

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

#### 1.1. Product identifier

Product form : Mixture  
 Name : C5 Wheel Armour  
 Product code : C5

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

##### 1.2.1. Relevant identified uses

Main use category : Industrial use, Professional use  
 Industrial/Professional use spec : Industrial  
 For professional use only

##### 1.2.2. Uses advised against

No additional information available

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

GTECHNIQ LTD  
 Unit 9, Pury Hill Business Park,  
 Nr Alderton,  
 Towcester,  
 NN12 7LS,  
 United Kingdom

Tel: +44 (0)1327 811 015

#### 1.4. Emergency telephone number

Emergency number : +44 (0)1327 811 015

| Country        | Organisation/Company                                     | Address                                               | Emergency number                                                          |
|----------------|----------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------------------------------|
| Ireland        | National Poisons Information Centre<br>Beaumont Hospital | Beaumont Hospital Beaumont Road<br>9 Dublin           | : +353 1 8379964                                                          |
| United Kingdom | National Poisons Information Service (NHS<br>Direct)     | <a href="http://www.npis.org">http://www.npis.org</a> | 111 (England & Wales only)<br>or 112 (EU) or 08454 24 24<br>24 (Scotland) |

### SECTION 2: Hazards identification

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

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flam. Liq. 2 H225  
 Skin Irrit. 2 H315  
 Eye Irrit. 2 H319  
 Aquatic Chronic 3 H412

Full text of hazard classes and H-statements : see section 16

##### Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

##### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



Signal word (CLP) :

Danger

Hazard statements (CLP) :

H225 - Highly flammable liquid and vapour  
 H315 - Causes skin irritation  
 H319 - Causes serious eye irritation

## Precautionary statements (CLP)

H412 - Harmful to aquatic life with long lasting effects

- : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
- P233 - Keep container tightly closed
- P273 - Avoid release to the environment
- P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
- P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- 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
- P403+P235 - Store in a well-ventilated place. Keep cool
- P280 - Wear eye protection, protective clothing, protective gloves
- P501 - Dispose of contents/container to a licensed waste centre in accordance with local/regional/national/international regulations

No labelling applicable

## 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable

### 3.2. Mixture

| Name                                                                                                 | Product identifier                                                   | %       | Classification according to Directive 67/548/EEC |
|------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|---------|--------------------------------------------------|
| Alkoxysilane/ (confidential) [flammable liquid]<br>Alkoxysiloxane/ (confidential) [flammable liquid] | (CAS No) Proprietary<br>(EC no) Proprietary                          | 30 - 50 | Xi; R36/38<br>R10                                |
| heptane, n-heptane                                                                                   | (CAS No) 142-82-5<br>(EC no) 205-563-8<br>(EC index no) 601-008-00-2 | 1 - 5   | F; R11<br>Xn; R65<br>Xi; R38<br>R67<br>N; R50/53 |

| Name                                                                                                 | Product identifier                                                   | %       | Classification according to Regulation (EC) No. 1272/2008 [CLP]                                                                       |
|------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|---------|---------------------------------------------------------------------------------------------------------------------------------------|
| Alkoxysilane/ (confidential) [flammable liquid]<br>Alkoxysiloxane/ (confidential) [flammable liquid] | (CAS No) Proprietary<br>(EC no) Proprietary                          | 30 - 50 | Flam. Liq. 3, H226<br>Eye Irrit. 2, H319<br>Skin Irrit. 2, H315                                                                       |
| heptane, n-heptane                                                                                   | (CAS No) 142-82-5<br>(EC no) 205-563-8<br>(EC index no) 601-008-00-2 | 1 - 5   | Flam. Liq. 2, H225<br>Skin Irrit. 2, H315<br>STOT SE 3, H336<br>Asp. Tox. 1, H304<br>Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410 |

Full text of H-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Allow breathing of fresh air. Allow the victim to rest.
- First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Gently wash with plenty of soap and water. Get medical advice/attention.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get immediate medical advice/attention. Get medical advice/attention.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

- Symptoms/injuries after skin contact : Causes skin irritation.

Symptoms/injuries after eye contact : Causes serious eye irritation.

