

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 09.07.2012

Revision: 05.07.2012

1 Identification of substance:

- **Product details:**
- **Trade name:** Spectrumark CM01D Metal Black
- **Article number:** ...
- **Application of the substance / the preparation** Dyestuff/Colouring agent
- **Manufacturer/Supplier:**
 ==> Hersteller:
 Spectrumark LLC
 3701 Commercial Ave., Suite 15/16
 Northbrook, IL 60062 (UNITED STATES)

- ==> Lieferant
 modico GmbH & Co. KG
 Landsberger Str. 18
 82256 Fürstfeldbruck (GERMANY)
 Tel.: +49 (8141) 88890-0
 Fax: +49 (8141) 88890-25
 info@spectrumark.eu
 www.spectrumark.eu
- **Informing department:** Product safety department.
- **Emergency information:**
 (Emergency Information - international 24 h)
 GIFTNOTRUF BERLN
 D-13437 Berlin
 Tel.: ++49 (0)30 / 19 240

2 Hazards identification

- **Hazard designation:**
 Xi Irritant
 N Dangerous for the environment
- **Information pertaining to particular dangers for man 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 36/37/38 Irritating to eyes, respiratory system and skin.
 R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- **Classification system**
 The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.
- **GHS label elements**
 Exclamation mark **Warning**
 3.1/4 - Harmful if swallowed.
 3.1/4 - Harmful if inhaled.
 3.2/2 - Causes skin irritation.
 3.3/2A - Causes serious eye irritation.
 3.8/3 - May cause respiratory irritation.

 4.1/3 - Harmful to aquatic life with long lasting effects.
- **Prevention:**
 Avoid breathing dust/fume/gas/mist/vapours/spray.
 Wash thoroughly after handling.
 Do not eat, drink or smoke when using this product.
 Use only outdoors or in a well-ventilated area.
 Avoid release to the environment.
 Wear protective gloves/protective clothing/eye protection/face protection.
- **Response:**
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
 IF ON SKIN: Wash with plenty of soap and water.
 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

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IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Call a POISON CENTER or doctor/physician if you feel unwell.

Specific treatment (see label).

Rinse mouth.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Take off contaminated clothing and wash before reuse.

· **Storage:**

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

· **Disposal:**

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

3 Composition/information on ingredients

· **Chemical characterization**

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

· **Dangerous components:**

CAS: 7543-51-3 EINECS: 231-944-3	Zink Phosphat Tetrahydrat ☒ Xi; R 36/37/38 Warning: ⚠ 3.2/2, 3.3/2A, 3.8/3	25-50%
CAS: 12006-98-3 EINECS: 234-492-5	Molybdenum boride ☒ Xi; R 36 Warning: ⚠ 3.3/2A	25-50%
CAS: 1312-76-1 EINECS: 215-199-1	Kaliumsilikat ☒ Xi; R 36/37/38 Warning: ⚠ 3.2/2, 3.3/2A, 3.8/3	10-25%
CAS: 1313-13-9 EINECS: 215-202-6	manganese dioxide, ore of Chapter 26 ☒ Xn; R 20/22 Warning: ⚠ 2.14/2; ⚠ 3.1.O/4, 3.1.I/4	< 2.5%
CAS: 1317-38-0 EINECS: 215-269-1	copper oxide ☒ Xn, ☒ N; R 22-50/53 Warning: ⚠ 4.1.C/1; ⚠ 3.1.O/4	< 2.5%

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

4 First aid measures

· **After inhalation** In case of unconsciousness bring patient into stable side position for transport.

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

· **After eye contact**

Remove contact lenses.

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

· **After swallowing** In case of persistent symptoms consult doctor.

· **Information for doctor** Treat symptomatic.

5 Fire fighting measures

· **Suitable extinguishing agents**

CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

· **Special hazards caused by the material, its products of combustion or flue gases:**

Formation of toxic gases is possible during heating or in case of fire.

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- **Protective equipment:** Wear self-contained breathing apparatus.

6 Accidental release measures

- **Person-related safety precautions:** Ensure adequate ventilation
- **Measures for environmental protection:**
 - Do not allow to enter drainage system, surface or ground water.
 - Inform respective authorities in case product reaches water or sewage system.
- **Measures for cleaning/collecting:** Ensure adequate ventilation.

7 Handling and storage

- **Handling**
- **Information for safe handling:**
 - Keep containers tightly sealed.
 - Prevent formation of dust.
- **Information about protection against explosions and fires:**
 - Dust can combine with air to form an explosive mixture.
- **Storage**
- **Requirements to be met by storerooms and containers:**
 - Keep container dry and tightly closed in a cool well ventilated area.
- **Information about storage in one common storage facility:** Store away from oxidizing agents.
- **Further information about storage conditions:**
 - Store only in the original containers in a dry well ventilated place. Protect from heat and direct sunlight.
 - Follow the advices on the product label. Keep away from ignition sources
 - Keep container tightly sealed.
- **Recommended storage temperature:** (5°C up to < 30°C)
- **Storage class** N.a.
- **Class according to regulation on inflammable liquids:** Void

