



Created: 18 Jan 2023

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## SAFETY DATA SHEET

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

#### 1.1 Product identifier

- Product Name: RAL 6020 GL Anti-Graffiti
- UFI:
- Product Part Number: 867-1R602C-6236

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

- Use of the substance/mixture: Paint, For industrial use only

#### 1.3 Details of the supplier of the safety data sheet

- Name of Supplier: HMG Powder Coatings Limited
- Address of Supplier: Dill Road, Castlereagh Industrial Estate, Belfast, BT6 9HU
- Telephone: +44 28 9079 4930
- Email: sds@hmgpowders.co.uk

#### 1.4 Emergency telephone number

- Emergency Telephone: +44 28 9079 4930 (0900 - 1600 UK)
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### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

- Classification according to Regulation (EC) No 1272/2008 [CLP]
- CLP: STOT RE 1

#### 2.2 Label elements



- Signal Word: Danger

#### Symbols

#### Hazard statements

Causes damage to organs through prolonged or repeated exposure by inhalation (H372)  
Contains isocyanates. May produce an allergic reaction. (EUH204)

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## SECTION 2: Hazards identification (....)

### Precautionary statements

- Do not breathe dust/fume/gas/mist/vapours/spray (P260).
- Dispose of contents/container to an authorised waste collection point (P501)
- Get medical advice/attention if you feel unwell (P314).
- Do not eat, drink or smoke when using this product (P270).

### Supplemental Hazard information (EU)

Contains: Cyclohexane, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethyl-, homopolymer, caprolactam-blocked

### 2.3 Other hazards

- May form explosible dust-air mixture if dispersed

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## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

- 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:

#### **$\epsilon$ -caprolactam**

CAS Number: 105-60-2  
EC Number: 203-313-2  
Concentration: 0.1 - <1%  
Categories: Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3  
H Statements: H332;H302;H315;H319;H335  
REACH Registration Number: 01-2119457029-36  
Symbols: GHS07

#### **Cyclohexane, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethyl-, homopolymer, caprolactam-blocked**

CAS Number: 127184-53-6  
EC Number: 603-188-8  
Concentration: 5 - <15%  
Categories: STOT RE 1  
H Statements: H372  
REACH Registration Number: 01-2119979523-27  
Symbols: GHS08

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

- 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.

#### Contact with eyes

Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.

#### Contact with skin

Remove contaminated clothing.

Wash skin thoroughly with soap and water or use recognised skin cleanser.

Do NOT use solvents or thinners.

#### Ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention.

Keep warm and at rest

Do not induce vomiting

#### Inhalation

In case of accident by inhalation: remove casualty to fresh air and keep at rest

Apply artificial respiration only if patient is not breathing

### 4.2 Most important symptoms and effects, both acute and delayed

- There are no data available on the mixture itself
- See Section 11
- Coatings powders can cause localised skin irritation in folds of the skin or under tight clothing.

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

- Exposure to decomposition products may cause a health hazard.
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## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

- recommended: alcohol resistant foam, CO<sub>2</sub>-blanket, water spray/mist
- not to be used for safety reasons:
- inert gas under high pressure (e.g. CO<sub>2</sub>), water jet.

### 5.2 Special hazards arising from the substance or mixture

- Fire will produce dense black smoke.
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## SECTION 5: Firefighting measures (....)

- Exposure to decomposition products may cause a health hazard.
- Appropriate breathing apparatus may be required.

### 5.3 Advice for firefighters

- Cool closed containers exposed to fire with water.
  - Wear Breathing Apparatus
  - Prevent run off water from entering drains if possible
  - See Section 8.2
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## SECTION 6: Accidental release measures

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

- Exclude sources of ignition and ventilate the area.
- Avoid breathing dust.
- Wear protective clothing as per section 8

### 6.2 Environmental precautions

- Do not allow to enter public sewers and watercourses
- If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations.

### 6.3 Methods and material for containment and cleaning up

- Contain and collect spillage with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).
- Do not use a dry brush as dust clouds or static can be created.

### 6.4 Reference to other sections

- See Section 7 & 8
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## SECTION 7: Handling and storage

**Advice should be taken from a competent occupational health practitioner on the assessment of employees with skin or respiratory complaints before the individual is exposed to the uncured product.**

### 7.1 Exposure Warnings

- Precautions should be taken to prevent the formation of dusts in concentrations above flammable, explosive or occupational exposure limits.
- Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources.
- Mixture may charge electrostatically: always use earthing leads when transferring from one container to another.

