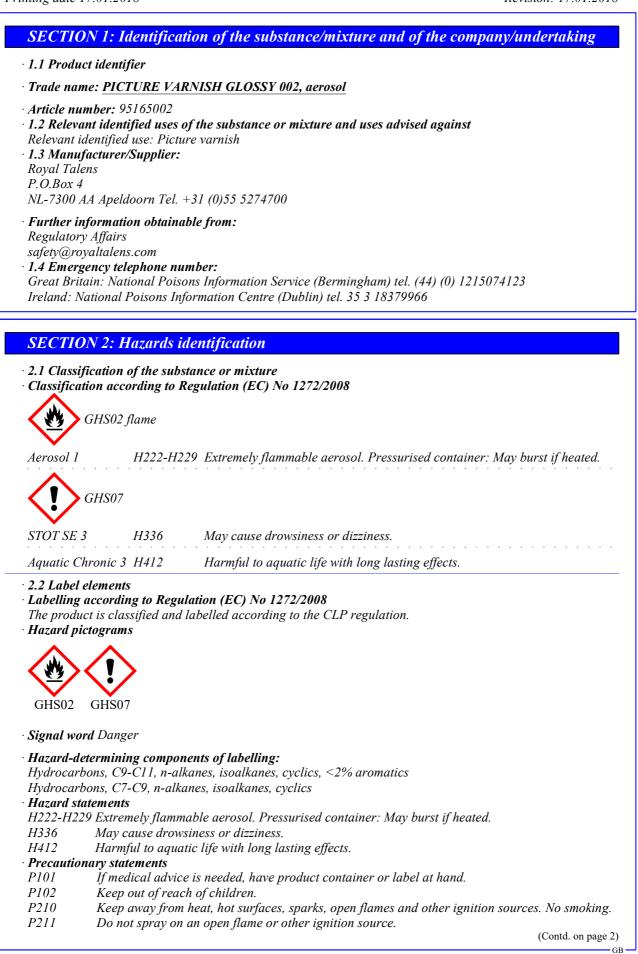
## ROYAL 🙆 TALENS

Safety data sheet according to 1907/2006/EC, Article 31 Page 1/8

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- *P251* Do not pierce or burn, even after use.
- P260 Do not breathe spray.
- *P271* Use only outdoors or in a well-ventilated area.
- *P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.*
- *P501 Dispose of contents/container to hazardous waste collection point.*

• Additional information:

EUH066 Repeated exposure may cause skin dryness or cracking.

· 2.3 Other hazards

- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

#### **SECTION 3: Composition/information on ingredients**

· 3.2 Chemical characterisation: Mixtures

• Description: Mixture of substances listed below with non-hazardous additions.

· Dangerous components:		
EC/List number: 919-857-5 Reg.nr.: 01-2119463258-33	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics Flam. Liq. 3, H226;  Asp. Tox. 1, H304;  STOT SE 3, H336	25-50%
CAS: 74-98-6 EINECS: 200-827-9 Reg.nr.: 01-2119486944-21	propane Flam. Gas 1, H220; Press. Gas C, H280	10-25%
CAS: 106-97-8 EINECS: 203-448-7 Reg.nr.: 01-2119474691-32	butane	10-25%
	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics ♦ Flam. Liq. 2, H225; ♦ Asp. Tox. 1, H304; ♦ Aquatic Chronic 2, H411; ♦ STOT SE 3, H336	10-25%
	<i>Hydrocarbons, C9, aromatics</i> ♦ <i>Flam. Liq. 3, H226;</i> ♦ <i>Asp. Tox. 1, H304;</i> ♦ <i>Aquatic Chronic 2,</i> <i>H411;</i> ♦ <i>STOT SE 3, H335-H336</i>	5-10%
• Additional information: For	the wording of the listed hazard phrases refer to section 16.	

## **SECTION 4: First aid measures**

• 4.1 Description of first aid measures

- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: Do not induce vomiting; call for medical help immediately.
- 4.2 Most important symptoms and effects, both acute and delayed May cause drowsiness or dizziness.
- 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

## **SECTION 5: Firefighting measures**

- 5.1 Extinguishing media
- · Suitable extinguishing agents: CO2, powder, water haze, foam
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · 5.2 Special hazards arising from the substance or mixture
- Formation of toxic gases/vapours is possible during heating or in case of fire.
- 5.3 Advice for firefighters
- · Protective equipment: No special measures required.

