

Safety data sheet
according to 1907/2006/EC, as amended by Regulation (EU) no.
2015/830

Printing date 26.11.2020

Version: 1.1

Revision: 26.11.2020

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

- **1.1 Product identifier**
- **Trade name:** FIXATIVE CONCENTRATED 064, aerosol
- **Article number:** 95160006; 95160016
- **UFI:** JD40-K0DS-W00C-E1Q3
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
Relevant identified use: Fixative for Pastel and Charcoal
- **1.3 Manufacturer/Supplier:**
Royal Talens
P.O.Box 4
NL-7300 AA Apeldoorn Tel. +31 (0)55 5274700
- **Further information obtainable from:**
Regulatory Affairs
safety@royaltalens.com
- **1.4 Emergency telephone number:**
Great Britain: National Poisons Information Service (Birmingham) tel. (44) (0) 1215074123
Ireland: National Poisons Information Centre (Dublin) tel. 35 3 18379966

SECTION 2: Hazards identification

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



GHS02 flame

Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.

- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS02 GHS07

- **Signal word** Danger
- **Hazard statements**
H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.
H319 Causes serious eye irritation.

(Contd. on page 2)

Safety data sheet
according to 1907/2006/EC, as ammended by Regulation (EU) no.
2015/830

Printing date 26.11.2020

Version: 1.1

Revision: 26.11.2020

(Contd. of page 1)

· **Precautionary statements**

- P101 If medical advice is needed, have product container or label at hand.
 P102 Keep out of reach of children.
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P211 Do not spray on an open flame or other ignition source.
 P251 Do not pierce or burn, even after use.
 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.

· **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:**

CAS: 64-17-5 EINECS: 200-578-6 Reg.nr.: 01-2119457610-43	ethanol ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319	50-70%
CAS: 106-97-8 EINECS: 203-448-7 Reg.nr.: 01-2119474691-32	butane, pure ⚠ Flam. Gas 1A, H220; ⚠ Acute Tox. 3, H331; Press. Gas (Comp.), H280	20-25%
CAS: 74-98-6 EINECS: 200-827-9 Reg.nr.: 01-2119486944-21	propane ⚠ Flam. Gas 1A, H220; Press. Gas (Comp.), H280	10-20%
CAS: 67-63-0 EINECS: 200-661-7 Reg.nr.: 01-2119457558-25	propan-2-ol ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319; STOT SE 3, H336	1-2.5%

- **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 eye contact:** Rinse opened eye for several minutes under running water.
 · **After swallowing:** If symptoms persist consult doctor.
 · **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
 · **4.3 Indication of any immediate medical attention and special treatment needed**
 No further relevant information available.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**

- **Suitable extinguishing agents:** CO₂, sand, extinguishing powder. Do not use water.
 · **For safety reasons unsuitable extinguishing agents:** Water with full jet
 · **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
 · **5.3 Advice for firefighters**
 · **Protective equipment:** No special measures required.

GB

(Contd. on page 3)

Safety data sheet
according to 1907/2006/EC, as ammended by Regulation (EU) no.
2015/830

Printing date 26.11.2020

Version: 1.1

Revision: 26.11.2020

(Contd. of page 2)

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** 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 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

· 8.1 Control parameters

· **Ingredients with limit values that require monitoring at the workplace:**

64-17-5 ethanol (50-70%)

WEL Long-term value: 1920 mg/m³, 1000 ppm

106-97-8 butane, pure (20-25%)

WEL Short-term value: 1810 mg/m³, 750 ppm
Long-term value: 1450 mg/m³, 600 ppm
Carc (if more than 0.1% of buta-1.3-diene)

67-63-0 propan-2-ol (1-2.5%)

WEL Short-term value: 1250 mg/m³, 500 ppm
Long-term value: 999 mg/m³, 400 ppm

· **DNELs**

64-17-5 ethanol

Oral	DNEL, long term (chronic) - systemic effects	87 mg/kg bw/day (Consumer)
Dermal	DNEL, long term (chronic) - systemic effects	206 mg/kg bw/day (Consumer)
		343 mg/kg bw/day (Employee)

(Contd. on page 4)

Safety data sheet
according to 1907/2006/EC, as amended by Regulation (EU) no.
2015/830

Printing date 26.11.2020

Version: 1.1

Revision: 26.11.2020

(Contd. of page 3)

Inhalative	DNEL, acute - local effects	950 mg/m ³ (Consumer) 1,900 mg/m ³ (Employee)
	DNEL, long term (chronic) - systemic effects	114 mg/m ³ (Consumer) 950 mg/m ³ (Employee)
67-63-0 propan-2-ol		
Oral	DNEL, long term (chronic) - systemic effects	26 mg/kg bw/day (Consumer)
Dermal	DNEL, long term (chronic) - systemic effects	319 mg/kg bw/day (Consumer) 888 mg/kg bw/day (Employee)
Inhalative	DNEL, long term (chronic) - systemic effects	89 mg/m ³ (Consumer) 500 mg/m ³ (Employee)

