

MATERIAL SAFETY DATA SHEET

PRODUCT NAME :ACTIVATED CHARCOAL AC35

1. Product and Company Identification

Product name: AC35 activated charcoal
Synonyms: Acticarbon AC35
Item Numbers: H122-05-001, H122-05-002
Note: Activated charcoal is also used in odour elements
A223-04-077, A223-04-079, A223-04-081

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2. Hazards Identification

EMERGENCY OVERVIEW

This material as supplied, when properly handled according to good working and hygienic practices is not dangerous to human health and the environment.

However, the material is primarily used as a gas/vapour sorbent. Care should be taken when handling material that has been used in processes involving corrosive, toxic, flammable, explosive or pyrophoric gases/vapours. Precautions must take account of the hazards associated with the process materials.

For short and long term exposure effects, refer to Section 11 Toxicological Information.

Eye Effects: Activated charcoal dust may cause temporary discomfort.
Skin Effects: None.
Ingestion/Oral Effects: None.
Inhalation Effects: None.

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MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known.

NFPA Hazard codes		HMIS Hazard codes		Rating System
Health	0	Health	0	0 = No Hazard
Flammability	0	Flammability	0	1 = Slight Hazard
Instability	0	Reactivity	0	2 = Moderate Hazard
				3 = Serious Hazard
				4 = Severe Hazard

3. Composition/Information on Ingredients

Ingredient	% Weight	CAS No	Hazard class*	Risk phrase*
Activated charcoal	100	Not allocated	Not applicable	Not applicable

*Hazard class & Risk phrase. These columns are only completed for ingredients which are classified as hazardous under EU Directive (67/548/EEC, as amended) and are present in sufficient concentration to make the overall substance hazardous. In all other situations, the column will be completed as "Not applicable".

4. First Aid Measures

Eyes:	If dust enters the eye, flush with plenty of water. If irritation persists, seek medical attention.
Skin:	Not applicable.
Ingestion/Oral:	Not applicable.
Inhalation:	After dust inhalation, remove to fresh air. If breathing problems occur, a qualified individual should administer oxygen or artificial respiration as indicated. Seek immediate medical attention.
Other Information:	If the material is contaminated with process residue, seek medical attention appropriate to the materials involved in the process.

5. Firefighting Measures

Extinguishing Media:	Foam. Do not use water in closed areas.
Fire and Explosion Hazard:	Material as supplied burns slowly without flame. Carbon oxides given off during decomposition.
Special Protective Equipment for Firefighters:	In confined spaces, firefighters should wear a Self-Contained Breathing Apparatus (SCBA) which meets appropriate standards operated in positive pressure mode, and full turnout gear.

For Flammability Properties - refer to Section 9.

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6. Accidental Release Measures

Sweep up spilt material. If there is significant dust content, wear respiratory protection and dampen the spilt material to avoid raising dust. Sufficient concentrations of airborne dust can be flammable or explosive.

7. Handling and Storage

Handling: Avoid raising dust.

Storage: Store in clean, dry, air tight containers.

Note: The above handling information applies to the material as supplied. If the material has been in contact with toxic or corrosive process chemicals, it must be handled in accordance with the handling requirements applicable to the process chemicals.

8. Exposure Controls/Personal Protection

Exposure Limits:

Ingredient	ACGIH - TLV	OSHA - PEL	Occupational Exposure Limits EH40 (UK)
Activated charcoal	2 mg/m ³ (as graphite)	15 mppcf (2.5 mg/m ³) (as graphite)	10 mg/m ³ (total dust) TWA 5 mg/m ³ (respirable dust)

Personal Protection:

- Engineering Measures: Provide eyewash facilities and safety showers. Ensure adequate ventilation in areas where the product is used, to keep airborne dust low.
- Respiratory Protection: Wear suitable respiratory protection whenever workplace conditions warrant a respirator's use.
- Hand/Skin Protection: Wear appropriate protective gloves to prevent contact with dust.
- Eye/Face Protection: Wear appropriate safety goggles or face shield.
- Hygiene Measures: Practice good workplace hygiene. Do not eat, drink or smoke while using the product. Wash hands after using the product and before eating, drinking or smoking. Immediately change clothing that is contaminated with dust.
- Other/General Protection: None.

