

1. Identification

Product identifier PlumeStop® Liquid Activated Carbon™
Other means of identification None.
Recommended use Soil and Groundwater Remediation.
Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Company name REGENESIS
Address 1011 Calle Sombra
San Clemente, CA 92673 USA
General information 949-366-8000
E-mail CustomerService@regenesis.com

Emergency phone number For Dangerous Goods Incidents ONLY (spill, leak, fire, exposure or accident), call CHEMTREC 24/7 at:
USA, Canada (+)1-800-424-9300
International +1 703-741-5970

2. Hazard identification

Physical hazards Not classified.

Health hazards Not classified.

Label elements

Hazard symbol None.
Signal word None.
Hazard statement The mixture does not meet the criteria for classification.

Precautionary statement

Prevention Observe good industrial hygiene practices.
Response Wash hands after handling.
Storage Store away from incompatible materials.
Disposal Dispose of waste and residues in accordance with local authority requirements.

Supplemental information None.

Other hazards None known.

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|---|--------------------------|------------|---------|
| Water | | 7732-18-5 | 60 - 80 |
| Colloidal activated carbon $\leq 2.5 \mu\text{m}$ | | 7440-44-0 | 10 - 30 |
| Proprietary additives | | | 1 - 5 |

Composition comments All concentrations are in percent by weight unless otherwise indicated.

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact Rinse with water. Get medical attention if irritation develops and persists.
Ingestion Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Direct contact with eyes may cause temporary irritation.

Indication of immediate medical attention and special treatment needed

Treat symptomatically.

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media

Use extinguishing agent suitable for type of surrounding fire.

Unsuitable extinguishing media

None known.

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed. Combustion products may include: carbon monoxide, carbon dioxide, sodium oxides, metal oxides.

Special protective equipment and precautions for firefighters

Use protective equipment appropriate for surrounding materials.

Fire fighting equipment/instructions

Move containers from fire area if you can do so without risk.

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials. Use water spray to keep fire-exposed containers cool.

General fire hazards

This material will not burn until the water has evaporated. Residue can burn. When dry may form combustible dust concentrations in air.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Avoid contact with spilled material. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

This product is miscible in water.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Avoid contact with skin and eyes. Avoid prolonged exposure. Observe good industrial hygiene practices. Wash thoroughly after handling. Wear appropriate personal protective equipment (See Section 8).

Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS). Protect from freezing.

8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

| Components | Type | Value | Form |
|--|------|---------|----------------------|
| Colloidal activated carbon ≤2.5 µm (CAS 7440-44-0) | TWA | 2 mg/m3 | Respirable fraction. |

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

| Components | Type | Value | Form |
|--|------|---------|-------------|
| Colloidal activated carbon ≤2.5 µm (CAS 7440-44-0) | TWA | 2 mg/m3 | Respirable. |

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

| Components | Type | Value | Form |
|---|------|---------------------|-------------|
| Colloidal activated carbon ≤2.5 µm (CAS 7440-44-0) | TWA | 2 mg/m ³ | Respirable. |

Canada. New Brunswick OELs: Threshold Limit Values (TLVs) Based on the 1991 and 1997 ACGIH TLVs and BEIs Publication (New Brunswick Regulation 91-191)

| Components | Type | Value | Form |
|---|------|---------------------|-------------|
| Colloidal activated carbon ≤2.5 µm (CAS 7440-44-0) | TWA | 2 mg/m ³ | Respirable. |

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

| Components | Type | Value | Form |
|---|------|---------------------|----------------------|
| Colloidal activated carbon ≤2.5 µm (CAS 7440-44-0) | TWA | 2 mg/m ³ | Respirable fraction. |

Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety)

| Components | Type | Value | Form |
|---|------|---------------------|------------------|
| Colloidal activated carbon ≤2.5 µm (CAS 7440-44-0) | TWA | 2 mg/m ³ | Respirable dust. |

Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21)

| Components | Type | Value | Form |
|---|-----------|---------------------|----------------------|
| Colloidal activated carbon ≤2.5 µm (CAS 7440-44-0) | 15 minute | 4 mg/m ³ | Respirable fraction. |
| | 8 hour | 2 mg/m ³ | Respirable fraction. |

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Wear approved chemical safety goggles.

Skin protection**Hand protection**

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier. Rubber, neoprene or PVC gloves are recommended.

Other

Avoid contact with the skin. Wear suitable protective clothing.

Respiratory protection

Not normally needed. In case of insufficient ventilation, wear suitable respiratory equipment. If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties**Appearance****Physical state**

Liquid.

Form

Aqueous suspension.

Colour

Black.

Odour

Odourless.

