

1 Identification of the substance/preparation and of the company/undertaking

- **Product details**
- **Trade name:** EnergyGuard DCC Aluminum
According the DCC technology!
- **Article number:** DCC218-1
- **Application of the substance / the preparation** Paint
- **Manufacturer/Supplier:**
Monopoly B. V.
Lassusstraat 9A
1075 GV Amsterdam
The Netherlands
Tel: (+31)-20-679-10-27
info@energyguardcorp.com
- **Further information obtainable from:** Product Safety Department
- **Information in case of emergency:** Tel: (+31)-20-679-10-27

2 Hazards identification

- **Hazard description:**



Xn Harmful

- **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.
R 10 Flammable.
R 20 Harmful by inhalation.
R 36/37/38 Irritating to eyes, respiratory system and skin.
R 40 Limited evidence of a carcinogenic effect.
R 42/43 May cause sensitisation by inhalation and skin contact.
R 48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Contains isocyanates. See information supplied by the manufacturer
- **Classification system:**
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
- **GHS label elements**



Danger

- H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H315 - Causes skin irritation.
- H319 - Causes serious eye irritation.
- H317 - May cause an allergic skin reaction.
- H351 - Suspected of causing cancer.
- H373 - May cause damage to organs through prolonged or repeated exposure.



Warning

- H226 - Flammable liquid and vapour.



Warning

- H332+EUH070 - Harmful if inhaled. Toxic by eye contact.
- H335 - May cause respiratory irritation.

- H412 - Harmful to aquatic life with long lasting effects.

Trade name: EnergyGuard DCC Aluminum
According the DCC technology!

(Contd. of page 1)

Contains isocyanates. May produce an allergic reaction.

Prevention:

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- P233 Keep container tightly closed.
- P240 Ground/bond container and receiving equipment.
- P241 Use explosion-proof electrical/ventilating/lighting/equipment.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
- P264 Wash thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P281 Use personal protective equipment as required.
- P285 In case of inadequate ventilation wear respiratory protection.

Response:

- P302+P352 IF ON SKIN: Wash with plenty of soap and water.
- P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P304+P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P312 Call a POISON CENTER or doctor/physician if you feel unwell.
- P314 Get medical advice/attention if you feel unwell.
- P321 Specific treatment (see on this label).
- P332+P313 If skin irritation occurs: Get medical advice/attention.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
- P362 Take off contaminated clothing and wash before reuse.
- P363 Wash contaminated clothing before reuse.
- P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.

Storage:

- P403+P233 Store in a well-ventilated place. Keep container tightly closed.
- P403+P235 Store in a well-ventilated place. Keep cool.
- P405 Store locked up.

Disposal:

- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

3 Composition/information on ingredients

Chemical characterization

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 9016-87-9	diphenylmethanediisocyanate, isomeres and homologues Carc. Cat. 3; Xn, Xi; R 20-36/37/38-40-42/43-48/20 Danger: 3.4.R/1, 3.2/2, 3.3/2, 3.4.S/1 Warning: 3.1.I/4, 3.8/3	15-20%
----------------	---	--------

(Contd. on page 3)

Trade name: EnergyGuard DCC Aluminum
According the DCC technology!

		(Contd. of page 2)
CAS: 1330-20-7 EINECS: 215-535-7 Index number: 601-022-00-9	xylene ☒ Xn, ☒ Xi; R 10-20/21-38 Warning: ⚠ 2.6/3; ⚠ 3.1.D/4, 3.1.I/4, 3.2/2	7-10%
CAS: 64742-95-6 EINECS: 265-199-0 Index number: 649-356-00-4	Solvent naphtha (petroleum), light arom. ☒ Xn, ☒ Xi, ☒ N; R 37/38-51/53-65-67 Danger: ⚠ 3.10/1 Warning: ⚠ 3.2/2, 3.8/3 ⚠ 4.1.C/2	7-10%
CAS: 108-65-6 EINECS: 203-603-9 Index number: 607-195-00-7	2-methoxy-1-methylethyl acetate ☒ Xi; R 10-36 Warning: ⚠ 2.6/3; ⚠ 3.3/2	7-10%
CAS: 64742-82-1 EINECS: 265-185-4 Index number: 649-330-00-2	Naphtha (petroleum), hydrodesulfurized heavy ☒ Xn, ☒ N; R 10-51/53-65-66-67 Danger: ⚠ 3.6/1B, 3.10/1	7-10%
CAS: 80-05-7 EINECS: 201-245-8 Index number: 604-030-00-0	bisphenol A Repr. Cat. 3; ☒ Xn, ☒ Xi; R 37-41-43-62-52 Danger: ⚠ 3.3/1 Warning: ⚠ 3.7/2; ⚠ 3.4.S/1, 3.8/3	3-5%
CAS: 123-86-4 EINECS: 204-658-1 Index number: 607-025-00-1	n-butyl acetate R 10-66-67 Warning: ⚠ 2.6/3; ⚠ 3.8/3	2,5-3%
CAS: 95-63-6 EINECS: 202-436-9 Index number: 601-043-00-3	1,2,4-trimethylbenzene ☒ Xn, ☒ Xi, ☒ N; R 10-20-36/37/38-51/53 Warning: ⚠ 2.6/3; ⚠ 3.1.I/4, 3.2/2, 3.3/2, 3.8/3 ⚠ 4.1.C/2	0,25-0,5%

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

4 First aid measures

• **General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

• **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:** If symptoms persist consult doctor.

