Safety data sheet
according to 1907/2006/EC

Printing date 06.12.2022 Version: 1.2 (replaces version 1.1) Revision: 06.12.2022

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:**
Manufacturer:
Royal Talens
P.O. Box 4
NL-7300 AA Apeldoorn Tel. +31 (0)55 5274700

UK Distributor:
R.Talens UK Ltd
P.O. Box 3717
Wokingham RG40 9RS, UK
Tel +44 (0)800 995 6500

· **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**

flame

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

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 GB CLP regulation.
· **Hazard pictograms**

GHS02 GHS07

(Contd. on page 2)

Safety data sheet
according to 1907/2006/EC

(Contd. of page 1)

· **Signal word** Danger
· **Hazard statements**
H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.
H319 Causes serious eye irritation.
· **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 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 Specific concentration limit: Eye Irrit. 2; H319: C ≥ 50 %	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.

(Contd. on page 3)

Safety data sheet
according to 1907/2006/EC

(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)
Inhalative	DNEL,acute - local effects	950 mg/m3 (Consumer)

(Contd. on page 4)

Safety data sheet
according to 1907/2006/EC

Printing date 06.12.2022 Version: 1.2 (replaces version 1.1) Revision: 06.12.2022

(Contd. of page 3)

	DNEL,long term (chronic) - systemic effects	1,900 mg/m3 (Employee) 114 mg/m3 (Consumer) 950 mg/m3 (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/m3 (Consumer) 500 mg/m3 (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**
· **Individual protection measures, such as 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.
· **Hand protection**

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

· **Material of gloves** Butyl rubber, BR
· **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/face protection**

Safety glasses

*

SECTION 9: Physical and chemical properties

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

· **Physical state**	Aerosol
· **Colour:**	According to product specification
· **Odour:**	Characteristic
· **Melting point/freezing point:**	Undetermined.
· **Boiling point or initial boiling point and boiling range**	-44 °C
· **Flammability**	Not applicable.

(Contd. on page 5)

Safety data sheet
according to 1907/2006/EC

Printing date 06.12.2022 Version: 1.2 (replaces version 1.1) Revision: 06.12.2022

(Contd. of page 4)

· **Lower and upper explosion limit**	
· **Lower:**	1.5 Vol %
· **Upper:**	15 Vol %
· **Flash point:**	-97 °C
· **Auto-ignition temperature:**	365 °C
· **Decomposition temperature:**	Not determined.
· **pH**	Mixture is non-soluble (in water).
· **Viscosity:**	
· **Kinematic viscosity**	Not applicable.
· **Dynamic:**	Not applicable.
· **Solubility**	
· **water:**	Not miscible or difficult to mix.
· **Partition coefficient n-octanol/water (log value)**	Not determined.
· **Vapour pressure at 20 °C:**	8,300 hPa
· **Density and/or relative density**	
· **Density at 20 °C:**	0.7 g/cm³
· **Vapour density**	Not applicable.

· **9.2 Other information**	
· **Appearance:**	
· **Form:**	Aerosol
· **Important information on protection of health and environment, and on safety.**	
· **Explosive properties:**	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· **Change in condition**	
· **Softening point/range**	
· **Oxidising properties**	No further relevant information available.
· **Evaporation rate**	Not determined.

· **Information with regard to physical hazard classes**	
· **Explosives**	Void
· **Flammable gases**	Void
· **Aerosols**	Extremely flammable aerosol. Pressurised container: May burst if heated.
· **Oxidising gases**	Void
· **Gases under pressure**	Void
· **Flammable liquids**	Void
· **Flammable solids**	Void
· **Self-reactive substances and mixtures**	Void
· **Pyrophoric liquids**	Void
· **Pyrophoric solids**	Void
· **Self-heating substances and mixtures**	Void
· **Substances and mixtures, which emit flammable gases in contact with water**	Void
· **Oxidising liquids**	Void
· **Oxidising solids**	Void
· **Organic peroxides**	Void
· **Corrosive to metals**	Void
· **Desensitised explosives**	Void

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.

(Contd. on page 6)

Safety data sheet
according to 1907/2006/EC

Printing date 06.12.2022 Version: 1.2 (replaces version 1.1) Revision: 06.12.2022

(Contd. of page 5)

· **10.6 Hazardous decomposition products:** No decomposition if used according to specifications.

*
SECTION 11: Toxicological information

· **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
· **Acute toxicity**

· 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)
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)

· **Serious eye damage/irritation** Causes serious eye irritation.
· **11.2 Information on other hazards**

· Endocrine disrupting properties
None of the ingredients is listed.

*
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 Endocrine disrupting properties**
The product does not contain substances with endocrine disrupting properties.
· **12.7 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 or ID number	
· ADR, IMDG, IATA	UN1950
· 14.2 UN proper shipping name	
· ADR	1950 AEROSOLS
· IMDG	AEROSOLS
· IATA	AEROSOLS, flammable

(Contd. on page 7)

Safety data sheet
according to 1907/2006/EC

(Contd. of page 6)

· **14.3 Transport hazard class(es)**

· **ADR**

· **Class**	2 5F Gases.
· **Label**	2.1

· **IMDG, IATA**

· **Class**	2.1 Gases.
· **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 Maritime transport in bulk according to IMO instruments**	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

(Contd. on page 8)

Safety data sheet
according to 1907/2006/EC

(Contd. of page 7)

*
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
· **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 relatif au transport international 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 (UK REACH)
PNEC: Predicted No-Effect Concentration (UK 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 – 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.**