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## **SECTION 6:** Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures Keep away from ignition sources.
- 6.2 Environmental precautions: Do not allow product to reach sewage system or any water course.
- 6.3 Methods and material for containment and cleaning up: Ensure adequate ventilation.
- Do not flush with water or aqueous cleansing agents

• **6.4 Reference to other sections** See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

#### **SECTION 7: Handling and storage**

#### · 7.1 Precautions for safe handling

*Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care.* 

- · Information about fire and explosion protection:
- Do not spray onto a naked flame or any incandescent material.
- Keep ignition sources away Do not smoke.

Protect from heat.

Protect against electrostatic charges.

*Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.* 

- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- *Requirements to be met by storerooms and receptacles:* Store in a cool location.

Observe official regulations on storing packagings with pressurised containers.

· Information about storage in one common storage facility: Not required.

#### • Further information about storage conditions:

Do not seal receptacle gas tight.

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

- · Storage class: -
- 7.3 Specific end use(s) No further relevant information available.

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

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· 8.1 Control parameters
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• Ingredient	$\cdot$ Ingredients with limit values that require monitoring at the workplace:		
106-97-8 l	106-97-8 butane (10-25%)		
Long	WEL Short-term value: 1810 mg/m <sup>3</sup> , 750 ppm Long-term value: 1450 mg/m <sup>3</sup> , 600 ppm Carc (if more than 0.1% of buta-1.3-diene)		
Hydrocarl	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics (10-25%)		
TWA Long	TWA Long-term value: 1000 mg/m <sup>3</sup> , 200 ppm		
· DNELs	·DNELs		
Hydrocarl	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics		
Oral	DNEL, long term (chronic) - systemic effects	125 mg/kg bw/day (Consumer)	
Dermal	DNEL, long term (chronic) - systemic effects	125 mg/kg bw/day (Consumer)	
		208 mg/kg bw/day (Employee)	
Inhalative	DNEL,long term (chronic) - systemic effects	185 mg/m3 (Consumer)	

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		871 mg/m3 (Employee)	
Hydrocarb	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics		
Oral	DNEL, long term (chronic) - systemic effects	699 mg/kg bw/day (Consumer)	
Dermal	DNEL, long term (chronic) - systemic effects	699 mg/kg bw/day (Consumer)	
		773 mg/kg bw/day (Employee)	
Inhalative	DNEL,long term (chronic) - systemic effects	608 mg/m3 (Consumer)	
		2,035 mg/m3 (Employee)	
Hydrocarb	Hydrocarbons, C9, aromatics		
Oral	DNEL, long term (chronic) - systemic effects	11 mg/kg bw/day (Consumer)	
Dermal	DNEL, long term (chronic) - systemic effects	11 mg/kg bw/day (Consumer)	
		25 mg/kg bw/day (Employee)	
Inhalative	DNEL,long term (chronic) - systemic effects	32 mg/m3 (Consumer)	
		150 mg/m3 (Employee)	

- · 8.2 Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work.
- · Respiratory protection: Not required.
- Protection of hands:



If prolonged or repeated contact is likely, chemical resistant gloves are recommended.

- · Material of gloves Nitrile rubber, NBR
- · Penetration time of glove material
- The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- Eye protection:



Safety glasses

## **SECTION 9: Physical and chemical properties**

• 9.1 Information on basic physical and c	hemical properties	
· General Information		
· Appearance:		
Form:	Fluid	
Colour:	According to product specification	
· Odour:	Characteristic	
· Odour threshold:	Not determined.	
· pH-value:	Not applicable.	
· Change in condition		
Melting point/freezing point:	Undetermined.	
Initial boiling point and boiling range	:: 107-137 ℃	
· Flash point:	-97 °C	
· Flammability (solid, gas):	Not applicable.	
• Auto-ignition temperature:	365 °C	
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Decomposition temperature:	Not determined.
Explosive properties:	Product is not explosive. However, formation of explosive air vapour mixtures are possible.
Explosion limits:	
Lower:	0.7 Vol %
Upper:	10.9 Vol %
Oxidising properties	No further relevant information available.
Vapour pressure at 20 °C:	8,300 hPa
Density at 20 °C:	$0.69  g/cm^3$
Evaporation rate	Not determined.
Solubility in / Miscibility with	
water:	Not miscible or difficult to mix.
Partition coefficient: n-octanol/water:	Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
9.2 Other information	No further relevant information available.

#### **SECTION 10: Stability and reactivity**

• 10.1 Reactivity Dangerous reactions are not expected if the product is handled according to its intended use.

- 10.2 Chemical stability Stable under recommended storage and handling conditions (see section 7).
- 10.3 Possibility of hazardous reactions
- Dangerous reactions are not expected if the product is handled according to its intended use.
- 10.4 Conditions to avoid No further relevant information available.
- $\cdot$  10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products: No decomposition if used according to specifications.

## **SECTION 11: Toxicological information**

#### · 11.1 Information on toxicological effects

• Acute toxicity Based on available data, the classification criteria are not met.

