

## Material Safety Data Sheet

| <b>1.</b>          | <p><b><u>Identification of substance and of the company</u></b></p> <p><b>Trade Name: Iron Oxide Black</b></p> <p>QINGDAO SANHUAN COLORCHEM CO.,LTD<br/>                 Add: Room 2301, No.4 Building, Penglinanhua Business Plaza, No.12 Liaoyang East Road, Qingdao, China<br/>                 Tel.: +86 532 88978177/88978188</p>  |                     |                      |                     |             |               |     |     |                     |  |  |              |                      |
|--------------------|---|---------------------|----------------------|---------------------|-------------|---------------|-----|-----|---------------------|--|--|--------------|----------------------|
| <b>2.</b>          | <p><b><u>Composition/Data on components</u></b></p> <p><b>Chemical characterization:</b><br/>                 Synthetic iron oxide Fe<sub>3</sub>O<sub>4</sub>, C. I. Pigment BLACK 11, 1317-61-9<br/> <b>CAS No:</b>1317-61-9<br/> <b>Eines No:</b> 215-277-5<br/> <b>Dangerous :</b> none</p>   |                     |                      |                     |             |               |     |     |                     |  |  |              |                      |
| <b>3.</b>          | <p><b><u>Hazards identification</u></b></p> <p>No hazardous effects known.<br/>                 The product is not a substance subject to mandatory marking in accordance with the EEC Directive 67/584/EEC<br/>                 Or amendments.</p>   |                     |                      |                     |             |               |     |     |                     |  |  |              |                      |
| <b>4.</b>          | <p><b><u>First Aid measures</u></b></p> <p><b>After inhaling:</b> Supply fresh air<br/> <b>After eye contact:</b> Flush with plenty of pressure water for 15 mins., occasionally raising eye lids.<br/> <b>After skin contact:</b> Wash skin with mild soap and water</p>   |                     |                      |                     |             |               |     |     |                     |  |  |              |                      |
| <b>5.</b>          | <p><b><u>Fire fighting measures</u></b></p> <p><b>Suitable extinguishing media:</b> no restriction<br/> <b>Special hazards caused by the material, its combustion products or resultant gases:</b> none<br/> <b>Special personal protection equipment:</b> none</p>   |                     |                      |                     |             |               |     |     |                     |  |  |              |                      |
| <b>6.</b>          | <p><b><u>Accidental release</u></b></p> <p><b>Environmental protection conduct:</b> Do not sweep or wash into public stretches of water, sewers or sites of unknown discharge paths.<br/> <b>After spillage/leakage/gas leakage:</b><br/>                 Clean up immediately with wetting or absorbent material avoiding dusting</p>  |                     |                      |                     |             |               |     |     |                     |  |  |              |                      |
| <b>7.</b>          | <p><b><u>Handling and storage</u></b></p> <p><b>Handling:</b><br/>                 Usual precautions for nuisance dust should be observed.<br/> <b>Protection against fire and explosion:</b> The product is non-flammable<br/> <b>Storage:</b> Store in roofed places at room temperature. Keep containers tightly sealed.<br/> <b>Flammability Class:</b> not applicable</p>  |                     |                      |                     |             |               |     |     |                     |  |  |              |                      |
| <b>8.</b>          | <p><b><u>Exposure controls/personal protection</u></b></p> <p><b>Additional notes for design of plant equipment:</b><br/>                 No further details, see sec. 7<br/> <b>Components with workplace-related limits to be monitored:</b></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><u>Designation</u></th> <th style="text-align: center;"><u>%</u></th> <th style="text-align: left;"><u>Type of data</u></th> <th style="text-align: left;"><u>Unit</u></th> </tr> </thead> <tbody> <tr> <td>Nuisance dust</td> <td style="text-align: center;">100</td> <td>MAK</td> <td>6 mg/m<sup>3</sup></td> </tr> <tr> <td></td> <td></td> <td>TLV/TWA(USA)</td> <td>10 mg/m<sup>3</sup></td> </tr> </tbody> </table> <p><b>Personal protection equipment:</b><br/> <b>Respiratory protection:</b><br/>                 An appropriate dust filter has to be used if a breathable dust is liberated.</p> | <u>Designation</u>  | <u>%</u>             | <u>Type of data</u> | <u>Unit</u> | Nuisance dust | 100 | MAK | 6 mg/m <sup>3</sup> |  |  | TLV/TWA(USA) | 10 mg/m <sup>3</sup> |
| <u>Designation</u> | <u>%</u>  | <u>Type of data</u> | <u>Unit</u>          |                     |             |               |     |     |                     |  |  |              |                      |
| Nuisance dust      | 100   | MAK                 | 6 mg/m <sup>3</sup>  |                     |             |               |     |     |                     |  |  |              |                      |
|                    |   | TLV/TWA(USA)        | 10 mg/m <sup>3</sup> |                     |             |               |     |     |                     |  |  |              |                      |

