

**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****1.1 product identifier**

Product code : VH201AED01  
 Product name : NOVABOARD 1 C 990 PROTECT BIO; YE 2,5KG

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

Product use : Printing ink or Additive  
 Uses advised against : None known.

**1.3 Details of the supplier of the safety data sheet**

Manufacturer / Distributor : Flint Group UK Ltd  
 Old Heath Road  
 GB Wolverhampton  
 WVI 2QT  
 UNITED KINGDOM

e-mail address of person responsible for this SDS : compliancecentre@flintgrp.com

**1.4 Emergency telephone number (with hours of operation)**

+44 (1902) 87 10 28 (8:00 h - 17:00 h)

**History**

Date of printing : 14.04.2013.  
 Date of issue/ Date of revision : 08.02.2013.  
 Date of previous issue : 01.02.2012.  
 Version : 6.01

**2. HAZARDS IDENTIFICATION****Classification and labeling according to Regulation (EC) 1907/2006 (REACH)**

Classification and labeling have been determined according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and take into account the intended product use.

**2.1b Classification of the substance or mixture**

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : R52/53  
 Physical/chemical hazards : Not applicable.  
 Human health hazards : Not applicable.  
 Environmental hazards : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**2.2b Label elements**

Hazard symbol or symbols :

Risk phrases : R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases : S60- This material and its container must be disposed of as hazardous waste.

Contains :

**Additional warning phrases and Additional information**  
 Contains cobalt(II)-2-ethylhexanoate. May produce an allergic reaction.

**2.3 Other hazards which do not result in classification**

Results of PBT and vPvB assessment: See sections 12 for details.

**3. COMPOSITION/INFORMATION ON INGREDIENTS****3.2 Mixtures**

Substances presenting a health or environmental hazard within the meaning of the Dangerous Substances Directive 67/548/EEC.

Chemical name	%	REACH Registration number	CAS number	EC number	Classification
manganese(II)-2-ethylhexanoate	1-5		13434-24-7	236-562-0	Xi; R38 [1]
cobalt(II)-2-ethylhexanoate	0.1-1		136-52-7	205-250-6	R43 [2]
tert-butylhydroquinone	0.1-1		1948-33-0	217-752-2	N; R50/53 [1] Xn; R22 Xi; R36/38 N; R50

See section 16 for the full text of the R-phrases declared above

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] PBT-substance

[4] vPvB-substance

Occupational exposure limits, if available, are listed in section 8.

Hazardous ingredients / Classification according to Regulation (EC) 1272/2008 (CLP)

Chemical name	CAS number	Hazard statements	Classification
manganese(II)-2-ethylhexanoate	13434-24-7	Causes skin irritation.	SKIN CORROSION/IRRITATION - Category 2
cobalt(II)-2-ethylhexanoate	136-52-7	May cause an allergic skin reaction. Very toxic to aquatic life with long lasting effects.	SKIN SENSITIZATION - Category 1 AQUATIC TOXICITY (ACUTE) - Category 1 AQUATIC TOXICITY (CHRONIC) - Category 1
tert-butylhydroquinone	1948-33-0	Harmful if swallowed. Causes skin irritation.  Causes serious eye irritation.  Very toxic to aquatic life.	ACUTE TOXICITY: ORAL - Category 4 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 AQUATIC TOXICITY (ACUTE) - Category 1

**4. FIRST AID MEASURES****4.1 Description of first aid measures**

- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention/advice.
- Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Give nothing by mouth. Do NOT induce vomiting.

Use suitable protective equipment (section 8).

**4.2 Most important symptoms and effects, both acute and delayed**

See toxicological information (section 11)

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## **4. FIRST AID MEASURES**

### **4.3 Indication of any immediate medical attention and special treatment needed**

In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.

## **5. FIRE-FIGHTING MEASURES**

### **5.1 Extinguishing media**

**Suitable Extinguishing media** : Recommended: alcohol-resistant foam, CO<sub>2</sub>, powders, water spray

**Extinguishing media not to be used** : Do not use water jet.

### **5.2 Special hazards arising from the substance or mixture**

Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.

### **5.3 Advice for fire-fighters**

Appropriate breathing apparatus may be required. Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.

## **6. ACCIDENTAL RELEASE MEASURES**

### **6.1 Personal precautions, protective equipment and emergency procedures**

Exclude sources of ignition and ventilate the area.

Avoid breathing vapor or spray. Refer to protective measures listed in sections 7 and 8.

### **6.2 Environmental precautions**

Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

### **6.3 Methods and materials for containment and cleaning up**

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Preferably clean with a detergent. Avoid using solvents.

### **6.4 Reference to other sections**

Note: see section 8 for personal protective equipment and section 13 for waste disposal.