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

No additional information available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

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

Fire hazard : Highly flammable liquid and vapour.

Explosion hazard : May form flammable/explosive vapour-air mixture.

### 5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6: Accidental release measures

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

General measures : Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking.

#### 6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if substance enters sewers or public waters. Avoid release to the environment.

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

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapours are flammable.

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. No open flames. No smoking. Use only non-sparking tools.

Hygiene measures : Wash Skin thoroughly after handling.

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

Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof Flame proof, lighting, electrical equipment and ventilation equipment.

Storage conditions : Keep in fireproof place. Keep container tightly closed. Keep only in the original container in a cool, well ventilated place away from : Direct sunlight, Heat and ignition sources.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight. Heat sources.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

| heptane, n-heptane (142-82-5) |            |           |
|-------------------------------|------------|-----------|
| EU                            | Local name | n-Heptane |

# C5 Wheel Armour

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

| heptane, n-heptane (142-82-5) |                                                            |                        |
|-------------------------------|------------------------------------------------------------|------------------------|
| EU                            | IOELV TWA (mg/m <sup>3</sup> )                             | 2085 mg/m <sup>3</sup> |
| EU                            | IOELV TWA (ppm)                                            | 500 ppm                |
| Austria                       | Local name                                                 | n-Heptan               |
| Austria                       | MAK (mg/m <sup>3</sup> )                                   | 2000 mg/m <sup>3</sup> |
| Austria                       | MAK (ppm)                                                  | 500 ppm                |
| Austria                       | MAK Short time value (mg/m <sup>3</sup> )                  | 8000 mg/m <sup>3</sup> |
| Austria                       | MAK Short time value (ppm)                                 | 2000 ppm               |
| Belgium                       | Local name                                                 | n-Heptane              |
| Belgium                       | Limit value (mg/m <sup>3</sup> )                           | 1664 mg/m <sup>3</sup> |
| Belgium                       | Limit value (ppm)                                          | 400 ppm                |
| Belgium                       | Short time value (mg/m <sup>3</sup> )                      | 2085 mg/m <sup>3</sup> |
| Belgium                       | Short time value (ppm)                                     | 500 ppm                |
| Bulgaria                      | Local name                                                 | n-Хептан*              |
| Bulgaria                      | OEL TWA (mg/m <sup>3</sup> )                               | 1600 mg/m <sup>3</sup> |
| Croatia                       | Local name                                                 | n-Heptan               |
| Croatia                       | GVI (granična vrijednost izloženosti) (mg/m <sup>3</sup> ) | 2085 mg/m <sup>3</sup> |
| Croatia                       | GVI (granična vrijednost izloženosti) (ppm)                | 500 ppm                |
| Croatia                       | Naznake (HR)                                               | EU* F, Xn, F           |
| Czech Republic                | Local name                                                 | n-Heptan               |
| Czech Republic                | Expoziční limity (PEL) (mg/m <sup>3</sup> )                | 1000 mg/m <sup>3</sup> |
| Czech Republic                | Expoziční limity (PEL) (ppm)                               | 240 ppm                |
| Czech Republic                | Expoziční limity (NPK-P) (mg/m <sup>3</sup> )              | 2000 mg/m <sup>3</sup> |
| Czech Republic                | Expoziční limity (NPK-P) (ppm)                             | 490 ppm                |
| Denmark                       | Local name                                                 | n-Heptan (1994)        |
| Denmark                       | Grænseværdie (langvarig) (mg/m <sup>3</sup> )              | 820 mg/m <sup>3</sup>  |
| Denmark                       | Grænseværdie (langvarig) (ppm)                             | 200 ppm                |
| Denmark                       | Anmærkninger (DK)                                          | E                      |
| Estonia                       | Local name                                                 | n-heptaan              |
| Estonia                       | OEL TWA (mg/m <sup>3</sup> )                               | 2085 mg/m <sup>3</sup> |
| Estonia                       | OEL TWA (ppm)                                              | 500 ppm                |
| Finland                       | Local name                                                 | n-Heptani              |
| Finland                       | HTP-arvo (8h) (mg/m <sup>3</sup> )                         | 1200 mg/m <sup>3</sup> |
| Finland                       | HTP-arvo (8h) (ppm)                                        | 300 ppm                |
| Finland                       | HTP-arvo (15 min)                                          | 2100 mg/m <sup>3</sup> |
| Finland                       | HTP-arvo (15 min) (ppm)                                    | 500 ppm                |
| France                        | Local name                                                 | n-Heptane              |
| France                        | VME (mg/m <sup>3</sup> )                                   | 1668 mg/m <sup>3</sup> |
| France                        | VME (ppm)                                                  | 400 ppm                |
| France                        | VLE (mg/m <sup>3</sup> )                                   | 2085 mg/m <sup>3</sup> |
| France                        | VLE (ppm)                                                  | 500 ppm                |
| Greece                        | OEL TWA (mg/m <sup>3</sup> )                               | 2000 mg/m <sup>3</sup> |
| Greece                        | OEL TWA (ppm)                                              | 500 ppm                |
| Greece                        | OEL STEL (mg/m <sup>3</sup> )                              | 2000 mg/m <sup>3</sup> |
| Greece                        | OEL STEL (ppm)                                             | 500 ppm                |
| Hungary                       | Local name                                                 | n-HEPTÁN               |
| Hungary                       | AK-érték                                                   | 2000 mg/m <sup>3</sup> |
| Hungary                       | CK-érték                                                   | 8000 mg/m <sup>3</sup> |
| Hungary                       | Megjegyzések (HU)                                          | EU1                    |
| Ireland                       | Local name                                                 | n-Heptane              |
| Ireland                       | OEL (8 hours ref) (mg/m <sup>3</sup> )                     | 2085 mg/m <sup>3</sup> |

