

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 19.1.2016

Version number 4

Revision: 19.1.2016

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

- **1.1 Product identifier**
- **Trade name:** BUNGARD GREENCOATING SPRAY
- **Article number:** 74150
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Product category** PC9a Coatings and paints, thinners, paint removers
- **Application of the substance / the mixture** Preparation
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
 Bungard Elektronik GmbH &
 Co. KG
 Rilkestraße 1
 D- 51570 Windeck-Germany
 Tel: +49 (0)2292 2292
 Fax: +49 (0)2292 6175
 e-mail info@bungard.de
- **Further information obtainable from:** Department Product Safety
- **1.4 Emergency telephone number:** +31 (0)561-694400 (09:00h - 17:00h)

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.*
 Skin Sens. 1 H317 *May cause an allergic skin reaction.*
 STOT SE 3 H336 *May cause drowsiness or dizziness.*

Aquatic Chronic 3 H412 *Harmful to aquatic life with long lasting effects.*

- **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-determining components of labelling:**
 Rosin
 acetone

(Contd. on page 2)

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

Printing date 19.1.2016

Version number 4

Revision: 19.1.2016

Trade name: BUNGARD GREENCOATING SPRAY

(Contd. of page 1)

Naphtha (petroleum), hydrotreated light

· **Hazard statements**

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

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H336 May cause drowsiness or dizziness.

H412 Harmful to aquatic life with long lasting effects.

· **Precautionary statements**

P102 Keep out of reach of children.

P260 Do not breathe spray.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P251 Do not pierce or burn, even after use.

P211 Do not spray on an open flame or other ignition source.

P280 Wear protective gloves.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

P501 Dispose of contents/container in accordance with local regulations.

· **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 nonhazardous additions.· **Dangerous components:**

CAS: 67-64-1 EINECS: 200-662-2 Index number: 606-001-00-8 Reg.nr.: 01-2119471330-49-xxxx	acetone Flam. Liq. 2, H225 Eye Irrit. 2, H319; STOT SE 3, H336	25-50%
CAS: 74-98-6 EINECS: 200-827-9 Index number: 601-003-00-5 Reg.nr.: 01-2119486944-21-xxxx	propane Flam. Gas 1, H220 Press. Gas C, H280	12,5-20%
CAS: 106-97-8 EINECS: 203-448-7 Index number: 601-004-00-0 Reg.nr.: 01-2119474691-32-xxxx	butane Flam. Gas 1, H220 Press. Gas C, H280	10-12,5%
CAS: 75-28-5 EINECS: 200-857-2 Index number: 601-004-00-0 Reg.nr.: 01-2119485395-27-xxxx	isobutane Flam. Gas 1, H220 Press. Gas C, H280	5-10%
CAS: 64742-49-0 EC number: 927-510-4 Index number: 649-328-00-1 Reg.nr.: 01-2119475515-33-xxxx	Naphtha (petroleum), hydrotreated light Flam. Liq. 2, H225 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 Skin Irrit. 2, H315; STOT SE 3, H336	5-10%

(Contd. on page 3)

GB

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

Printing date 19.1.2016

Version number 4

Revision: 19.1.2016

Trade name: BUNGARD GREENCOATING SPRAY

(Contd. of page 2)

CAS: 8050-09-7 EINECS: 232-475-7 Index number: 650-015-00-7 Reg.nr.: 01-2119480418-32-xxxx	Rosin ⚠ Skin Sens. 1, H317	5-10%
CAS: 108-65-6 EINECS: 203-603-9 Index number: 607-195-00-7 Reg.nr.: 01-2119475791-29-xxxx	2-methoxy-1-methylethyl acetate ⚠ Flam. Liq. 3, H226	5-10%

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

SECTION 4: First aid measures

- **4.1 Description of 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.
- **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** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation
Keep away from ignition sources.
- **6.2 Environmental precautions:**
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.
- **6.3 Methods and material for containment and cleaning up:** Ensure adequate ventilation.
- **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.
- **Information about fire - and explosion protection:**
Do not spray onto a naked flame or any incandescent material.

(Contd. on page 4)

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

Printing date 19.1.2016

Version number 4

Revision: 19.1.2016

Trade name: BUNGARD GREENCOATING SPRAY

(Contd. of page 3)

*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: Protect from heat and direct sunlight.****· 7.3 Specific end use(s) No further relevant information available.****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:****67-64-1 acetone**WEL Short-term value: 3620 mg/m³, 1500 ppmLong-term value: 1210 mg/m³, 500 ppm**106-97-8 butane**WEL Short-term value: 1810 mg/m³, 750 ppmLong-term value: 1450 mg/m³, 600 ppm

Carc (if more than 0.1% of buta-1,3-diene)

8050-09-7 RosinWEL Short-term value: 0.15 mg/m³Long-term value: 0.05 mg/m³

Sen

108-65-6 2-methoxy-1-methylethyl acetateWEL Short-term value: 548 mg/m³, 100 ppmLong-term value: 274 mg/m³, 50 ppm

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· Additional information: The lists 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.**Do not inhale gases / fumes / aerosols.**Avoid contact with the eyes.**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*

(Contd. on page 5)

Trade name: BUNGARD GREENCOATING SPRAY

(Contd. of page 4)



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

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
· Odour threshold:	Not determined.