#### · LD/LC50 values relevant for classification:

Hydrocarb	<i>Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, &lt;2% aromatics</i>	
Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>5,000 mg/kg (rabbit)
Inhalative	LC50/4 h	>5,000 mg/l (rat)
Hydrocarb	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics	
Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)
Inhalative	LC50/4 h	>20 mg/l (rat)
Hydrocarb	Hydrocarbons, C9, aromatics	
Oral	LD50	2,000-5,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)

· Primary irritant effect:

• Skin corrosion/irritation Based on available data, the classification criteria are not met.

· Serious eye damage/irritation Based on available data, the classification criteria are not met.

· Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

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

 $\cdot$  Germ cell mutagenicity Based on available data, the classification criteria are not met.

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- · *Carcinogenicity* Based on available data, the classification criteria are not met.
- *Reproductive toxicity Based on available data, the classification criteria are not met.*
- · STOT-single exposure
- May cause drowsiness or dizziness.
- STOT-repeated exposure Based on available data, the classification criteria are not met.

• Aspiration hazard Based on available data, the classification criteria are not met.

## **SECTION 12: Ecological information**

· 12.1 Toxicity

• Aquatic toxicity:

Hydrocarbons, C9, aromatics

EC50, acute 1-10 mg/l (algae)

- · 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water Do not allow product to reach ground water, water course or sewage system. Danger to drinking water if even small quantities leak into the ground.

- Harmful to aquatic organisms
- · 12.5 Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- 12.6 Other adverse effects No further relevant information available.

## **SECTION 13: Disposal considerations**

· 13.1 Waste treatment methods

· Recommendation

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

• Uncleaned packaging:

• Recommendation: Disposal must be made according to official regulations.

14.1 UN-Number ADR, IMDG, IATA	UN1950	
14.2 UN proper shipping name		
ADR	1950 AEROSOLS	
IMDG, IATA	AEROSOLS	
14.3 Transport hazard class(es) ADR		
Class	2 5F Gases.	

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Label	3
IMDG, IATA	
×	
Class	3 Flammable liquids.
Label	3
14.4 Packing group	Void
ADR IMDG, IATA	voia II
14.5 Environmental hazards:	
	Not applicable.
14.6 Special precautions for user Danger code (Kemler):	Warning: Gases.
EMS Number:	- F-D,S-U
Stowage Category	B
Stowage Code	SW1 Protected from sources of heat.
	SW22 For AEROSOLS with a maximum capacity of 1 litre
	Category A. For AEROSOLS with a capacity above 1 litre Category B. For WASTE AEROSOLS: Category C, Clea
	of living quarters.
Segregation Code	SG69 For AEROSOLS with a maximum capacity of 1 litre
	Segregation as for class 9. Stow "separated from" class
	except for division 1.4. For AEROSOLS with a capacit
	above 1 litre: Segregation as for the appropriat
	subdivision of class 2. For WASTE AEROSOLS
	Segregation as for the appropriate subdivision of class 2.
14.7 Transport in bulk according to Anna Marmal and the IBC Code	
Marpol and the IBC Code	Not applicable.
Transport/Additional information:	
ADR	17
Limited quantities (LQ)	1L Code: E0
Excepted quantities (EQ)	Not permitted as Excepted Quantity
Transport category	2
Tunnel restriction code	D
IMDG	
Limited quantities (LQ)	1L
Excepted quantities (EQ)	Code: E0
	Not permitted as Excepted Quantity
UN "Model Regulation":	UN 1950 AEROSOLS, 3

## **SECTION 15: Regulatory information**

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

· Directive 2012/18/EU

· Named dangerous substances - ANNEX I None of the ingredients is listed.

· Seveso category P3a FLAMMABLE AEROSOLS

• Qualifying quantity (tonnes) for the application of lower-tier requirements 150 t

• Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t • REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3, 40

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(Contd. of page 7) • 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out. **SECTION 16: Other information** This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. · Relevant phrases H220 Extremely flammable gas. H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H280 Contains gas under pressure; may explode if heated. H304 May be fatal if swallowed and enters airways. H331 Toxic if inhaled. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H411 Toxic to aquatic life with long lasting effects. • Abbreviations and acronyms: ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) DNEL: Derived No-Effect Level (REACH) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Flam. Gas 1: Flammable gases - Category 1 Aerosol 1: Aerosols – Category 1 Press. Gas C: Gases under pressure - Compressed gas Flam. Liq. 2: Flammable liquids - Category 2 Flam. Liq. 3: Flammable liquids – Category 3 Acute Tox. 3: Acute toxicity – Category 3 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3 Asp. Tox. 1: Aspiration hazard - Category 1 Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2 Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3