# C5 Wheel Armour

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

| heptane, n-heptane (142-82-5) |                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------------|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ireland                       | OEL (8 hours ref) (ppm)                    | 500 ppm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Ireland                       | Notes (IE)                                 | IOELV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Italy                         | Local name                                 | Eptano, n-                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Italy                         | OEL TWA (mg/m <sup>3</sup> )               | 2085 mg/m <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Italy                         | OEL TWA (ppm)                              | 500 ppm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Latvia                        | Local name                                 | n-Heptāns                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Latvia                        | OEL TWA (mg/m <sup>3</sup> )               | 350 mg/m <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Latvia                        | OEL TWA (ppm)                              | 85 ppm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Lithuania                     | Local name                                 | n-heptanas                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Lithuania                     | IPRV (mg/m <sup>3</sup> )                  | 2085 mg/m <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Lithuania                     | IPRV (ppm)                                 | 500 ppm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Lithuania                     | TPRV (mg/m <sup>3</sup> )                  | 3128 mg/m <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Lithuania                     | TPRV (ppm)                                 | 750 ppm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Luxembourg                    | Local name                                 | n-Heptane                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Luxembourg                    | OEL TWA (mg/m <sup>3</sup> )               | 2085 mg/m <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Luxembourg                    | OEL TWA (ppm)                              | 500 ppm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Malta                         | Local name                                 | n-Heptane                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Malta                         | OEL TWA (mg/m <sup>3</sup> )               | 2085 mg/m <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Malta                         | OEL TWA (ppm)                              | 500 ppm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Netherlands                   | Local name                                 | n-Heptaan                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Netherlands                   | Grenswaarde TGG 8H (mg/m <sup>3</sup> )    | 1200 mg/m <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Netherlands                   | Grenswaarde TGG 8H (ppm)                   | 288 ppm (n-Heptaan; Netherlands; Time-weighted average exposure limit 8 h; Public occupational exposure limit value)                                                                                                                                                                                                                                                                                                                                                                                    |
| Netherlands                   | Grenswaarde TGG 15MIN (mg/m <sup>3</sup> ) | 1600 mg/m <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Netherlands                   | Grenswaarde TGG 15MIN (ppm)                | 384 ppm (n-Heptaan; Netherlands; Short time value; Public occupational exposure limit value)                                                                                                                                                                                                                                                                                                                                                                                                            |
| Poland                        | Local name                                 | Heptan (n-heptan)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Poland                        | NDS (mg/m <sup>3</sup> )                   | 1200 mg/m <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Poland                        | NDSch (mg/m <sup>3</sup> )                 | 2000 mg/m <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Portugal                      | Local name                                 | Heptano, todos os isómeros (n-Heptano )                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Portugal                      | OEL TWA (ppm)                              | 400 ppm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Portugal                      | OEL STEL (ppm)                             | 500 ppm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Romania                       | Local name                                 | Heptan (n)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Romania                       | OEL TWA (mg/m <sup>3</sup> )               | 2085 mg/m <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Romania                       | OEL TWA (ppm)                              | 500 ppm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Slovenia                      | Local name                                 | heptan (vse izomere)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Slovenia                      | OEL TWA (mg/m <sup>3</sup> )               | 2085 mg/m <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Slovenia                      | OEL TWA (ppm)                              | 500 ppm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Spain                         | Local name                                 | n-Heptano                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Spain                         | VLA-ED (mg/m <sup>3</sup> )                | 2085 mg/m <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Spain                         | VLA-ED (ppm)                               | 500 ppm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Spain                         | Notes                                      | VLI (Agente químico para el que la U.E. estableció en su día un valor límite indicativo. Todos estos agentes químicos figuran al menos en una de las directivas de valores límite indicativos publicadas hasta ahora (ver Anexo C. Bibliografía). Los estados miembros disponen de un tiempo fijado en dichas directivas para su transposición a los valores límites de cada país miembro. Una vez adoptados, estos valores tienen la misma validez que el resto de los valores adoptados por el país.) |
| Sweden                        | Local name                                 | n-Heptane and other heptanes                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

