

Material Safety Data Sheet
according 1907/2006/EG, Article 31

Internal No.: 74150

Name: Green Coat

Last changed: 8.1.11

1 Identification of Substance and Company

TRADE NAME	Green Solder Coating
APPLICATION	

Producer/importer	Bungard Elektronik GmbH & Co. KG
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Postal code	51570 Windeck
Country	Germany
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2 Composition/Information on Ingredients

Chemical characterization

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

· Dangerous components:		
CAS: 67-64-1 EINECS: 200-662-2	acetone Xi, F; R 11-36-66-67	25-50%
CAS: 74-98-6 EINECS: 200-827-9	propane F+; R 12	12.5-20%
CAS: 106-97-8 EINECS: 203-448-7	butane F+; R 12	10-12.5%
CAS: 75-28-5 EINECS: 200-857-2	isobutane F+; R 12	5-10%
CAS: 64742-49-0 EINECS: 265-151-9	Naphtha (petroleum), hydrotreated light Xn, Xi, F, N; R 11-38-51/53-65-67	5-10%
CAS: 8050-09-7 EINECS: 232-475-7	Rosin Xi; R 43	5-10%
CAS: 108-65-6 EINECS: 203-603-9	2-methoxy-1-methylethyl acetate Xi; R 10-36	2.5-5%
CAS: 78-93-3 EINECS: 201-159-0	butanone Xi, F; R 11-36/37-66-67	2.5-5%
CAS: 71-36-3 EINECS: 200-751-6	butan-1-ol Xn, Xi; R 10-22-37/38-41-67	1-2.5%

· **Additional information:** For the wording of the listed risk phrases refer to section 16.

3 Hazards Identification

· **Hazard description:**



Xi Irritant

F+ Extremely flammable



· **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

At long or repeated contact with skin it may cause dermatitis due to the degreasing effect of the solvent.

Warning! Pressurized container.

Has a narcotizing effect.

R 12 Extremely flammable.

R 36 Irritating to eyes.

R 43 May cause sensitisation by skin contact.

R 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R 66 Repeated exposure may cause skin dryness or cracking.

R 67 Vapours may cause drowsiness and dizziness.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking.

Buildup of explosive mixtures possible without sufficient ventilation.

Keep out of the reach of children

· **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

4 First Aid Measures

· **After inhalation:**

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.

5 Fire Fighting Measures

· **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

· **Protective equipment:** No special measures required.

6 Accidental Release Measures

· **Person-related safety precautions: Ensure adequate ventilation**

· **Measures for environmental protection:**

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

· **Measures for cleaning/collecting:** Ensure adequate ventilation.

7 Handling and Storage

· **Handling:**

· **Information for safe handling:**

No special measures required.

Ensure good ventilation/exhaustion at the workplace.

No special measures required.

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 against electrostatic charges.

Pressurized 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.

· Storage:

· Requirements to be met by storerooms and receptacles:

Store in a cool location.

Observe official regulations on storing packagings with pressurized containers.

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

· Further information about storage conditions:

Keep container tightly sealed.

Do not seal receptacle gas tight.

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

8 Exposure Control/Personal Protection

· Additional information about design of technical facilities: No further data; see item 7. · Ingredients with limit values that require monitoring at the workplace:

67-64-1 acetone

WEL () Short-term value: 3620 mg/m³, 1500 ppm

Long-term value: 1210 mg/m³, 500 ppm

106-97-8 butane

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)

8050-09-7 Rosin

WEL () Short-term value: 0.15 mg/m³

Long-term value: 0.05 mg/m³

Sen

108-65-6 2-methoxy-1-methylethyl acetate

WEL () Short-term value: 548 mg/m³, 100 ppm

Long-term value: 274 mg/m³, 50 ppm

Sk

78-93-3 butanone

WEL () Short-term value: 899 mg/m³, 300 ppm

Long-term value: 600 mg/m³, 200 ppm

Sk

71-36-3 butan-1-ol

WEL () Short-term value: 154 mg/m³, 50 ppm

Sk

· Additional information: The lists valid during the making were used as basis.

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.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes.

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Avoid contact with the eyes and skin.

· **Respiratory protection:** Not required.

· **Protection of hands:**

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

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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



· **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.

· **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

9 Physical and Chemical Properties

· **General Information**

Form:	Aerosol
Colour:	According to product specification
Odour:	Characteristic
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Not applicable, as aerosol.
· Flash point:	< 0°C (< 32°F) Not applicable, as aerosol.
· Ignition temperature:	365.0°C (689°F)
· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· Explosion limits:	
Lower:	1.5 Vol %
Upper:	13.0 Vol %
· Vapour pressure at 20°C (68°F):	3500.0 hPa (2625 mm Hg)
· Density at 20°C (68°F):	0.70600 g/cm³
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
· Solvent content:	
Organic solvents:	88.7 %
· Solids content:	11.1 %

10 Stability and Reactivity

· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

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- **Dangerous reactions** No dangerous reactions known.
- **Dangerous decomposition products:** No dangerous decomposition products known.