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

- **Components with critical values that require monitoring at the workplace:**

1313-13-9 manganese dioxide, ore of Chapter 26

WEL	Long-term value: 5 mg/m ³ as Mn
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- **Additional Occupational Exposure Limit Values for possible hazards during processing:**
 - The general exposure limit value of 6 mg/m³ (OEL) for processing of dusty materials has to be observed.
- **Additional information:** The lists that were valid during the compilation were used as basis.
- **Personal protective equipment**
- **General protective and hygienic measures**
 - Keep away from foodstuffs, beverages and food.
 - Instantly remove any soiled and impregnated garments.
 - Wash hands during breaks and at the end of the work.
 - Avoid contact with the eyes and skin.
- **Breathing equipment:**
 - Not necessary if room is well-ventilated.
 - In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use breathing apparatus that is independent of circulating air.
- **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.

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- 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.
 - **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 safety glasses.
 - **Body protection:** Protective work clothing.

9 Physical and chemical properties:

· General Information

Form:	Powder
Colour:	Dark grey
Smell:	Not characteristic

· Change in condition

Melting point/Melting range: Not determined

Boiling point/Boiling range: Not determined

· **Flash point:** Not applicable

· **Ignition temperature:** Not determined.

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

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

Product is not explosive.

· **Density at 20°C**

1.5-1.9 g/cm³

· **Solubility in / Miscibility with**

Water: Insoluble

10 Stability and reactivity

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

· **Dangerous reactions** No dangerous reactions known

· **Dangerous products of composition:**

In case of fire decomposition products are carbon monoxide, carbon dioxide, smoke, nitrogen oxids and traces of incompletely burned hydrocarbons.

11 Toxicological information

· **Acute toxicity:**

· **Primary irritant effect:**

· **on the skin:** Irritant for skin and mucous membranes.

· **on the eye:** Irritant effect.

· **Sensitization:** No sensitizing effect known.

· **Additional toxicological information:**

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

Irritant

GB

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12 Ecological information:

BOD: No specific information is available.
 COD: No specific information is available.

- **Information about elimination (persistence and degradability):**
- **Degree of elimination:** No specific information is available.
- **Behaviour in environmental systems:**
- **Components:** No specific information is available.
- **Mobility and bioaccumulation potential:** No specific information is available.
- **Other information ...**
- **Ecotoxic effects:**
- **Acquatic toxicity:**

This product is a preparation which according to EC legislation, does not as yet require environmental classification. It does not contain constituents which are hazardous to aquatic organism.

Fish LC50 (96hr) : Not determined.
 Daphnia EC50 (48hr) : Not determined.
 Algal IC50 (72hr) : Not determined.

- **Remark:** Toxic for fish
- **Toxicity to Terrestrial Organisms**
 No information is available on the impact of this product on the terrestrial eco-system; but it is unlikely to be found a significant concentration in this environmental compartment.
- **Additional ecological information:**
- **General notes:**
 Also poisonous for fish and plankton in water bodies.
 Toxic for aquatic organisms

13 Disposal considerations

- **Product:**
- **Recommendation**
 Disposal must be made according to official regulations.
 Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **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 Class:** -
- **Maritime transport IMDG/GGVSea:**
- **IMDG/GGVSea Class:** -
- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** -
- **UN "Model Regulation":** -
- **Transport/Additional information:** Not dangerous according to the above specifications.

15 Regulatory information

- **Designation according to EC guidelines:**
 Observe the normal safety regulations when handling chemicals
 The product has been classified and labelled in accordance with EC Directives / Ordinance on Hazardous Materials (GefStoffV)

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- **Code letter and hazard designation of product:**

Xi Irritant
N Dangerous for the environment

- **Risk phrases:**

36/37/38 Irritating to eyes, respiratory system and skin.
51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

- **Safety phrases:**

2 Keep out of the reach of children.
22 Do not breathe dust.
25 Avoid contact with eyes.
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.
36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

- **National regulations**

- **Technical instructions (air):**

Class	Share in %
III	3.1

16 Other information:

This MSDS (Material Safety Data Sheet) sheet was prepared in compliance with Commission Directive 1907/2006/EEC as well as their relevant amendements, on the approximation of laws, regulations and administrative provisions relative to the classification, packaging and labelling of dangerous substances and preparations. All informations and instructions provided in this MSDS are based on the current state scientific and technical knowledge at the date indicated on the present MSDS.

It is the responsibility of person in receipt of this MSDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. If the recipient subsequently produces a formulation containing this product, it is the recipients sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS in compliance with the Commission Directive 1907/2006/EEC.

All MSDS older than the current version loose the validity and are replaced by this latest version.

- **Relevant R-phrases**

20/22 Harmful by inhalation and if swallowed.
22 Harmful if swallowed.
36 Irritating to eyes.
36/37/38 Irritating to eyes, respiratory system and skin.
50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

- **Department issuing data specification sheet:** Product Safety Department.

- **Contact:** Product Steward.

- **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: Reglement internationale 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
VbF: Verordnung über brennbare Flüssigkeiten, Österreich (Ordinance on the storage of combustible liquids, Austria)