

## 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 2 Langfurlong  
Upper Heyford  
Northampton  
Northamptonshire  
NN7 3FA  
United Kingdom

Tel: +44 (0)1604 962 553

### 1.4. Emergency telephone number

Emergency number : +44 (0)1604 962553

Country	Organisation/Company	Address	Emergency number
Ireland	National Poisons Information Centre Beaumont Hospital	Beaumont Hospital Beaumont Road 9 Dublin	: +353 1 8379964
United Kingdom	National Poisons Information Service (NHS Direct)	<a href="http://www.npis.org">http://www.npis.org</a>	111 (England & Wales only) or 112 (EU) or 08454 24 24 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
silane/ (confidential) [flammable liquid] siloxane/ (confidential) [flammable liquid]	(CAS No) Proprietary (EC no) Proprietary	30 - 50	Xi; R36/38 R10
heptane, n-heptane	(CAS No) 142-82-5 (EC no) 205-563-8 (EC index no) 601-008-00-2	1 - 5	F; R11 Xn; R65 Xi; R38 R67 N; R50/53

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

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
	Based on available data, the classification criteria are not met
Germ cell mutagenicity	: Not classified
	Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified
	Based on available data, the classification criteria are not met

Reproductive toxicity	: Not classified Based on available data, the classification criteria are not met
Specific target organ toxicity (single exposure)	: Not classified Based on available data, the classification criteria are not met
Specific target organ toxicity (repeated exposure)	: Not classified Based on available data, the classification criteria are not met
Aspiration hazard	: Not classified 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)
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### 12.2. Persistence and degradability

#### C5 Wheel Armour

Persistence and degradability	May cause long-term adverse effects in the environment.
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#### 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)

#### silane (proprietary)

Persistence and degradability	Biodegradability in water: no data available.
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### 12.3. Bioaccumulative potential

#### C5 Wheel Armour

Bioaccumulative potential	Not established.
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#### 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).

#### silane (proprietary)

Bioaccumulative potential	Bioaccumulation: No data available.
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### 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)  
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 ; alkoxyasilane (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) : 5l  
 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 - silane
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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 – silane
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 - silane
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 - silane

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.*