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|  |                               |                          |                       |
|--|-------------------------------|--------------------------|-----------------------|
| <b>9. <u>Physical and chemical properties</u></b>  |                               |                          |                       |
| form:  | powder                        |                          |                       |
| colour:  | red                           |                          |                       |
| odour:   | odourless                     |                          |                       |
|  |                               | <b><u>Value/Area</u></b> | <b><u>Unit</u></b>    |
| <b>Change in physical state</b>  |                               |                          | <b><u>Method</u></b>  |
| <b>Thermal Decomposition:</b>  |                               | n.a.                     | °C                    |
| <b>Flash point:</b>  | not flammable                 |                          | Lit.                  |
| <b>Flammable properties:</b> The product is not flammable under standardized conditions.   |                               |                          |                       |
| <b>Explosion risks:</b> The product is not explosive   |                               |                          |                       |
| <b>Vapour pressure:</b>  |                               | n.a.                     | mbar                  |
| <b>Density:</b>  | (200C)                        | 4.6                      | g/cm <sup>3</sup>     |
| <b>Solubility in water:</b>  | (200C)                        | <0.5                     | %                     |
| <b>pH-Value:</b>   | (at 100 g/l H <sub>2</sub> O) | (200C)                   | ca.5-8                |
|  |                               |                          | DIN/ISO 787 part 10 B |
|  |                               |                          | DIN/ISO 787 part 3    |
|  |                               |                          | DIN/ISO 787 part 9    |
| <b>10. <u>Stability and reactivity</u></b>   |                               |                          |                       |
| <b>Hazardous decomposition products</b>  |                               |                          |                       |
| No decomposition at proper storage and application conditions  |                               |                          |                       |
| <b>11. <u>Toxicological Information</u></b>  |                               |                          |                       |
| Because of experiences with the product mentioned, there are no recognizable hazards for human beings, If it is correctly used and applied.                                |                               |                          |                       |
| <b>12. <u>Ecological information</u></b>   |                               |                          |                       |
| Avoid infiltration into waster drainings or soil.  |                               |                          |                       |
| <b>13. <u>Disposal considerations</u></b>  |                               |                          |                       |
| <b>Product:</b>  |                               |                          |                       |
| Dispose in accordance with federal, state and local regulations.   |                               |                          |                       |
| <b>Waste Code No.:</b>   |                               |                          |                       |
| Check re-use as alternative.   |                               |                          |                       |
| <b>Contaminated packages and containers:</b>   |                               |                          |                       |
| Emptied, but contaminated packages and containers may be recycled.   |                               |                          |                       |
| <b>Waste Code No.:</b> 18715 (Germany)   |                               |                          |                       |
| <b>14. <u>Transport information</u></b>  |                               |                          |                       |
| <b>International:</b>  |                               |                          |                       |
| <b>Land transport:</b>   | ADR/RID/GGVS/GGVE:            | Not Regulated            |                       |
| <b>Sea transport:</b>  | IMDG/GGV See UN-No.:          | Not Regulated            |                       |
| <b>Air transport:</b>  | ICAO/IATA UN/ID-No.:          | Not Regulated            |                       |
| <b>U.S.</b>  | D.O.T.CLASSIFICATION:         | Not Regulated            |                       |
| <b>CANADA</b>  | Transport of dangerous goods: | Not Regulated            |                       |
| <b>DOT Shipping Name:</b> None   |                               |                          |                       |
| Technical Shipping Name:Inorganic Oxide  |                               |                          |                       |
| DOT Hazardous Classification: Non-Regulated. This product is not classed as a dangerous substance under the Classification, Packaging and Labeling of Dangerous Goods Act. |                               |                          |                       |
| <b>DOT Hazard Class:</b> Non-Regulated.  |                               |                          |                       |
| <b>DOT Identification Number:</b> None   |                               |                          |                       |
| <b>DOT Labels required:</b> None   |                               |                          |                       |
| <b>DOT Placards required:</b> None. No specific transportation precautions required.   |                               |                          |                       |
| <b>UN Class:</b> None.   |                               |                          |                       |
| <b>15. <u>Regulatory information</u></b>   |                               |                          |                       |
| The product is not a substance subject to mandatory marking in accordance with the EEC Directive 67/548/EEC or amendments.   |                               |                          |                       |
| <b>Water risk class:</b> WGK 0 (Self-assessment, acc. to §§7a 19,19a-1 of German Water Utilization Act (WHG))  |                               |                          |                       |
| <b>16. <u>Further information:</u></b>   |                               |                          |                       |
| Vertical markings at left margin denote alterations of previous issue.   |                               |                          |                       |
| The information contained herein is based on the present state of our knowledge, but without liability.  |                               |                          |                       |
| <b>Department issuing this data sheet:</b> Product safety department   |                               |                          |                       |