5 Fire-fighting measures

• **Suitable extinguishing agents:** CO₂, sand, extinguishing powder. Do not use water.

• **For safety reasons unsuitable extinguishing agents:** Water with full jet

• **Protective equipment:** Mouth respiratory protective device.

6 Accidental release measures

• **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.

• **Measures for environmental protection:**

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:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

(Contd. on page 4)

Trade name: EnergyGuard DCC Aluminum
According the DCC technology!

(Contd. of page 3)

Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents

7 Handling and storage

- **Handling:**
- **Information for safe handling:**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about fire - and explosion protection:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.

8 Exposure controls/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:**

1330-20-7 xylene

IOELV	Short-term value: 442 mg/m ³ , 100 ppm Long-term value: 221 mg/m ³ , 50 ppm Skin
-------	--

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

IOELV	Short-term value: 550 mg/m ³ , 100 ppm Long-term value: 275 mg/m ³ , 50 ppm Skin
-------	--

- **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.
Avoid contact with the eyes and skin.
- **Respiratory protection:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **Protection of hands:**



Protective gloves

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

- **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.

(Contd. on page 5)

Trade name: EnergyGuard DCC Aluminum
According the DCC technology!

(Contd. of page 4)

- **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 protection:**



Tightly sealed goggles

9 Physical and chemical properties

· General Information

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

· Change in condition

Melting point/Melting range: Undetermined.
Boiling point/Boiling range: 137°C

· **Flash point:** 30°C

· **Ignition temperature:** 315°C

· **Self-igniting:** Product is not selfigniting.

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

· **Density at 20°C:** 1,102 g/cm³

· **Solubility in / Miscibility with water:** Not miscible or difficult to mix.

· **Viscosity:**
Kinematic at 20°C: 100 s (ISO 6 mm)

· **Solvent content:**
Organic solvents: 38,0 %

· **Solids content:** 62,0 %

10 Stability and reactivity

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

1330-20-7 xylene

Oral	LD50	4300 mg/kg (rat)
Dermal	LD50	2000 mg/kg (rabbit)

64742-95-6 Solvent naphtha (petroleum), light arom.

Oral	LD50	>6800 mg/kg (rat)
------	------	-------------------

(Contd. on page 6)

Trade name: EnergyGuard DCC Aluminum
According the DCC technology!

(Contd. of page 5)

Dermal	LD50	>3400 mg/kg (rab)
Inhalative	LC50/4 h	>10,2 mg/l (rat)
80-05-7 bisphenol A		
Oral	LD50	3250 mg/kg (rat)
Dermal	LD50	3000 mg/kg (rabbit)

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:**
Sensitization possible through inhalation.
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:
Harmful
Irritant
- **Sensitisation** May cause sensitisation by inhalation and skin contact.

12 Ecological information

- **Ecotoxicological effects:**
- **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.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **Land transport ADR/RID (cross-border)**
- **ADR/RID class:** -
- **Maritime transport IMDG:**
- **IMDG Class:** -
- **Marine pollutant:** No
- **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 3
- **UN/ID Number:** 1263
- **Label** 3

(Contd. on page 7)

Trade name: EnergyGuard DCC Aluminum
According the DCC technology!

(Contd. of page 6)

- **Packaging group:** III
- **Proper shipping name:** PAINT
- **UN "Model Regulation":** -

15 Regulatory information

- **Labelling according to EU guidelines:**
- **Code letter and hazard designation of product:**



Xn Harmful

- **Hazard-determining components of labelling:**
diphenylmethanediisocyanate, isomeres and homologues
bisphenol A
- **Risk phrases:**
 - 10 Flammable.
 - 20 Harmful by inhalation.
 - 36/37/38 Irritating to eyes, respiratory system and skin.
 - 40 Limited evidence of a carcinogenic effect.
 - 42/43 May cause sensitisation by inhalation and skin contact.
 - 48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
 - 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- **Safety phrases:**
 - 23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
 - 36/37 Wear suitable protective clothing and gloves.
 - 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
 - 51 Use only in well-ventilated areas.
 - 61 Avoid release to the environment. Refer to special instructions/safety data sheets.
- **Special labelling of certain preparations:**
Contains isocyanates. See information supplied by the manufacturer

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 R-phrases**
 - 10 Flammable.
 - 20 Harmful by inhalation.
 - 20/21 Harmful by inhalation and in contact with skin.
 - 36 Irritating to eyes.
 - 36/37/38 Irritating to eyes, respiratory system and skin.
 - 37 Irritating to respiratory system.
 - 37/38 Irritating to respiratory system and skin.
 - 38 Irritating to skin.
 - 40 Limited evidence of a carcinogenic effect.
 - 41 Risk of serious damage to eyes.
 - 42/43 May cause sensitisation by inhalation and skin contact.
 - 43 May cause sensitisation by skin contact.
 - 48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
 - 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 - 52 Harmful to aquatic organisms.

(Contd. on page 8)

Trade name: EnergyGuard DCC Aluminum
According the DCC technology!

(Contd. of page 7)

- 62 Possible risk of impaired fertility.
65 Harmful: may cause lung damage if swallowed.
66 Repeated exposure may cause skin dryness or cracking.
67 Vapours may cause drowsiness and dizziness.

· **Department issuing MSDS:** product safety department

· **Contact:** Tel: (+31)-20-679-10-27

· **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)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent