

Safety Data Sheet

Material Name: RSE SR (GAC)

ID: RSE-014

*** Section 1 - Chemical Product and Company Identification ***

Chemical Family: Carbon
Formula: Mixture

Chemical Name: **RSE SR-GAC Impregnated Coal Base Activated Carbon**
Product Use: Various uses

Manufacturer Information

RSE Incorporated
51529 Birch Street
New Baltimore, MI 48047

Phone: (586) 725-0192

Emergency #: (800) 424-9300 CHEMTREC

NOTE: CHEMTREC emergency telephone number is to be used in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals. All non-emergency questions should be directed to customer service.

*** Section 2 - Composition / Information on Ingredients ***

CAS #	Component	Percent
7440-44-0	Activated Carbon (Coconut Shell)	90-99
1310-58-3	Potassium Hydroxide	1-10

Component Information/Information on Non-Hazardous Components

This product is considered non-hazardous by the criteria specified in 29 CFR 1910.1200 (Hazard Communication).

*** Section 3 - Hazards Identification ***

Emergency Overview

Product is a black granular material. May be irritating to eyes, skin and respiratory tract. High airborne dust concentrations may pose an explosion hazard. Wet activated carbon present in a confined space may produce an oxygen deficient atmosphere and presents a risk of asphyxiation to persons entering those areas.

Potential Health Effects: Eyes

Contact may produce mechanical eye irritation.

Potential Health Effects: Skin

Skin irritation would not be expected from single short-term exposure to this product. Prolonged or repeated contact may produce some irritation.

Potential Health Effects: Ingestion

Ingestion of this product may cause gastrointestinal irritation, nausea, vomiting and constipation. Small amounts of this product in solution, if aspirated into the lungs, may cause mild to severe pulmonary injury, possibly death.

Potential Health Effects: Inhalation

Overexposure to dusts may produce irritation of the respiratory system. Wet activated carbon may cause asphyxiation by adsorbing oxygen from confined spaces.

HMIS Ratings: Health: 1 Fire: 1 Reactivity: 1 Pers. Prot.: safety glasses with side shields, impervious gloves for prolonged contact

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

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*** Section 4 - First Aid Measures ***

First Aid: Eyes

Immediately flush eyes with plenty of water for at least 15 minutes. Seek medical attention if irritation persists.

First Aid: Skin

For skin contact, wash with soap and large amounts of water. If irritation persists, seek medical attention.

First Aid: Ingestion

If the material is swallowed, get immediate medical attention or advice -- Do not induce vomiting unless instructed to do so by medical personnel

First Aid: Inhalation

If symptoms are experienced, remove source of contamination or move victim to fresh air. Seek medical attention if irritation persists.

First Aid: Notes to Physician

This product in solution, if aspirated into the lungs, may cause chemical pneumonitis; treat the affected person appropriately.

*** Section 5 - Fire Fighting Measures ***

Flash Point: Not available

Upper Flammable Limit (UFL): Not applicable

Auto Ignition: Not available

Rate of Burning: Not available

Method Used: Not applicable

Lower Flammable Limit (LFL): Not applicable

Flammability Classification: Not available

General Fire Hazards

Activated carbon exposed to air is a potential fire hazard because of its very high surface area and absorptive capacity. Accumulation of airborne dusts may present an explosion or fire hazard in the presence of an ignition source.

Hazardous Combustion Products

Upon combustion, this product may emit oxides of nitrogen, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Other materials adsorbed onto the carbon may also be released during combustion.

Extinguishing Media

Dry chemical, foam, carbon dioxide, water fog.

Fire Fighting Equipment/Instructions

Firefighters should wear full protective clothing including self contained breathing apparatus.

NFPA Ratings: Health: 1 Fire: 1 Reactivity: 1 Other:

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

*** Section 6 - Accidental Release Measures***

Containment Procedures

Contain the discharged material. If sweeping of a contaminated area is necessary, use a dust suppressant agent.

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Clean-Up Procedures

Wear appropriate protective equipment and clothing during clean-up. Sweep up or vacuum spilled material. Use of a moist absorbent is recommended.

Evacuation Procedures

None necessary.

Special Procedures

None.

*** Section 7 - Handling and Storage ***

Handling Procedures

Avoid getting this material into contact with your eyes. Avoid prolonged or repeated skin contact with this material. Wash thoroughly after handling. Avoid the formation of airborne dusts. Use with adequate ventilation.

Storage Procedures

Keep the container tightly closed and in a cool, well-ventilated place. Store away from heat, ignition sources, combustible materials and incompatible materials.

*** Section 8 - Exposure Controls / Personal Protection ***

Exposure Guidelines

A: General Product Information

Exposures should be minimized in accordance with good industrial hygiene practices. The manufacturer recommends that exposure limits for nuisance dusts be followed. The OSHA PEL for the respirable fraction is 5 mg/m³ (TWA) and for total dust the OSHA PEL is 15 mg/m³ (TWA). The ACGIH threshold limit value for Particulates Not Otherwise Classified (PNOC) is 10 mg/m³ (TWA).