## **7. HANDLING AND STORAGE**

### **7.1 Precautions for safe handling**

Keep container tightly closed. Avoid contact with skin and eyes. Avoid inhalation of vapor, spray or mist. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Put on appropriate personal protective equipment (see section 8). Always keep in containers made from the same material as the original one. Comply with the health and safety at work laws.

### **7.2 Conditions for safe storage, including any incompatibilities**

Store in accordance with all local, regional, national and international regulations.

Store in a dry, cool and well-ventilated area, away from incompatible materials (see section 10).

Observe label precautions. Keep container tightly closed and in a well-ventilated place.

Prevent unauthorized access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Storage temperature: 5 to 35°C

### **7.3 Specific end use(s)**

Not applicable.

### **7.4 Additional information**

Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite some hours later. To avoid the risks of fires, all contaminated materials should be stored in purpose-built containers or in metal containers with tight-fitting, self-closing lids. Contaminated materials should be removed from the workplace at the end of each working day and be stored outside.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1 Control parameters**

Ingredient name	Occupational exposure limits
manganese(II)-2-ethylhexanoate	<b>EH40/2005 WELs (United Kingdom (UK), 8/2007). Notes: as Mn</b> TWA: 0.5 mg/m <sup>3</sup> , (as Mn) 8 hour(s).
cobalt(II)-2-ethylhexanoate	<b>EH40/2005 WELs (United Kingdom (UK), 8/2007). Skin sensitizer. Notes: as Co</b> TWA: 0.1 mg/m <sup>3</sup> , (as Co) 8 hour(s).

**Other Exposure limits** : CMR: See toxicological information (section 11)

**8.2 Exposure controls**

Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapors below the OEL, suitable respiratory protection must be worn.

**Individual protection measures**

**Respiratory system** : If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators.

**Skin and body** : Personnel should wear protective clothing.

**Hands** : The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

For prolonged or repeated handling, use the following type of gloves:

Recommended:

4-8 hours: polyethylene (PE) or Viton gloves.

References: <http://www.esig.org/en/library/publications/best-practice-guides>

**Eyes** : Use safety eyewear designed to protect against splash of liquids.

**Environmental exposure controls**

Do not allow to enter drains or watercourses.

**9. PHYSICAL AND CHEMICAL PROPERTIES****9.1 Information on basic physical and chemical properties****Appearance**

**Physical state** : Liquid.

**Color** : Yellow.

**Odor** : Pleasant, ester-like.

**Odor threshold** : Not available.

**pH** : Not available.

**Melting point** : Not available.

**Boiling point** :  $\geq 200$  °C

**Flash point** : Closed cup:  $> 100$  °C [theoretical]

**Evaporation rate** : Not available.

**Flammability (solid, gas)** : Not applicable.

**Burning time** : Not applicable.

**Burning rate** : Not applicable.

**Explosion limits**

**Lower:** : Not available.

**Upper:** : Not available.

**Vapor pressure** :  $< 0.1$  hPa

**Vapor density** : Not available.

**Density** :  $\sim 1$  g/cm<sup>3</sup>

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Solubility</b>	: insoluble in water.
<b>Octanol/water partition coefficient</b>	: Not available.
<b>Auto-ignition temperature</b>	: ca 343 °C
<b>Decomposition temperature</b>	: Not available.
<b>Viscosity</b>	: Kinematic (20°C (68°F)): >4 cm <sup>2</sup> /s (>400 cSt) Kinematic (40°C (104°F)): >0.07 cm <sup>2</sup> /s (>7 cSt)
<b>Explosive properties</b>	: Not available.
<b>Oxidizing properties</b>	: Not available.

**9.2 Other information**

<b>SADT</b>	: Not available.
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**10. STABILITY AND REACTIVITY****10.1 Reactivity**

Not available.

**10.2 Chemical stability**

Stable under recommended storage and handling conditions (see section 7).

**10.3 Possibility of hazardous reactions**

Not available.

**10.4 Conditions to avoid**

When exposed to high temperatures may produce hazardous decomposition products.

**10.5 Incompatible materials**

Keep away from the following materials to prevent strong exothermic reactions:  
oxidizing agents, strong alkalis, strong acids

**10.6 Hazardous decomposition products**

Decomposition products may include the following materials:  
carbon monoxide, carbon dioxide, smoke, oxides of nitrogen

**11. TOXICOLOGICAL INFORMATION****11.1 Information on toxicological effects**

There is no data available on the preparation itself. The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified for toxicological hazards accordingly. See sections 2 and 3 for details.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. If splashed in the eyes, the liquid may cause irritation and reversible damage.