## **SECTION 7: Handling and storage (....)**

- 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.
- Avoid contact with skin and eyes
- 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.
- Do not allow dust to accumulate on surfaces and equipment
- Take precautionary measures against static discharges
- In case of insufficient ventilation, wear suitable respiratory equipment
- 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.
- For personal protection see Section 8.

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

- Observe label precautions.
- Keep only in the original container in a cool, well ventilated place away from combustible material
- Keep container tightly closed.
- 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)**

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

### **8.1 Control parameters**

- WEL (inhalable dust) (long term): 10 mg/m<sup>3</sup> (OES)
- WEL (respirable dust) (long term): 4 mg/m<sup>3</sup> (OES)
- If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.
- Reference should be made to monitoring standards, such as the following:  
European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy),  
European Standard EN14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents),  
European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents).

**SECTION 8: Exposure controls/personal protection (....)**

- Reference to national guidance documents for the methods for the determination of hazardous substances will also be required.

 **$\epsilon$ -caprolactam**

WEL (inhalable dust) (long term): 1 mg/m<sup>3</sup> (UK)

WEL (inhalable dust) (short term): 3 mg/m<sup>3</sup> (UK)

DNEL (Industry; inhalational, short term local effects): 10 mg/m<sup>3</sup>

DNEL (Industry; inhalational, long term local effects): 5 mg/m<sup>3</sup>

**Cyclohexane, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethyl-, homopolymer, caprolactam-blocked**

DNEL (Industry; inhalational, short term local effects): 0.375 mg/m<sup>3</sup>

DNEL (Industry; inhalational, long term local effects): 0.075 mg/m<sup>3</sup>

**8.2 Exposure controls**

- Avoid inhalation of dusts.
- 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 particulates below the OEL, suitable respiratory protection must be worn.
- Respiratory protection:
  - If workers could be exposed to concentrations above the exposure limit they should 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. A2P3).
  - 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.
- Hand protection:
  - There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.
  - Use gloves tested according to EN 374.
  - 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 or effectiveness of the glove may be reduced by physical/ chemical damage and poor maintenance.
- Barrier creams may help to protect the exposed areas of the skin, but are not substitutes for full physical protection.
- They should however not be applied once exposure has occurred.

## SECTION 8: Exposure controls/personal protection (....)

- Eye protection:
    - Safety eye-wear should be used when there is a likelihood of exposure.
  - Skin protection:
    - Personnel should wear protective clothing.
    - Care should be taken in the selection of protective clothing to ensure that inflammation and irritation of the skin at neck and wrists through contact with the powder are avoided.
  - Environmental exposure controls:
    - Do not allow to enter drains or water courses.
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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

- Physical state: Solid\_loose\_powder
- Colour: Various
- Odour: Odourless
- Melting point/Range: Not available
- Boiling Point/Range: Not available
- Lower Explosive Limit: 20 g/m<sup>3</sup>
- Upper Explosive Limit: 70 g/m<sup>3</sup>
- Minimum Ignition Energy: 15 - 60 mJ
- Flammability: Not available
- pH: Not applicable
- Solubility in water: Insoluble in water
- Density: 1.2 - 1.9 g/cm<sup>3</sup>

### 9.2 Other information

- Volatile Organic Compound Content 0.0%
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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

- No information available

### 10.2 Chemical stability

- Considered stable under normal conditions
- May form explosive dust/air mixtures

### 10.3 Possibility of hazardous reactions

- No hazardous reactions known if used for its intended purpose

### 10.4 Conditions to avoid

## SECTION 10: Stability and reactivity (....)

- Considered stable under normal conditions
- When exposed to high temperatures may produce hazardous decomposition products.

### 10.5 Incompatible materials

- None

### 10.6 Hazardous decomposition products

- such as carbon monoxide and dioxide, smoke, oxides of nitrogen etc.
- 

## SECTION 11: Toxicological information

There are no data available on the mixture itself

The mixture has been assessed following the criteria of the CLP Regulation (EC) No 1272/2008 and classified for toxicological hazards accordingly.