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9. Physical and Chemical Properties

Appearance and Odour	Black odourless solid	Boiling Point	Not applicable	°C/°F
pH (as supplied)	5-8	Freezing Point	No data available	°C/°F
Solubility in Water	Insoluble	Auto Ignition	>400/752	°C/°F
Volatile Content by Volume	None. Material does absorb gases/ vapours which may subsequently be released	Flash Point	No data available	°C/°F
Specific Gravity	0.45-0.48 @ 20°C/68°F			
Vapour Pressure (mbar)	No data available	Vapour Pressure (Torr)	No data available	

10. Stability and Reactivity

Stability:	Stable.
Material/Conditions to Avoid:	Strong oxidising agents, air, metals, halogens, and unsaturated oils.
Hazardous Decomposition:	Carbon dioxide, carbon monoxide.
Hazardous Polymerisation:	Will not occur.

11. Toxicological Information

For a comprehensive description of the various toxicological (health) effects which may arise if the user comes into contact with the substance or preparation, refer to Section 2 Hazards Identification.

Animal data:

LD50 value:	No data available.
LC50 value:	No data available.

Carcinogenicity:

No known carcinogenic hazards.

12. Ecological Information

Material is insoluble in water. No ecological assessment available.

13. Disposal Considerations

Dispose of according to national and local regulations. The material as supplied is not classified as hazardous, dangerous or toxic. Approved landfill sites can be used.

Note that used material which is contaminated with process materials may have different hazards/properties from the material as supplied. Dispose of used material in accordance with the nature of the contamination.

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14. Transport Information

This product is not classified as dangerous under transport regulations.

PARAMETER	EUROPEAN	CANADIAN TDG	UNITED STATES DOT
Proper Shipping Name	Not applicable	Not applicable	Not applicable
Hazard Class	Not applicable	Not applicable	Not applicable
Identification Number	Not applicable	Not applicable	Not applicable
Shipping Label	Not applicable	Not applicable	Not applicable

15. Regulatory Information

European Regulatory Information

This product has been classified in accordance with the Dangerous Substances Directive (67/548/EEC, as amended) and the Preparations Directive (88/379/EEC, as amended), implemented in the UK as the Chemical (Hazard Information and Packing) Regulations 1994 (CHIP, as amended).

Classified as dangerous to supply: No.

Risk Phrases: Not applicable.

Safety Phrases: Not applicable.

Symbols: None.

United States Regulatory Information

All materials contained in this product are on the US Toxic Substances Control Act (TSCA).

SARA TITLE III - SECTION 313 SUPPLIER NOTIFICATION:

This product does not contain toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986 and 40 CFR Part 372.

California Proposition 65: This product does not contain chemicals known to the State of California to cause cancer or reproductive toxicity.

Canadian Regulatory Information

WHMIS Classification: Not classified.

All ingredients in this product are included in the Canadian DSL.

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16. Other Information

This MSDS is compiled in accordance with ANSI Z400.1 and Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

Sources of information for this data sheet:

- Attenborough and Peacock Safety Data Sheet for activated carbon.

Glossary:

ACGIH - American Conference of Governmental Industrial Hygienists; **ANSI** - American National Standards Institute; **Canadian TDG** - Canadian Transportation of Dangerous Goods; **CAS** - Chemical Abstracts Service; **Chemtrec** - Chemical Transportation Emergency Center (US); **CHIP** - Chemical (Hazard Information and Packing); **DSL** - Domestic Substances List; **EEC** - European Economic Community; **EH40 (UK)** - HSE Guidance Note EH40 Occupational Exposure Limits; **EPCRA** - Emergency Planning and Community Right-to-Know Act; **EU** - European Union; **HMIS** - Hazardous Material Information Service; **LC** - Lethal Concentration; **LD** - Lethal Dose; **NFPA** - National Fire Protection Association; **OSHA** - Occupational Safety and Health Administration, US Department of Labour; **PEL** - Permissible Exposure Limit; **SARA (Title III)** - Superfund Amendments and Reauthorization Act; **SARA 313** - Superfund Amendments and Reauthorization Act, Section 313; **SCBA** - Self-Contained Breathing Apparatus; **TLV** - Threshold Limit Value; **TSCA** - Toxic Substances Control Act Public Law 94-469; **TWA** - Time-Weighted Average; **US DOT** - US Department of Transportation; **WHMIS** - Workplace Hazardous Materials Information System.

Revisions:

Nov. 2008 - Data Sheet updated to reflect the latest supplier safety information.

Although the information and recommendations in this data sheet are to the best of our knowledge correct, it is recommended that you make your own determination of the material's suitability for your purpose before you use it. The information contained in this data sheet has been reproduced from the manufacturers' data; the accuracy of this information is the responsibility of the manufacturer. Edwards accept no responsibility for damage of any nature resulting from the use of, or the reliance upon, this data sheet.