| heptane, n-heptane (142-82-5) |                                           |                                                                            |
|-------------------------------|-------------------------------------------|----------------------------------------------------------------------------|
| Sweden                        | nivågränsvärde (NVG) (mg/m <sup>3</sup> ) | 800 mg/m <sup>3</sup>                                                      |
| Sweden                        | nivågränsvärde (NVG) (ppm)                | 200 ppm                                                                    |
| Sweden                        | kortidsvärde (KTV) (mg/m <sup>3</sup> )   | 1200 mg/m <sup>3</sup>                                                     |
| Sweden                        | kortidsvärde (KTV) (ppm)                  | 300 ppm                                                                    |
| United Kingdom                | Local name                                | n-Heptane                                                                  |
| United Kingdom                | WEL TWA (mg/m <sup>3</sup> )              | 2085 mg/m <sup>3</sup>                                                     |
| United Kingdom                | WEL TWA (ppm)                             | 500 ppm                                                                    |
| Iceland                       | Local name                                | n- Heptan                                                                  |
| Iceland                       | OEL (8 hours ref) (mg/m <sup>3</sup> )    | 820 mg/m <sup>3</sup>                                                      |
| Iceland                       | OEL (8 hours ref) (ppm)                   | 200 ppm                                                                    |
| Norway                        | Local name                                | Heptan                                                                     |
| Norway                        | Grenseverdier (AN) (mg/m <sup>3</sup> )   | 800 mg/m <sup>3</sup>                                                      |
| Norway                        | Grenseverdier (AN) (ppm)                  | 200 ppm                                                                    |
| Australia                     | Local name                                | Heptane (n-Heptane)                                                        |
| Australia                     | TWA (mg/m <sup>3</sup> )                  | 1640 mg/m <sup>3</sup>                                                     |
| Australia                     | TWA (ppm)                                 | 400 ppm                                                                    |
| Australia                     | STEL (mg/m <sup>3</sup> )                 | 2050 mg/m <sup>3</sup>                                                     |
| Australia                     | STEL (ppm)                                | 500 ppm                                                                    |
| USA - ACGIH                   | Local name                                | Heptane, all isomers                                                       |
| USA - ACGIH                   | ACGIH TWA (ppm)                           | 400 ppm                                                                    |
| USA - ACGIH                   | ACGIH STEL (ppm)                          | 500 ppm (Heptane, all isomers; USA; Short time value; TLV - Adopted Value) |
| USA - OSHA                    | Local name                                | Heptane (n-Heptane)                                                        |
| USA - OSHA                    | OSHA PEL (TWA) (mg/m <sup>3</sup> )       | 2000 mg/m <sup>3</sup>                                                     |
| USA - OSHA                    | OSHA PEL (TWA) (ppm)                      | 500 ppm                                                                    |

