

## Activated Carbon Material Safety Data Sheet

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<b>1. Identification of the Substance/Preparation and company/Undertaking</b>									
<b>1.1 Product Data/Trade Name</b>	STEAM ACTIVATED CARBON  Grade: All Filtracarb® "CC", "EX" "SK" and "WP" Grades  Activated Carbon is a black odourless non-volatile infusible substance in granular, extruded or powder form. It is used as an adsorbent in a wide range of gaseous and liquid applications.								
<b>1.2 Producer/Supplier</b>  <b>Department in Charge</b> <b>Telephone</b> <b>Facsimile</b>	CPL CARBON LINK STERLING HOUSE 2 PARK STREET WIGAN WN3 5HE  Sales Department + 44 (0) 1942 824240 + 44 (0) 1942 824133								
<b>2. Composition/Information on Ingredients</b>									
<b>2.1 Chemical characterisation/Chemical description</b>	PREPARATION CARBONACEOUS ADSORPTION MEDIUM  <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Component</th> <th style="text-align: left;">NIOSH NO</th> <th style="text-align: left;">CAS NO</th> <th style="text-align: left;">%by weight</th> </tr> </thead> <tbody> <tr> <td>Activated Carbon</td> <td>FF5250 00</td> <td>7440-44-0</td> <td>100</td> </tr> </tbody> </table> <p style="text-align: center;"><b>UN 1362 (Amendment 28)</b></p>	Component	NIOSH NO	CAS NO	%by weight	Activated Carbon	FF5250 00	7440-44-0	100
Component	NIOSH NO	CAS NO	%by weight						
Activated Carbon	FF5250 00	7440-44-0	100						
<b>2.2 Hazardous Components</b>	No hazardous components								
<b>3. Hazards Identification</b>									
	<p><b>Special Hazards</b></p> <p>Activated carbon (especially when wet) can deplete oxygen from air in enclosed spaces and dangerously low levels of oxygen may result. When workers enter a vessel containing activated carbon, follow procedures for potentially low oxygen. Workers should also take appropriate precautions when dealing with spent (used) activated carbons which may exhibit properties of adsorbed materials.</p> <p>Steam Activated carbon is a mild reducing agent and reacts with strong oxidising agents such as ozone which can promote its combustion.</p> <p>At high temperatures (above 750°Celsius) activated carbon can react with water producing Hydrogen and Carbon monoxide, which are flammable, and explosive gasses. Hence water should only be used as a copious spray for fire-fighting in order to ensure rapid cooling of the material.</p>								

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	<p><b>Occupational Exposure Standard</b></p> <p>10 mg/Nm<sup>3</sup> 8h time weight average; there is no OES for activated carbon; the given value is applicable as a nuisance dust limit.</p>
<p><b>4. First Aid Measures</b></p>	<p><b>EYES</b> Carbon dust can cause irritation in contact with the eyes. Flush with copious quantities of water without delay.</p> <p><b>SKIN</b> Due to its dehydrating property, activated carbon can cause slight irritation in contact with the skin in certain cases. Washing with soap and water is recommended to relieve the condition.</p> <p><b>INGESTION</b> Ingested activated carbon may irritate the digestive tracts. As no harmful effects are anticipated, vomiting should not be induced.</p> <p><b>INHALATION</b> Inhalation of activated carbon dust can cause irritation of the respiratory tracts and may produce coughing and sneezing. No harmful effects are anticipated but if an acute problem develops, move the affected person to a clean area, administer oxygen if required and seek expert medical attention.</p>

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<b>5. Fire Fighting Measures</b>	
<b>5.1 Suitable fire fighting media</b>	Powder, foam, sand, water
<b>5.2 Unsuitable fire fighting media</b>	None
<b>5.3 Particular hazards arising from the material, its combustion products or gases generated</b>	As products of combustion, mainly CO and CO <sub>2</sub> result.
<b>5.4 Special Safety Equipment</b>	In enclosed spaced, breathing apparatus with external air supply may be necessary.
<b>5.5 Additional Measure</b>	Vessel should be cooled using water spray.
<b>6. Accidental Release Measures</b>	Spilt material may be recovered mechanically. See section 8 for personal protection and section 13 for disposal consideration.
<b>7. Handling and Storage</b>	
<b>7.1 Handling - Hints to avoid fires and explosions</b>	Keep away from ignition hazards
<b>7.2 Storage</b>	Do not store in the proximity of flammable substances, oxidising agents, unsaturated oil or metal salts.  Store dry