11 Toxicological Information

- **Acute toxicity:**
- **LD/LC50 values relevant for classification:**

67-64-1 acetone

Oral LD50 5800 mg/kg (rat)
Dermal LD50 20000 mg/kg (rabbit)
LC50 / 4 h 39 mg/m³ (rat)

106-97-8 butane

LC50 / 4 h 658 mg/m³ (rat)

64742-49-0 Naphtha (petroleum), hydrotreated light

Oral LD50 >5000 mg/kg (rat)
Dermal LD50 >2600 mg/kg (rabbit)
LC50 / 4 h >193 mg/m³ (rat)

108-65-6 2-methoxy-1-methylethyl acetate

Oral LD50 8532 mg/kg (rat)
Dermal LD50 >5000 mg/kg (rabbit)
LC50 / 4 h 35.7 mg/m³ (rat)

78-93-3 butanone

Oral LD50 2737 mg/kg (rat)
Dermal LD50 6480 mg/kg (rabbit)
LC50 / 4 h 34 mg/m³ (rat)

71-36-3 butan-1-ol

Oral LD50 4400 mg/kg (rat)
Dermal LD50 4200 mg/kg (rabbit)
LC50 / 4 h 25 mg/m³ (rat)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Irritating effect.
- **Sensitization:** Sensitization possible through skin contact.

- **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Irritant

- **Sensitisation** May cause sensitisation by skin contact.

12 Ecological Information

- **Ecotoxicological effects:**
- **Acquatic toxicity:**

67-64-1 acetone

EC50 / 48 h 39 mg/l (daphnia magna)
LC50 / 48 h 2262 mg/l (daphnia magna)
LC50 / 96 h (static) 5540 mg/l (fish)

64742-49-0 Naphtha (petroleum), hydrotreated light

LC50 127-159 mg/l (Leuciscus idus)

108-65-6 2-methoxy-1-methylethyl acetate

EC50 408 mg/l (daphnia magna)

71-36-3 butan-1-ol

EC50 / 48 h 1983 mg/l (daphnia magna)

EC50 / 72 h 8500 mg/l (algae)

· **Remark:** Harmful to fish· **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

13 Disposal Considerations

· **Product:**· **Recommendation**

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

· **European waste catalogue**

20 01 13 solvents

15 01 04 metallic packaging

· **Uncleaned packaging:**· **Recommendation:** Disposal must be made according to official regulations.

14 Transport Information

Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)

ADR/RID-GGVS/E	2 5F Gases.
Class:	
Kemler Number:	23
UN-Number:	1950
Packaging group:	-
Label	2.1
Designation of goods:	1950 AEROSOLS

Maritime transport IMDG/GGVSea:

IMDG/GGVSea	2.1
Class:	
UN Number:	1950
Label	2.1
Packaging group:	-
EMS Number:	F-D,S-U
Correct technical name:	AEROSOLS

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class:	2.1
UN/ID Number:	1950
Label	2.1
Packaging group:	-
Proper shipping name:	AEROSOLS, flammable

15 Regulatory Information

Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

· Code letter and hazard designation of product:

Xi Irritant



F+ Extremely flammable



· Hazard-determining components of labelling:

Rosin

· Risk phrases:

12 Extremely flammable.

36 Irritating to eyes. 43 May cause sensitisation by skin contact.

52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

66 Repeated exposure may cause skin dryness or cracking.

67 Vapours may cause drowsiness and dizziness.

· Safety phrases:

2 Keep out of the reach of children.

23 Do not breathe aerosol.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.

46 If swallowed, seek medical advice immediately and show this container or label.

51 Use only in well-ventilated areas.

· Special labelling of certain preparations:

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking.

Buildup of explosive mixtures possible without sufficient ventilation.

Keep out of the reach of children

16 Other Information

· Protective equipment: No special measures required

10 Flammable.

11 Highly flammable.

12 Extremely flammable.

22 Harmful if swallowed.

36 Irritating to eyes.

36/37 Irritating to eyes and respiratory system.

37/38 Irritating to respiratory system and skin.

38 Irritating to skin.

41 Risk of serious damage to eyes.

43 May cause sensitisation by skin contact.

51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

65 Harmful: may cause lung damage if swallowed.

66 Repeated exposure may cause skin dryness or cracking.

67 Vapours may cause drowsiness and dizziness.

VENDOR NOTES

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described