Nitrogen oxides (NO<sub>x</sub>)*  
*Carbon monoxide (CO) and Carbon dioxide (CO<sub>2</sub>)*

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

#### 123-86-4 n-Butyl acetate

Oral	LD50	13100 mg/kg (rat)
Dermal	LD50	14100 mg/kg (rabbit)
Inhalative	LC50/4 h	> 21 mg/l (rat)

#### 28182-81-2 Hexane, 1,6-diisocyanato-, homopolymer

Oral	LD50	> 2000 mg/kg (rat)
Dermal	LD50	> 2000 mg/kg (rat)

#### 108-65-6 1-Methoxy-2-propyl acetate

Oral	LD50	8532 mg/kg (rat)
Dermal	LD50	> 2000 mg/kg (rabbit)
Inhalative	LC50/4 h	35.7 mg/l (rat)

- **Primary irritant effect:**
- **on the skin:** *Long or repeated contact can defat skin and may cause dermatitis.*
- **on the eye:** *Short time, reversible irritating effect.*
- **Subacute to chronic toxicity:** *not classified*

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· **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:

Sensitising

Danger by skin resorption.

Vapours have anaesthetic effect.

· **Sensitisation** May cause sensitisation by skin contact.

· **Repeated dose toxicity** not classified

· **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**

According to present knowledge no CMR-effects known.

## SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**

**123-86-4 n-Butyl acetate**

EC50	959 mg/l (pseudomonas putida) (EC10)
EC50/24 h	72.8 mg/l (water flea (daphnia magna))
IC50/72 h	674.7 mg/l (algae (Scenedesmus subspicatus))
LC50/96 h	62 mg/l (leuciscus idus)
	100 mg/l (bluegill (lepomis macrochirus))
	18 mg/l (fathead minnow (pimephales promelas))
NOEC/21 d	23 mg/l (water flea (daphnia magna))

**108-65-6 1-Methoxy-2-propyl acetate**

IC50/96 h	100 - 180 mg/l (rainbow trout (oncorhynchus mykiss)) (OECD 203)
	IUCLID
LC50/96 h	100-180 mg/l (red killifish (Oryzias latipes)) (OECD 203)
	ECHA-Reg.-Dossier (1987-09-21)

· **12.2 Persistence and degradability** No further relevant information available.

· **12.3 Bioaccumulative potential** No further relevant information available.

· **12.4 Mobility in soil** No further relevant information available.

· **Additional ecological information:**

· **General notes:** Water hazard class 2 (Self-assessment): hazardous for water

· **12.5 Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **12.6 Other adverse effects** No further relevant information available.

## SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **European waste catalogue:**

08 00 00	WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS
08 01 00	wastes from MFSU and removal of paint and varnish
08 01 11	waste paint and varnish containing organic solvents or other dangerous substances

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- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

### SECTION 14: Transport information

· <b>14.1 UN-Number</b> · <b>ADR, IMDG, IATA</b>	UN1263
· <b>14.2 UN proper shipping name</b> · <b>ADR</b> · <b>IMDG, IATA</b>	UN1263 PAINT RELATED MATERIAL, Special provision 640E PAINT RELATED MATERIAL
· <b>14.3 Transport hazard class(es)</b> · <b>ADR</b>	
	
· <b>Class</b> · <b>Label</b>	3 (F1) Flammable liquids. 3
· <b>IMDG, IATA</b>	
	
· <b>Class</b> · <b>Label</b>	3 Flammable liquids. 3
· <b>14.4 Packing group</b> · <b>ADR, IMDG, IATA</b>	III
· <b>14.5 Environmental hazards:</b> · <b>Marine pollutant:</b>	NO
· <b>14.6 Special precautions for user</b> · <b>Kemler Number:</b> · <b>EMS Number:</b>	Warning: Flammable liquids. 30 F-E, S-E
· <b>14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
· <b>Transport/Additional information:</b>	Transport by post may be prohibited or restricted.
· <b>ADR</b> · <b>Excepted quantities (EQ):</b> · <b>Limited quantities (LQ):</b> · <b>Transport category:</b> · <b>Tunnel restriction code:</b>	EI 5L 3 D/E
· <b>UN "Model Regulation":</b>	UN1263, PAINT RELATED MATERIAL, Special provision 640E, 3, III

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### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **National regulations**
- **Information about limitation of use:**  
Employment restrictions concerning pregnant and lactating women must be observed.  
Employment restrictions concerning young persons must be observed.
- **Decree to be applied in case of technical fault:**  
Quantity limits according to "EC Seveso directive" should be observed.
- **Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**  
The(se) R- resp. H-phrase(s) are those of the ingredient(s) and do(es) not necessarily represent the classification of the preparation/mixture.
- H226 Flammable liquid and vapour.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.
- R10 Flammable.
- R14 Reacts violently with water.
- R36/37/38 Irritating to eyes, respiratory system and skin.
- R42 May cause sensitisation by inhalation.
- R43 May cause sensitisation by skin contact.
- R66 Repeated exposure may cause skin dryness or cracking.
- R67 Vapours may cause drowsiness and dizziness.

- **Department issuing MSDS:**  
Sprayguns Direct Limited Morleys Group  
250 Osmaston Road, Derby  
DE23 8LB, England

Phone: +44 1332 611893  
Fax: +44 1332 331611

- **Abbreviations and acronyms:**  
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
DNEL: Derived No-Effect Level (REACH)  
PNEC: Predicted No-Effect Concentration (REACH)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
Flam. Liq. 3: Flammable liquids, Hazard Category 3  
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2  
Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2  
Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1  
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

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STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

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· \* **Data compared to the previous version altered.**

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