Odour threshold

Property has not been measured.

pH

8 - 11

Melting point/freezing point

Property has not been measured.

Initial boiling point and boiling range

Property has not been measured.

| | |
|---|---------------------------------|
| Flash point | Property has not been measured. |
| Evaporation rate | Not available. |
| Flammability (solid, gas) | Not applicable. |
| Upper/lower flammability or explosive limits | |
| Explosive limit - lower (%) | Property has not been measured. |
| Explosive limit – upper (%) | Property has not been measured. |
| Vapour pressure | Property has not been measured. |
| Vapour density | Property has not been measured. |
| Relative density | 1 - 1.2 (Water = 1) |
| Solubility(ies) | |
| Solubility (water) | Miscible. |
| Partition coefficient (n-octanol/water) | Property has not been measured. |
| Auto-ignition temperature | Property has not been measured. |
| Decomposition temperature | Property has not been measured. |
| Viscosity | Property has not been measured. |
| Other information | |
| Density | Property has not been measured. |
| Kinematic viscosity | Property has not been measured. |

10. Stability and reactivity

| | |
|---|---|
| Reactivity | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| Chemical stability | Material is stable under normal conditions. |
| Possibility of hazardous reactions | No dangerous reaction known under conditions of normal use. |
| Conditions to avoid | Contact with incompatible materials. Keep from freezing. |
| Incompatible materials | Strong oxidising agents. Water reactive materials. |
| Hazardous decomposition products | No hazardous decomposition products are known. |

11. Toxicological information

Information on likely routes of exposure

| | |
|---------------------|--|
| Inhalation | Prolonged inhalation may be harmful. |
| Skin contact | Prolonged or repeated skin contact may result in minor irritation. |
| Eye contact | Direct contact with eyes may cause temporary irritation. |
| Ingestion | Expected to be a low ingestion hazard. |

| | |
|---|--|
| Symptoms related to the physical, chemical and toxicological characteristics | Direct contact with eyes may cause temporary irritation. |
|---|--|

Information on toxicological effects

| | |
|--|--|
| Acute toxicity | Not expected to be acutely toxic. |
| Skin corrosion/irritation | Prolonged skin contact may cause temporary irritation. |
| Serious eye damage/eye irritation | Direct contact with eyes may cause temporary irritation. |
| Respiratory or skin sensitisation | |
| Respiratory sensitisation | Not a respiratory sensitiser. |
| Skin sensitisation | This product is not expected to cause skin sensitisation. |
| Germ cell mutagenicity | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. |
| Carcinogenicity | Not classifiable as to carcinogenicity to humans. |
| Reproductive toxicity | This product is not expected to cause reproductive or developmental effects. |

| | |
|---|---------------------------|
| Specific target organ toxicity - single exposure | Not classified. |
| Specific target organ toxicity - repeated exposure | Not classified. |
| Aspiration hazard | Not an aspiration hazard. |

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

| Product | Species | Test Results |
|--------------------------|---------------------|-------------------|
| PlumeStop® (CAS Mixture) | | |
| Aquatic | | |
| <i>Chronic</i> | | |
| Fish | LC50 Fathead minnow | > 100 mg/l, 96 hr |

| | |
|--------------------------------------|---|
| Persistence and degradability | No data is available on the degradability of this product. |
| Bioaccumulative potential | No data available. |
| Mobility in soil | This product is miscible in water. Expected to be mobile in soil. |
| Other adverse effects | None known. |

13. Disposal considerations

| | |
|--|---|
| Disposal instructions | Collect and reclaim or dispose in sealed containers at licensed waste disposal site. |
| Local disposal regulations | Dispose in accordance with all applicable regulations. |
| Hazardous waste code | The waste code should be assigned in discussion between the user, the producer and the waste disposal company. |
| Waste from residues / unused products | Dispose in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). |
| Contaminated packaging | Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. |

14. Transport information

TDG

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

15. Regulatory information

Canadian regulations This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Controlled Drugs and Substances Act

Not regulated.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

International regulations

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto Protocol

Not applicable.

Montreal Protocol

Not applicable.

Basel Convention

Not applicable.

International Inventories

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|--|-------------------------------|
| Australia | Australian Inventory of Industrial Chemicals (AICIS) | Yes |
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | Yes |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | No |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | Yes |
| Korea | Existing Chemicals List (ECL) | Yes |
| New Zealand | New Zealand Inventory | Yes |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | Yes |
| Taiwan | Taiwan Chemical Substance Inventory (TCSI) | Yes |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information

Issue date 14-September-2015

Revision date 09-May-2022

Version No. 04

Disclaimer Regenesis cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.