· **pH-value:** Not determined.

· **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.

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:** > 230 °C (> 446 °F)

· **Decomposition temperature:** Not determined.

· **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 hPa (2625 mm Hg)

· **Density at 20 °C (68 °F):** 0.706 g/cm³ (5.892 lbs/gal)

· **Relative density** Not determined.

· **Vapour density** Not determined.

· **Evaporation rate** Not applicable.

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

Not miscible or difficult to mix.

(Contd. on page 6)

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

Printing date 19.1.2016

Version number 4

Revision: 19.1.2016

Trade name: BUNGARD GREENCOATING SPRAY

(Contd. of page 5)

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|---|-----------------|
| · Partition coefficient (n-octanol/water): Not determined. | |
| · Viscosity: | |
| Dynamic: | Not determined. |
| Kinematic: | Not determined. |
| · Solvent content: | |
| Organic solvents: | 88.8 % |
| · EU-VOC: | 626.6 g/l |
| · EU-VOC in %: | 88.75 % |
| · Solids content: 11.1 % | |
| · 9.2 Other information No further relevant information available. | |

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **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 dangerous decomposition products known.

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:**

67-64-1 acetone

Oral	LD50	5800 mg/kg (rat)
Dermal	LD50	20000 mg/kg (rabbit)
Inhalative	LC50 / 4 h	39 mg/m ³ (rat)

106-97-8 butane

Inhalative	LC50 / 4 h	658000 mg/m ³ (rat)
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64742-49-0 Naphtha (petroleum), hydrotreated light

Oral	LD50	>5840 mg/kg (rat)
Dermal	LD50	>2920 mg/kg (rat)
Inhalative	LC50 / 4 h	>25200 mg/m ³ (rat)
	LC50 / 4h	>2 mg/l (rat)
	LC50 / 96 h	2.5 mg/l (Leuciscus idus)

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

Oral	LD50	8532 mg/kg (rat)
Dermal	LD50	>5000 mg/kg (rabbit)
Inhalative	LC50 / 4 h	35.7 mg/m ³ (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**
May cause an allergic skin reaction.

(Contd. on page 7)

GB

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

Printing date 19.1.2016

Version number 4

Revision: 19.1.2016

Trade name: BUNGARD GREENCOATING SPRAY

(Contd. of page 6)

- **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**
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:

67-64-1 acetone

EC50 / 48 h	8800 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

EC50 / 24 h	>10 mg/l (Daphnia magna)
	>100 mg/l (fish)
LC50 / 48 h	4924 mg/l (fish)
LC50 / 96 h	2.5 mg/l (Pimephales promelas)

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

EC50	408 mg/l (daphnia magna)
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- **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.
- **Ecotoxicological effects:**
- **Remark:** Harmful to fish
- **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.

· European waste catalogue

20 01 13*	solvents
15 01 04	metallic packaging

(Contd. on page 8)

GB

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

Printing date 19.1.2016

Version number 4

Revision: 19.1.2016

Trade name: **BUNGARD GREENCOATING SPRAY**

(Contd. of page 7)

- **Uncleaned packaging:**
- **Recommendation:** Non contaminated packagings may be recycled.

SECTION 14: Transport information

· 14.1 UN-Number · ADR, IMDG, IATA	UN1950
· 14.2 UN proper shipping name · ADR · IMDG · IATA	1950 AEROSOLS AEROSOLS Aerosols, flammable
· 14.3 Transport hazard class(es) · ADR	
· Class · Label	2 5F Gases. 2.1
· IMDG, IATA	
· Class · Label	2.1 2.1
· 14.4 Packing group · ADR, IMDG, IATA	Void
· 14.5 Environmental hazards: · Marine pollutant:	No
· 14.6 Special precautions for user · Danger code (Kemler): · EMS Number: · Stowage Code · Segregation Code	Warning: Gases. - F-D,S-U 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. 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

(Contd. on page 9)

GB

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

Printing date 19.1.2016

Version number 4

Revision: 19.1.2016

Trade name: BUNGARD GREENCOATING SPRAY

(Contd. of page 8)

· Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
· Transport category	2
· Tunnel restriction code	D

· IMDG	
· Limited quantities (LQ)	IL
· 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**
- **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.
H226 Flammable liquid and vapour.
H280 Contains gas under pressure; may explode if heated.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.
- **Department issuing MSDS:** R&D legislation and regulatory advisor
- **Contact:** Mr. K. Smedeman
- **Abbreviations and acronyms:**
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
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)
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, Hazard Category 1
Aerosol 1: Flammable aerosols, Hazard Category 1
Press. Gas C: Gases under pressure: Compressed gas
Flam. Liq. 2: Flammable liquids, Hazard Category 2
Flam. Liq. 3: Flammable liquids, Hazard Category 3

(Contd. on page 10)

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

Printing date 19.1.2016

Version number 4

Revision: 19.1.2016

Trade name: BUNGARD GREENCOATING SPRAY

(Contd. of page 9)

*Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2**Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2**Skin Sens. 1: Sensitisation - Skin, Hazard Category 1**STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3**Asp. Tox. 1: Aspiration hazard, Hazard Category 1**Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2**Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3***· * Data compared to the previous version altered.**

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