**Substances / Mixtures****Acute toxicity**

:

Product/ingredient name	Result	Species	Dose	Exposure
tert-butylhydroquinone	LD50 Oral	Rat	700 mg/kg	-

**Irritation/Corrosion** : Not available.

**Sensitization** : Contains Sensitizing material . May produce an allergic reaction. See sections 2 and 3 for details.

**Mutagenicity** : Not available.

**Carcinogenicity** : Not available.

**Reproductive toxicity** : Not available.

**Specific target organ toxicity (single exposure)** : Not available.

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**11. TOXICOLOGICAL INFORMATION**

**Specific target organ toxicity (repeated exposure)** : Not available.

**Aspiration hazard** : Not available.

**Chronic toxicity** : Not available.

**Teratogenicity** : Not available.

Product name	List name	Name on list	Classification	Notes
cobalt(II)-2-ethylhexanoate	UK Occupational Exposure Limits EH40 - WEL	cobalt compounds	Carc.	

**Other information****Toxicokinetics**

**Absorption** : Not available.

**Distribution** : Contains material which may cause damage to the following organs: blood, kidneys, upper respiratory tract, central nervous system (CNS), stomach.

**Metabolism** : Not available.

**Elimination** : Not available.

**12. ECOLOGICAL INFORMATION**

There is no data available on the preparation itself.  
Do not allow to enter drains or watercourses.

The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and is classified for eco-toxicological properties accordingly. See sections 3 and 15 for details.

**12.1 Toxicity data**

Not available.

**12.2 Persistence/degradability**

Not available.

Product/ingredient name	Test	Result	Dose	Inoculum
cobalt(II)-2-ethylhexanoate		- % - Not readily - - days	-	-

**12.3 Bioaccumulative potential**

Not available.

**12.4 Mobility in soil**

Not available.

**12.5 Results of PBT and vPvB assessment**

**PBT** : P: Not available. B: Not available. T: Not available.

**vPvB** : vP: Not available. vB: Not available.

**12.6 Other adverse effects**

**AOX** : The product contains organically bound halogens and can contribute to the AOX value in waste water.

**13. DISPOSAL CONSIDERATIONS****13.1 Waste treatment methods**

Do not allow to enter drains or watercourses.

Dispose of according to all federal, state and local applicable regulations.

**Methods of disposal** : The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

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## 13. DISPOSAL CONSIDERATIONS

- European waste catalogue (EWC)** : The European Waste Catalogue classification of this product, when disposed of as waste, is: 08 03 12\* waste ink containing dangerous substances. If this product is mixed with other wastes, this code may no longer apply. If mixed with other wastes, the appropriate code should be assigned. For further information, contact your local waste authority.
- Hazardous waste** : Yes.

## 14. TRANSPORT INFORMATION

**Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

### International transport regulations

This product is not regulated for carriage according to ADR/RID, IMDG, ICAO/IATA.

- 14.1 UN number** : Not applicable.
- 14.2 Proper shipping name** : Not applicable.
- 14.3 Transport hazard class(es)** : Not applicable.
- 14.4 Packing group** : Not applicable.
- 14.5 Environmental hazards** : Not applicable.
- 14.6 Special precautions for user** : Not applicable.

### 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

### Other Special Considerations about the Product:

Materials such as cleaning rags, paper wipes etc, which are contaminated with coldset ink need not be assigned to ADR class 4.2, provided they are transported in containers of less than 450 liters capacity (ADR 2.2.42.1.5(c), Note 2). This exemption does not apply if contaminated materials are mixed with other wastes.

## 15. REGULATORY INFORMATION

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

- EU regulations** : The product is classified as dangerous according to Directive 1999/45/EC and its amendments.  
See sections 2 and 3 for details.
- VOC content** : < 1 %
- Europe inventory** : All components are listed or exempted.
- Industrial use** : The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

### 15.2 Chemical Safety Assessment

This product contains substances for which Chemical Safety Assessments are still required.

## 16. OTHER INFORMATION

CEPE MSDS Code : 8

### **Full text of R-phrases referred to in sections 2 and 3 - Europe**

- R22- Harmful if swallowed.
- R38- Irritating to skin.
- R36/38- Irritating to eyes and skin.
- R43- May cause sensitization by skin contact.
- R50- Very toxic to aquatic organisms.
- R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**The information in this Safety Data Sheet is required pursuant to Annex II to Regulation (EC) No 1907/2006.**  
: 08.02.2013.

**Date of issue/Date of revision** : 08.02.2013.

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## **16. OTHER INFORMATION**

Date of issue/Date of  
revision

Version : 6.01

Indicates information that has changed from previously issued version.

### Notice to reader

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.