See Section 2 & 3

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Acute toxicity

Estimated LD<sub>50</sub> (oral) (ATE) : >2000 mg/kg  
Estimated LD<sub>50</sub> (dermal) (ATE) : >4000 mg/kg  
Estimated LD<sub>50</sub> (inhalational) (ATE) : >5 mg/l/4hr (dust/mist)

#### ε-caprolactam

LD<sub>50</sub> (oral) : 1475 mg/kg  
LC<sub>50</sub> (inhalation) : 8.16 mg/l  
LD<sub>50</sub> (dermal) : >2000 mg/kg

#### Cyclohexane, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethyl-, homopolymer, caprolactam-blocked

LD<sub>50</sub> (oral) : >10000 mg/kg  
LC<sub>50</sub> (inhalation) : >5.3 mg/l

#### Skin corrosion/irritation

#### Serious eye damage/irritation

#### Respiratory or skin sensitisation

#### Germ cell mutagenicity



## SECTION 11: Toxicological information (....)

**Carcinogenicity**

**Reproductive toxicity**

**STOT (specific target organ toxicity) - single exposure**

**STOT (specific target organ toxicity) - repeated exposure**

**Aspiration hazard**

### 11.2 Information on other hazards

- The ingestion of significant quantities may cause gastro-intestinal disturbances
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## SECTION 12: Ecological information

There are no data available on the mixture itself

**Coatings powder residues should not be allowed to enter drains or water courses or be deposited where they can affect ground or surface waters.**

### 12.1 Toxicity

- See Section 3

#### **ε-caprolactam**

IC<sub>50</sub> (algae): 1000 mg/l (72 hr)  
EC<sub>50</sub> (daphnia): >1000 mg/l (48 hr)  
LC<sub>50</sub> (fish): >100 mg/l (96 hr)

#### **ε-caprolactam**

PNEC (STP): 1737 mg/l  
PNEC (Sediment; fresh water): 18.7 mg/kg  
PNEC (Marine water): 0.2 mg/l  
PNEC (Soil): 2.55 mg/kg  
PNEC (Fresh water): 2 mg/l

### 12.2 Persistence and degradability

- No information available

### 12.3 Bioaccumulative potential

- No information available

### 12.4 Mobility in soil

## SECTION 12: Ecological information (....)

- No information available
- insoluble in water

### 12.5 Results of PBT and vPvB assessment

- Not Classified

### 12.6 Endocrine disrupting properties

### 12.7 Other adverse effects

- None
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## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

- Do not allow to enter drains or water courses.
  - The European Waste Catalogue classification of this product, when disposed of as waste, is
  - EU Waste Codes: 15 01 15 Composite Packaging
  - EU Waste Codes: 08 02 01 Waste Coating Powders
  - Disposal should be in accordance with local, state or national legislation
  - Do not discharge into drains or the environment, dispose to an authorised waste collection point
  - 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 containers contaminated by the product in accordance with local or national legal provisions.
  - Dispose of contents/container to an authorised waste collection point (P501)
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## SECTION 14: Transport information

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

### 14.1 UN number or ID number

- UN No.:

### 14.2 UN proper shipping name

- Proper Shipping Name:

### 14.3 Transport hazard class(es)

## **SECTION 14: Transport information (....)**

- Hazard Class:

### **14.4 Packing group**

- Packing Group:

### **14.5 Environmental hazards**

### **14.6 Special precautions for user**

- Always transport in closed containers that are upright and secure.
- Ensure that persons transporting the product know what to do in the event of an accident or spillage.

### **14.7 Maritime transport in bulk according to IMO instruments**

- Not applicable
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## **SECTION 15: Regulatory information**

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

- This Safety Data Sheet is provided in compliance with the EC Regulations 1907/2006, 1272/2008, 2015/830 and 2020/878
- Refer to current CLP Regulations
- Refer to current ADR Regulations

### **15.2 Chemical safety assessment**

- A chemical safety assessment (CSA) for this product has not yet been completed
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## **SECTION 16: Other information**

**Text not given with phrase codes where they are used elsewhere in this safety data sheet:-  
H302: Harmful if swallowed. H315: Causes skin irritation. H319: Causes serious eye irritation.  
H332: Harmful if inhaled. H335: May cause respiratory irritation. H372: Causes damage to organs through prolonged or repeated exposure.**

**The information in this safety data sheet is based on the present state of knowledge and 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 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**

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**SECTION 16: Other information (....)**

**responsible for ensuring that the requirements of relevant legislation are complied with.**

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

--- end of safety datasheet ---

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