### 8.2. Exposure controls

|                                  |                                                                                                         |
|----------------------------------|---------------------------------------------------------------------------------------------------------|
| Appropriate engineering controls | : Provide adequate general and local exhaust ventilation.                                               |
| Personal protective equipment    | : Protective clothing. Protective goggles. Gloves.                                                      |
| Hand protection                  | : Wear protective gloves                                                                                |
| Eye protection                   | : Chemical goggles or safety glasses                                                                    |
| Skin and body protection         | : Wear suitable protective clothing                                                                     |
| Respiratory protection           | : Where exposure through inhalation may occur from use, respiratory protection equipment is recommended |



Other information : Do not eat, drink or smoke during use.

## SECTION 9: Physical and chemical properties

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

|                                            |                      |
|--------------------------------------------|----------------------|
| Physical state                             | : Liquid             |
| Appearance                                 | : Colourless liquid. |
| Colour                                     | : Colourless. clear. |
| Odour                                      | : Faint.             |
| Odour threshold                            | : No data available  |
| pH                                         | : No data available  |
| Relative evaporation rate (butylacetate=1) | : No data available  |
| Melting point                              | : No data available  |

|                                  |                                      |
|----------------------------------|--------------------------------------|
| Freezing point                   | : No data available                  |
| Boiling point                    | : 82 °C                              |
| Flash point                      | : -3 °C                              |
| Auto-ignition temperature        | : 200 °C                             |
| Decomposition temperature        | : No data available                  |
| Flammability (solid, gas)        | : Highly flammable liquid and vapour |
| Vapour pressure                  | : No data available                  |
| Relative vapour density at 20 °C | : No data available                  |
| Relative density                 | : No data available                  |
| Density                          | : 0,95 g/cm <sup>3</sup>             |
| Solubility                       | : Insoluble in water.                |
| Log Pow                          | : No data available                  |
| Viscosity, kinematic             | : No data available                  |
| Viscosity, dynamic               | : No data available                  |
| Explosive properties             | : No data available                  |
| Oxidising properties             | : No data available                  |
| Explosive limits                 | : No data available                  |

## 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Highly flammable liquid and vapour. May form flammable/explosive vapour-air mixture.

### 10.3. Possibility of hazardous reactions

Not established.

### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame.

### 10.5. Incompatible materials

Strong acids. Strong bases.

### 10.6. Hazardous decomposition products

Fume. Carbon monoxide. Carbon dioxide. May release flammable gases.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified (Based on available data, the classification criteria are not met)

| heptane, n-heptane (142-82-5) |                                                                                                                         |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| LD50 oral rat                 | > 15000 mg/kg (Rat; Equivalent or similar to OECD 401; Literature study; >5000 mg/kg bodyweight; Rat; Read-across)      |
| LD50 dermal rabbit            | > 3160 mg/kg (Rabbit; Literature study; Equivalent or similar to OECD 402; >2000 mg/kg bodyweight; Rabbit; Read-across) |
| LC50 inhalation rat (mg/l)    | 103 mg/l/4h (Rat; Literature study)                                                                                     |
| LC50 inhalation rat (ppm)     | 25000 ppm/4h (Rat; Literature study)                                                                                    |

|                                   |                                                                                      |
|-----------------------------------|--------------------------------------------------------------------------------------|
| Skin corrosion/irritation         | : Causes skin irritation.                                                            |
| Serious eye damage/irritation     | : Causes serious eye irritation.                                                     |
| Respiratory or skin sensitisation | : Not classified<br>Based on available data, the classification criteria are not met |
| Germ cell mutagenicity            | : Not classified<br>Based on available data, the classification criteria are not met |
| Carcinogenicity                   | : Not classified<br>Based on available data, the classification criteria are not met |



|                                                     |                                                                                      |
|-----------------------------------------------------|--------------------------------------------------------------------------------------|
| Reproductive toxicity                               | : Not classified<br>Based on available data, the classification criteria are not met |
| Specific target organ toxicity (single exposure)    | : Not classified<br>Based on available data, the classification criteria are not met |
| Specific target organ toxicity (repeated exposure)  | : Not classified<br>Based on available data, the classification criteria are not met |
| Aspiration hazard                                   | : Not classified<br>Based on available data, the classification criteria are not met |
| Potential adverse human health effects and symptoms | : Based on available data, the classification criteria are not met.                  |