B: Component Exposure Limits

Activated Carbon (Coconut Shell AC Base) (7440-44-0)

NIOSH: no established RELs - see Appendix D

Potassium Hydroxide (1310-58-3)

ACGIH: C 2 mg/m³

OSHA: C 2 mg/m³

NIOSH: 2 mg/m³ TWA

Engineering Controls

Ventilation should be sufficient to effectively remove and prevent buildup of airborne dusts.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face

Wear safety glasses with side shields.

Personal Protective Equipment: Skin

Wear impervious gloves for prolonged contact.

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Personal Protective Equipment: Respiratory

If ventilation is not sufficient to effectively remove and prevent buildup of dusts, appropriate NIOSH/MSHA approved respiratory protection should be provided. Confined spaces containing activated carbon may be oxygen deficient atmospheres, use appropriate protective measures.

Personal Protective Equipment: General

Use good industrial hygiene practices in handling this material.

*** Section 9 - Physical & Chemical Properties ***

Appearance: Black granules	Odor: Not available
Physical State: Solid	pH: 10.6 (10% suspension in water)
Vapor Pressure: Not applicable	Vapor Density: Not applicable
Boiling Point: Not available	Melting Point: Not available
Solubility (H₂O): Insoluble	Specific Gravity: Not available
Freezing Point: Not available	

*** Section 10 - Chemical Stability & Reactivity Information ***

Chemical Stability

Stable

Chemical Stability: Conditions to Avoid

Avoid accumulation of airborne dusts. Dusts may be explosive when exposed to heat, flame, ignition sources, combustible material and incompatible materials.

Incompatibility

Contact with incompatible materials may produce ignition or explosions. Incompatible with oxides, peroxides, oxosalts, potassium, nitric acid, sodium sulfide, halogens, oxygen, ozone, bromates, chlorates, iodates, and nitrates. Unsaturated oils (such as linseed oil) may be spontaneously flammable when distributed on activated carbon.

Hazardous Decomposition

Upon decomposition, this product may emit oxides of potassium, iodides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Other materials adsorbed onto the carbon may also be released during decomposition.

Hazardous Polymerization

Hazardous polymerization will not occur.

*** Section 11 - Toxicological Information ***

Acute Toxicity

A: General Product Information

No data available for this product. Overexposure to activated carbon dusts would be expected to produce mild irritation to the respiratory tract, skin and eyes. Chronic skin exposure may discolor the hair follicle, chronic inhalation may produce carbon deposition in the lungs. Potassium hydroxide in concentrated form is corrosive to all tissues. The potassium hydroxide present in this product is bound to the carbon and would not be expected to be corrosive unless released from the carbon. However, inhalation, ingestion, eye or skin contact with dusts may be severely irritating if potassium hydroxide is released. Solutions of this product may be corrosive.

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B: Component Analysis - LD50/LC50

Potassium Hydroxide (1310-58-3)

Oral LD50 Rat: 273 mg/kg

Carcinogenicity

A: General Product Information

No carcinogenicity data available for this product.

B: Component Carcinogenicity

None of this product's components are listed by ACGIH, IARC, OSHA, NIOSH, or NTP.

Epidemiology

No epidemiological data is available for this product.

Neurotoxicity

No data available for this product.

Mutagenicity

No data available for this product.

Teratogenicity

No data available for this product.

Other Toxicological Information

The additives in this product are tightly bound to the carbon and under normal handling and usage should produce little exposure.

*** Section 12 - Ecological Information ***

Ecotoxicity

No data available for this product.

Environmental Fate

No data available for this product.

*** Section 13 - Disposal Considerations ***

US EPA Waste Number & Descriptions

A: General Product Information

Material, if discarded, is not expected to be characteristic hazardous waste under RCRA.

B: Component Waste Numbers

No EPA Waste Numbers are applicable for this product's components.

Disposal Instructions

All wastes must be handled in accordance with local, state and federal regulations.

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*** Section 14 - Transportation Information ***

US DOT Information

Shipping Name: Not regulated as a dangerous material

Hazard Class: Not regulated

UN/NA #: None

Packing Group: None

Required Label(s): None

Additional Info.: The carbon present in this product is prepared by a steam activated process. Testing using methods in 49CFR173 Appendix E has shown the product does not meet the definition of Hazard Class 4.2.

*** Section 15 - Regulatory Information ***

US Federal Regulations

A: General Product Information

No information is available.

B: Component Analysis

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

Potassium Hydroxide (1310-58-3)

CERCLA: final RQ = 1000 pounds (454 kg)

State Regulations

A: General Product Information

No information available.

B: Component Analysis - State

Component	CAS #	CA	FL	MA	MN	NJ	PA
Potassium Hydroxide	1310-58-3	Yes	Yes	Yes	Yes	Yes	Yes

Other Regulations

A: General Product Information

None.

B: Component Analysis - Inventory

Component	CAS #	TSCA	DSL	EINECS
Activated Carbon (Coconut shell AC Base)	7440-44-0	Yes	Yes	Yes
Potassium Hydroxide	1310-58-3	Yes	Yes	Yes

C: Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS#	Minimum Concentration
Potassium Hydroxide	1310-58-3	1% item 1335 (996)

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*** Section 16 - Other Information ***
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Other Information

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use.

Key/Legend

EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration

Contact: Steve Stanek

Contact Phone: (586) 725-0192

This is the end of MSDS RSE – RSE SR (GAC)