

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 02.10.2020

Version number 1

Revision: 02.10.2020

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

- **1.1 Product identifier**
- **Trade name:**
Signierfarbe Signalorange RAL 2010 X 498
(SCHABOS & UNIVERSAL)
- **Article number:** 192079
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture**
Industrial use.
Printing inks
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
SCHABOS GmbH
Widdersdorfer Str. 236-240
50825 Köln
GERMANY
- **Further information obtainable from:**
CEO
info@schabos.de
- **1.4 Emergency telephone number:**
SCHABOS GmbH
Widdersdorfer Str. 236-240
D-50825 Köln
+49(0)221 / 99877 - 0 (reachable during opening hours)

SECTION 2: Hazards identification

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



GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

- **2.2 Label elements**
- **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**
H225 Highly flammable liquid and vapour.
H315 Causes skin irritation.

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H319 Causes serious eye irritation.

· **Precautionary statements**

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P243 Take action to prevent static discharges.
- P280 Wear protective gloves / eye protection.
- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or 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.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Additional information:**

EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

SECTION 3: Composition/information on ingredients

· **3.2 Chemical characterisation: Mixtures**

· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 64-17-5 EINECS: 200-578-6 Index number: 603-002-00-5 Reg.nr.: 01-2119457610-43-xxxx	ethanol ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319	≥25-<50%
CAS: 107-41-5 EINECS: 203-489-0 Index number: 603-053-00-3 Reg.nr.: 01-2119539582-35-xxxx	2-methylpentane-2,4-diol ⚠ Skin Irrit. 2, H315; ⚠ Eye Irrit. 2, H319	10-25%
CAS: 1569-02-4 EINECS: 216-374-5 Index number: 603-177-00-8 Reg.nr.: 01-2119462792-32-xxxx	1-ethoxypropan-2-ol ⚠ Flam. Liq. 3, H226; ⚠ STOT SE 3, H336	2,5-10%
CAS: 9004-70-0	Nitrocellulose < 12.6 % N ⚠ Flam. Sol. 1, H228	2,5-10%
CAS: 13463-67-7 EINECS: 236-675-5 Index number: 022-006-00-2 Reg.nr.: 01-2119489379-17-xxxx	titanium dioxide ⚠ Carc. 2, H351	2,5-10%
CAS: 141-78-6 EINECS: 205-500-4 Index number: 607-022-00-5 Reg.nr.: 01-2119475103-46-xxxx	ethyl acetate ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319; STOT SE 3, H336	≥2,5-<10%
CAS: 34590-94-8 EINECS: 252-104-2 Reg.nr.: 01-2119450011-60-xxxx	Dipropylene glycol monomethyl ether substance with a Community workplace exposure limit	2,5-10%

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- **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**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately rinse with water.
- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**
Do not induce vomiting; call for medical help immediately.
Rinse out mouth and then drink plenty of water.
- **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, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture**
Can form explosive gas-air mixtures.
In case of fire, the following can be released:
Irritant gases/vapours.
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information**
Cool endangered receptacles with water spray.
Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
Dispose of the material collected according to regulations.
- **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**
Store in cool, dry place in tightly closed receptacles.

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- Use only in well ventilated areas.
- **Information about fire - and explosion protection:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Further information about storage conditions:**
Keep container tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.
Store receptacle in a well ventilated area.
- **Storage class:** 3
- **7.3 Specific end use(s)** Printing inks

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**

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

141-78-6 ethyl acetate

IOELV	Short-term value: 1468 mg/m ³ , 400 ppm Long-term value: 734 mg/m ³ , 200 ppm
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34590-94-8 Dipropylene glycol monomethyl ether

IOELV	Long-term value: 308 mg/m ³ , 50 ppm Skin
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- **Additional information:**
The lists for Exposure Controls valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Respiratory protection:** Not necessary if room is well-ventilated.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

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- **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:**



Tightly sealed goggles

- **Body protection:** Solvent resistant protective clothing

- **Protective suit** antistatic.

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form:	Liquid
Colour:	Orange
· Odour:	Solvent-like
· Odour threshold:	Not determined.

- pH-value: Undetermined.

- **Change in condition**

Melting point/freezing point:	Not applicable.
Initial boiling point and boiling range:	> 78 °C

- Flash point: ≤ 21 °C (c.c.)

- Flammability (solid, gas): Not applicable.

- Ignition temperature: 425 °C

- Decomposition temperature: Not determined.

- Auto-ignition temperature: Product is not selfigniting.

- Explosive properties: Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

- **Explosion limits:**

Lower:	1 Vol %
Upper:	15 Vol %

- Vapour pressure at 20 °C: 59 hPa

- Density: Not determined.

- Relative density: Not determined.

- Vapour density: Not determined.

- Evaporation rate: Not determined.

- **Solubility in / Miscibility with water:**

Not miscible or difficult to mix.

- Partition coefficient: n-octanol/water: Not applicable.