## SECTION 12: Ecological information

### 12.1. Toxicity

|                 |                                                      |
|-----------------|------------------------------------------------------|
| Ecology - water | : Harmful to aquatic life with long lasting effects. |
|-----------------|------------------------------------------------------|

| heptane, n-heptane (142-82-5) |                                                                                                          |
|-------------------------------|----------------------------------------------------------------------------------------------------------|
| EC50 Daphnia 1                | 0,2 mg/l (LC50; Other; 96 h; Chaetogammarus marinus; Semi-static system; Salt water; Experimental value) |

### 12.2. Persistence and degradability

| C1 Crystal Lacquer            |                                                         |
|-------------------------------|---------------------------------------------------------|
| Persistence and degradability | May cause long-term adverse effects in the environment. |

| heptane, n-heptane (142-82-5)   |                                                                                                                                                |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Persistence and degradability   | Readily biodegradable in water. Forming sediment in water. Biodegradable in soil. Low potential for adsorption in soil. Photolysis in the air. |
| Biochemical oxygen demand (BOD) | 1,92 g O <sub>2</sub> /g substance                                                                                                             |
| Chemical oxygen demand (COD)    | 0,06 g O <sub>2</sub> /g substance                                                                                                             |
| ThOD                            | 3,52 g O <sub>2</sub> /g substance                                                                                                             |
| BOD (% of ThOD)                 | > 0,5 (5 days; Literature study)                                                                                                               |

| alkoxysilane (proprietary)    |                                               |
|-------------------------------|-----------------------------------------------|
| Persistence and degradability | Biodegradability in water: no data available. |

### 12.3. Bioaccumulative potential

| C1 Crystal Lacquer        |                  |
|---------------------------|------------------|
| Bioaccumulative potential | Not established. |

| heptane, n-heptane (142-82-5) |                                                  |
|-------------------------------|--------------------------------------------------|
| BCF other aquatic organisms 1 | 552 (BCF; BCFBAF v3.00)                          |
| Log Pow                       | 4,66 (Experimental value; 4.5; Literature study) |
| Bioaccumulative potential     | Potential for bioaccumulation (4 ≥ Log Kow ≤ 5). |

| alkoxysilane (proprietary) |                                     |
|----------------------------|-------------------------------------|
| Bioaccumulative potential  | Bioaccumulation: No data available. |

### 12.4. Mobility in soil

| heptane, n-heptane (142-82-5) |                                                    |
|-------------------------------|----------------------------------------------------|
| Surface tension               | 0,019 N/m (25 °C; 0.020 N/m; 20 °C)                |
| Log Koc                       | log Koc, SRC PCKOCWIN v2.0; 2.38; Calculated value |

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

|                        |                                    |
|------------------------|------------------------------------|
| Additional information | : Avoid release to the environment |
|------------------------|------------------------------------|

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

|                                |                                                                             |
|--------------------------------|-----------------------------------------------------------------------------|
| Waste disposal recommendations | : Dispose in a safe manner in accordance with local/national regulations.   |
| Additional information         | : Handle empty containers with care because residual vapours are flammable. |



|                                   |                                                                                                                                                                |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ecology - waste materials         | : Avoid release to the environment.                                                                                                                            |
| European List of Waste (LoW) code | : 08 02 00 - wastes from MFSU of other coatings (including ceramic materials)<br>20 01 27* - paint, inks, adhesives and resins containing dangerous substances |

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

### 14.1. UN number

|               |        |
|---------------|--------|
| UN-No. (ADR)  | : 1263 |
| UN-No. (IMDG) | : 1263 |
| UN-No. (IATA) | : 1263 |
| UN-No. (ADN)  | : 1263 |
| UN-No. (RID)  | : 1263 |