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<b>8. Exposure Controls/ Personal Protection</b>	<p>Wet activated carbon can react with oxygen to sufficient extent to make the atmosphere dangerous or human life. Entry to enclosed spaces containing activated carbon must only be allowed when adequate precautions have been taken to ensure ventilation of the space with fresh air and for the atmosphere to be monitored continuously to ensure adequate oxygen content for respiration. A suitable safe system of work should be employed in full accordance with Local, State or Federal Regulations.</p> <p style="text-align: center;"><b>PROTECTIVE MEASURES</b></p> <p><b>EYES</b>                      Approved safety glasses offering full eye protection should be worn as a minimum. Where a dusty atmosphere can be anticipated, dust tight goggles should be worn.</p> <p><b>RESPIRATION</b>            A dust mask meeting EN or NIOSH regulations should be worn whilst handling this product.</p> <p><b>CLOTHING</b>                Where product is continuously or frequently handled, gloves should be worn and /or a good barrier cream used before starting work. Overalls should also be worn.</p>
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<b>9. Physical and Chemical Properties</b>	
<b>9.1 Appearance</b> Form Colour Smell	SOLID, CYLINDRICAL AND POWDER BLACK ODOURLESS
<b>9.2 Safety relevant data</b> Bulk density Possibility of self-ignition Temperature of ignition Explosion hazard pH Value Solubility  UN Recommendations on the Transport of Dangerous Goods, Manual of Testing Criteria (33.3.1.3.3.)	240 to 600 Kg/m <sup>3</sup> None >380°C None N.a. Insoluble in water and organic solvents  No dangerous self heating when tested in a 100 mm cube at 140°C

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<b>10. Stability and Reactivity</b>	
<b>10.1 Conditions to be avoided</b>	Stable under normal conditions
<b>Decomposition products</b>	Carbon dioxide and carbon monoxide
<b>11. Toxicological Information</b>	
<b>Inhalation</b>	This product is not regarded as a harmful product
<b>Ingestion</b>	A once intake of 50 grams gives no side-effects
<b>Eyes</b>	Irritation is possible, no side-effects known
<b>Skin Contact</b>	No detrimental effects are known. Not taken up by the skin
<b>LD<sub>50</sub></b>	Not Registered
<b>12. Ecological Information</b>	
<b>BOD</b>	1-2 mg O <sub>2</sub> / gram of carbon
<b>COD</b>	2000 mg O <sub>2</sub> / gram of carbon
<b>Biodegradability</b>	Non biodegradable
<b>Fish Toxicity</b>	Non toxic. LD <sub>50</sub> not applicable; all fish survive during test period of 96 hours in 100 g/l suspension
<b>13. Disposal Considerations</b>	
Vacuum up spilled product and flush remaining product with plenty of water	
<b>14. Transport Information</b>	
<b>Land (rail/road) RID/ADR</b>	Not Classified
<b>Inland Waterway Transport (ADNR)</b>	Not Classified
<b>Sea (IMDG)</b>	Not Classified
<b>Air (ICAO/IATA)</b>	Not Classified
<b>15. Regulatory Information</b>	

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<b>Labelling according to guideline 67/548/EC and 1999/45/EC</b>  <b>Danger symbols</b>  <b>R(isk) sentences</b>  <b>S(afety) sentences</b>	Not Registered
<b>16. Other Information</b>  <b>This product is not a dangerous product or substance</b>	Guideline 67/548/EC and 1999/45/EC  THE DATA ABOVE REFLECTS OUR PRESENT KNOWLEDGE. IT DESCRIBES OUR PRODUCTS WITH RESPECT TO SAFETY REGULATIONS, A WARRANTY OF CERTAIN CHARACTERISTICS IS NOT GIVEN IN ANY WAY

Material safety data sheet according to guideline 2001/58/EC