· **PNECs****64-17-5 ethanol**

PNEC, fresh water	0.96 mg/l (aquatic organism)
PNEC, marine water	0.79 mg/l (aquatic organism)
PNEC, fresh water sediment	3.6 mg/kg (aquatic organism)
PNEC, soil	0.63 mg/kg (terrestrial organism)

67-63-0 propan-2-ol

PNEC, fresh water	140.9 mg/l (aquatic organism)
PNEC, marine water	140.9 mg/l (aquatic organism)
PNEC, fresh water sediment	552 mg/kg (aquatic organism)
PNEC, marine water sediment	552 mg/kg (aquatic organism)
PNEC, soil	28 mg/kg (terrestrial organism)

· **8.2 Exposure controls**· **Personal protective equipment:**

- **General protective and hygienic measures:** Wash hands before breaks and at the end of work.
- **Respiratory protection:** Use suitable respiratory protective device in case of insufficient ventilation.
- **Protection of hands:**



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

· **Material of gloves** Butyl rubber, BR· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**

Safety glasses

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**· **General Information**· **Appearance:**

Form:	Aerosol
Colour:	According to product specification
Odour:	Characteristic

(Contd. on page 5)

Safety data sheet
according to 1907/2006/EC, as amended by Regulation (EU) no.
2015/830

Printing date 26.11.2020

Version: 1.1

Revision: 26.11.2020

(Contd. of page 4)

· pH-value:	Not applicable.
· Change in condition	
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	-44 °C
· Flash point:	-97 °C
· Flammability (solid, gas):	Not applicable.
· Auto-ignition temperature:	365 °C
· Decomposition temperature:	Not determined.
· Explosive properties:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· Explosion limits:	
Lower:	1.5 Vol %
Upper:	15 Vol %
· Oxidising properties	No further relevant information available.
· Vapour pressure at 20 °C:	8,300 hPa
· Density at 20 °C:	0.7 g/cm ³
· Vapour density	Not applicable.
· 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 applicable.
Kinematic:	Not applicable.
· 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.
- **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:**

64-17-5 ethanol

Oral	LD50	10,470 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)
Inhalative	LC50/4 h	51-125 mg/l (rat)

106-97-8 butane, pure

Inhalative	LC50/4 h	658 mg/l (rat)
------------	----------	----------------

(Contd. on page 6)

Safety data sheet
according to 1907/2006/EC, as ammended by Regulation (EU) no.
2015/830

Printing date 26.11.2020

Version: 1.1

Revision: 26.11.2020

(Contd. of page 5)

67-63-0 propan-2-ol

Oral	LD50	5,840 mg/kg (rat)
Dermal	LD50	13,900 mg/kg (rabbit)
Inhalative	LC50/6h	>25 mg/l (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation**
Causes serious eye irritation.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Additional toxicological information:**
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **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** Based on available data, the classification criteria are not met.
- **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:** No further relevant information available.
- **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.
- **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**
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- **14.1 UN-Number**
- **ADR, IMDG, IATA** UN1950
- **14.2 UN proper shipping name**
- **ADR** 1950 AEROSOLS
- **IMDG** AEROSOLS
- **IATA** AEROSOLS, flammable

· **14.3 Transport hazard class(es)**· **ADR**· **Class**2 5F Gases.

(Contd. on page 7)


Safety data sheet
according to 1907/2006/EC, as ammended by Regulation (EU) no.
2015/830

Printing date 26.11.2020

Version: 1.1

Revision: 26.11.2020

(Contd. of page 6)

· Label	2.1
· IMDG, IATA	
	
· Class	2.1
· Label	2.1
· 14.4 Packing group	None.
· ADR, IMDG, IATA	Void
· 14.5 Environmental hazards:	Not applicable.
· 14.6 Special precautions for user	Warning: Gases.
· Hazard identification number (Kemler code):	-
· EMS Number:	F-D,S-U
· 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, Clear of living quarters.
· Segregation Code	SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E0 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, 2.1

SECTION 15: Regulatory information

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

· Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

67-63-0 | propan-2-ol

· Directive 2012/18/EU

· **Named dangerous substances - ANNEX I** None of the ingredients is listed.· **Seveso category P3a** FLAMMABLE AEROSOLS

(Contd. on page 8)

Safety data sheet
 according to 1907/2006/EC, as ammended by Regulation (EU) no.
 2015/830

Printing date 26.11.2020

Version: 1.1

Revision: 26.11.2020

(Contd. of page 7)

- **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

· **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

None of the ingredients is listed.

- **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.
- H280 Contains gas under pressure; may explode if heated.
- H319 Causes serious eye irritation.
- H331 Toxic if inhaled.
- H336 May cause drowsiness or dizziness.

· **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)
- PNEC: Predicted No-Effect Concentration (REACH)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- Flam. Gas 1A: Flammable gases – Category 1A
- Aerosol 1: Aerosols – Category 1
- Press. Gas (Comp.): Gases under pressure – Compressed gas
- Flam. Liq. 2: Flammable liquids – Category 2
- Acute Tox. 3: Acute toxicity - inhalation – Category 3
- Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
- STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

- *** Data compared to the previous version altered.**

GB