- **Viscosity:**

Dynamic:	Not determined.
Kinematic:	20 - 30 s (DIN 53211/4)

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· Solvent content:	
Organic solvents:	60 - 80 %
Water:	< 1 %
VOC (EC)	50 - 70 %
· Solids content:	
9.2 Other information	20 - 40 % No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** To avoid thermal decomposition do not overheat.
- **10.2 Chemical stability** To avoid thermal decomposition do not overheat.
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **10.3 Possibility of hazardous reactions**
Forms explosive gas mixture with air.
Reacts with alkali, amines and strong acids.
Reacts with strong oxidising agents.
- **10.4 Conditions to avoid** To avoid thermal decomposition do not overheat.
- **10.5 Incompatible materials:** Reacts with acids, alkalis and oxidising agents.
- **10.6 Hazardous decomposition products:** Irritant gases/vapours.

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	>15.800 mg/kg (rabbit)
Inhalative	LC50/4 h	>51 mg/l (rat)

107-41-5 2-methylpentane-2,4-diol

Oral	LD50	3.700 mg/kg (rat)
Dermal	LD50	8.560 mg/kg (rabbit)

1569-02-4 1-ethoxypropan-2-ol

Oral	LD50	>2.000 mg/kg (rat)
Dermal	LD50	>2.000 mg/kg (rab)

13463-67-7 titanium dioxide

Oral	LD50	>5.000 mg/kg (rat)
Dermal	LD50	>10.000 mg/kg (rabbit)

141-78-6 ethyl acetate

Oral	LD50	5.600 mg/kg (rat)
Dermal	LD50	>18.000 mg/kg (rabbit)
Inhalative	LC50/4 h	56 mg/l (rat)

34590-94-8 Dipropylene glycol monomethyl ether

Oral	LD50	5.135 mg/kg (rat)
Dermal	LD50	9.500 mg/kg (rab)

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Inhalative LC50/4 h 55-60 mg/l (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation**
Causes skin irritation.
- **Serious eye damage/irritation**
Causes serious eye irritation.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **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:

64-17-5 ethanol

EC50/48 h 5.012 mg/l (daphnia)
LC50/96 h 11.200 mg/l (leuciscus idus)
IC50/96 h 275 mg/l (algae)

1569-02-4 1-ethoxypropan-2-ol

LC50/24 h >10.000 mg/l (pimephales promelas)
LC50/48 h 180 mg/l (dam)

13463-67-7 titanium dioxide

EC50/48 h >1.000 mg/l (daphnia) (OECD Guideline 202)
EC50/72 h >100 mg/l (pseudokirchneriella subcapitata) (OECD Guideline 201)
LC50/96 h >1.000 mg/l (fish) (OECD Guideline 203)

141-78-6 ethyl acetate

EC50/16 h 2.900 mg/l (pseudomonas putida)
EC50/48 h 717 mg/l (dam) (DIN 38418)
3.300 mg/l (scenedesmus subspicatus)
LC50/96 h 230 mg/l (oncorhynchus mykiss)
455 mg/l (pimephales promelas)

34590-94-8 Dipropylene glycol monomethyl ether

EC50/96 h 969 mg/l (selenastrum capricornutum)
LC50/48 h 1.919 mg/l (dam)
LC50/96 h >10.000 mg/l (pimephales promelas)

- **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.
- **General notes:** Do not allow product to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

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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.

Disposal must be made according to official regulations.

· **European waste catalogue**

08 03 12*	waste ink containing hazardous substances
08 03 14*	ink sludges containing hazardous substances

· **Uncleaned packaging:**

· **Recommendation:**

Disposal must be made according to official regulations.

Non contaminated packagings may be reused.

Packagings that may not be cleansed are to be disposed of in the same manner as the product.

SECTION 14: Transport information

· **14.1 UN-Number**

· **ADR, IMDG, IATA**

UN1210

· **14.2 UN proper shipping name**

· **ADR**

1210 PRINTING INK

· **IMDG, IATA**

PRINTING INK

· **14.3 Transport hazard class(es)**

· **ADR, IMDG, IATA**



· **Class**

3 Flammable liquids.

· **Label**

3

· **14.4 Packing group**

· **ADR, IMDG, IATA**

II

· **14.5 Environmental hazards:**

Not applicable.

· **14.6 Special precautions for user**

Warning: Flammable liquids.

· **Hazard identification number (Kemler code):**

33

· **EMS Number:**

F-E,S-D

· **Stowage Category**

B

· **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**

Not applicable.

· **Transport/Additional information:**

· **ADR**

· **Limited quantities (LQ)**

5L

· **Excepted quantities (EQ)**

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500

ml

· **Transport category**

2

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· Tunnel restriction code	D/E
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 1210 PRINTING INK, 3, II

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 P5c FLAMMABLE LIQUIDS**
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 5.000 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 50.000 t
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 40

· **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**

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H228 Flammable solid.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H351 Suspected of causing cancer.

- **Department issuing SDS:** Technical & Safety Service

- **Contact:** info@schabos.de

· **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)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids – Category 2

Flam. Liq. 3: Flammable liquids – Category 3

Flam. Sol. 1: Flammable solids – Category 1

Skin Irrit. 2: Skin corrosion/irritation – Category 2

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Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Carc. 2: Carcinogenicity – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

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EU