### 14.2. UN proper shipping name

|                                       |                                                                                                      |
|---------------------------------------|------------------------------------------------------------------------------------------------------|
| Proper Shipping Name (ADR)            | : PAINT                                                                                              |
| Proper Shipping Name (IMDG)           | : PAINT                                                                                              |
| Proper Shipping Name (IATA)           | : Paint                                                                                              |
| Proper Shipping Name (ADN)            | : PAINT                                                                                              |
| Proper Shipping Name (RID)            | : PAINT                                                                                              |
| Transport document description (ADR)  | : UN 1263 PAINT (CONTAINS ; alkoxysilane (proprietary) ; heptane, n-heptane(142-82-5)), 3, II, (D/E) |
| Transport document description (IMDG) | : UN 1263 PAINT, 3, II                                                                               |

### 14.3. Transport hazard class(es)

#### ADR

|                                  |     |
|----------------------------------|-----|
| Transport hazard class(es) (ADR) | : 3 |
| Danger labels (ADR)              | : 3 |



#### IMDG

|                                   |     |
|-----------------------------------|-----|
| Transport hazard class(es) (IMDG) | : 3 |
| Danger labels (IMDG)              | : 3 |



#### IATA

|                                   |     |
|-----------------------------------|-----|
| Transport hazard class(es) (IATA) | : 3 |
| Hazard labels (IATA)              | : 3 |



#### ADN

|                                  |     |
|----------------------------------|-----|
| Transport hazard class(es) (ADN) | : 3 |
| Danger labels (ADN)              | : 3 |



## RID

Transport hazard class(es) (RID) : 3  
Danger labels (RID) : 3



### 14.4. Packing group

Packing group (ADR) : II  
Packing group (IMDG) : II  
Packing group (IATA) : II  
Packing group (ADN) : II  
Packing group (RID) : II

### 14.5. Environmental hazards

Dangerous for the environment : No  
Marine pollutant : No  
Other information : No supplementary information available

### 14.6. Special precautions for user

#### 14.6.1. Overland transport

Classification code (ADR) : F1  
Special provisions (ADR) : 163, 640D, 650  
Limited quantities (ADR) : 5I  
Excepted quantities (ADR) : E2  
Packing instructions (ADR) : P001, IBC02, R001  
Special packing provisions (ADR) : PP1  
Mixed packing provisions (ADR) : MP19  
Portable tank and bulk container instructions (ADR) : T4  
Portable tank and bulk container special provisions (ADR) : TP1, TP8, TP28  
Tank code (ADR) : LGBF  
Vehicle for tank carriage : FL  
Transport category (ADR) : 2  
Special provisions for carriage - Operation (ADR) : S2, S20  
Hazard identification number (Kemler No.) : 33  
Orange plates :



Tunnel restriction code (ADR) : D/E  
EAC code : •3YE

#### 14.6.2. Transport by sea

Special provisions (IMDG) : 163  
Limited quantities (IMDG) : 5 L  
Excepted quantities (IMDG) : E2  
Packing instructions (IMDG) : P001

|                                   |                  |
|-----------------------------------|------------------|
| Special packing provisions (IMDG) | : PP1            |
| IBC packing instructions (IMDG)   | : IBC02          |
| Tank instructions (IMDG)          | : T4             |
| Tank special provisions (IMDG)    | : TP1, TP8, TP28 |
| EmS-No. (Fire)                    | : F-E            |
| EmS-No. (Spillage)                | : S-E            |
| Stowage category (IMDG)           | : B              |

#### 14.6.3. Air transport

|                                              |                 |
|----------------------------------------------|-----------------|
| PCA Excepted quantities (IATA)               | : E2            |
| PCA Limited quantities (IATA)                | : Y341          |
| PCA limited quantity max net quantity (IATA) | : 1L            |
| PCA packing instructions (IATA)              | : 353           |
| PCA max net quantity (IATA)                  | : 5L            |
| CAO packing instructions (IATA)              | : 364           |
| CAO max net quantity (IATA)                  | : 60L           |
| Special provisions (IATA)                    | : A3, A72, A192 |
| ERG code (IATA)                              | : 3L            |

#### 14.6.4. Inland waterway transport

|                                   |                |
|-----------------------------------|----------------|
| Classification code (ADN)         | : F1           |
| Special provisions (ADN)          | : 163, 64D, 65 |
| Limited quantities (ADN)          | : 5 L          |
| Excepted quantities (ADN)         | : E2           |
| Equipment required (ADN)          | : PP, EX, A    |
| Ventilation (ADN)                 | : VE01         |
| Number of blue cones/lights (ADN) | : 1            |
| Carriage prohibited (ADN)         | : No           |
| Not subject to ADN                | : No           |

#### 14.6.5. Rail transport

|                                                           |                     |
|-----------------------------------------------------------|---------------------|
| Classification code (RID)                                 | : F1                |
| Special provisions (RID)                                  | : 163, 640D, 650    |
| Limited quantities (RID)                                  | : 5L                |
| Excepted quantities (RID)                                 | : E2                |
| Packing instructions (RID)                                | : P001, IBC02, R001 |
| Special packing provisions (RID)                          | : PP1               |
| Mixed packing provisions (RID)                            | : MP19              |
| Portable tank and bulk container instructions (RID)       | : T4                |
| Portable tank and bulk container special provisions (RID) | : TP1, TP8, TP28    |
| Tank codes for RID tanks (RID)                            | : LGBF              |
| Transport category (RID)                                  | : 2                 |
| Colis express (express parcels) (RID)                     | : CE7               |
| Hazard identification number (RID)                        | : 33                |
| Carriage prohibited (RID)                                 | : No                |

#### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

|                                                                                                                                                                                                                                                  |                                                        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| 3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008 | C1 Crystal Lacquer - heptane, n-heptane - alkoxysilane |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|

|                                                                                                                                                                                                                                                                                                                                                                                                        |                                                        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| 3.a. Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F                                                                                          | C1 Crystal Lacquer - heptane, n-heptane – alkoxysilane |
| 3.b. Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10                                                                                 | C1 Crystal Lacquer - heptane, n-heptane - alkoxysilane |
| 3.c. Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1                                                                                                                                                                                                                         | C1 Crystal Lacquer - heptane, n-heptane                |
| 40. Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not. | C1 Crystal Lacquer - heptane, n-heptane - alkoxysilane |

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

## 15.1.2. National regulations

### Germany

Water hazard class (WGK)

: 1 - low hazard to waters

WGK remark

: Classification water polluting based on the components in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of 27 July 2005 (Anhang 4)

## 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

Data sources

: 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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information

: None.

Full text of R-, H- and EUH-statements:

|                   |                                                                        |
|-------------------|------------------------------------------------------------------------|
| Aquatic Acute 1   | Hazardous to the aquatic environment — Acute Hazard, Category 1        |
| Aquatic Chronic 1 | Hazardous to the aquatic environment — Chronic Hazard, Category 1      |
| Aquatic Chronic 3 | Hazardous to the aquatic environment — Chronic Hazard, Category 3      |
| Asp. Tox. 1       | Aspiration hazard, Category 1                                          |
| Eye Irrit. 2      | Serious eye damage/eye irritation, Category 2                          |
| Flam. Liq. 2      | Flammable liquids, Category 2                                          |
| Flam. Liq. 3      | Flammable liquids, Category 3                                          |
| Skin Irrit. 2     | Skin corrosion/irritation, Category 2                                  |
| STOT SE 3         | Specific target organ toxicity — Single exposure, Category 3, Narcosis |
| H225              | Highly flammable liquid and vapour                                     |
| H226              | Flammable liquid and vapour                                            |
| H304              | May be fatal if swallowed and enters airways                           |
| H315              | Causes skin irritation                                                 |
| H319              | Causes serious eye irritation                                          |
| H336              | May cause drowsiness or dizziness                                      |
| H400              | Very toxic to aquatic life                                             |
| H410              | Very toxic to aquatic life with long lasting effects                   |
| H412              | Harmful to aquatic life with long lasting effects                      |

SDS EU\_NSC

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*