

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier**

Product name	Activated Carbon
Product number	ACP-0750, ACP-2400
Brand	ReefX®
Substance name	Activated carbon
EC no.	231-153-3
CAS no.	7440-44-0

1.2 Relevant identified uses of the substance or mixture and uses advised against

For freshwater and marine aquarium use as a source of extruded pure activated carbon for water treatment and conditioning.

1.3 Details of the supplier of the safety data sheet

Name	Live Reef Ltd
Address	8-9 Mountbatten Road EX16 6SW Tiverton Devon UK
Telephone	+44 (0)800 8620270
email	info@livereef.uk

1.4 Emergency telephone number

Live Reef Distribution Ltd
+44 (0)800 8620270

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008 (CLP)**

This product does not meet the criteria for classification in any hazard class according to Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008 [CLP]**

This product does not meet the criteria for classification in any hazard class according to Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.

2.3 Other hazards

In the event of dust formed by mechanical action (sanding, sawing, etc.), this dust may cause irritation by inhalation and contact with eyes.

May cause CO and CO₂ emanations in the event of a fire.

Wet Activated Carbon depletes oxygen from air and, therefore, dangerously low levels of oxygen may be encountered. Whenever workers enter a vessel containing activated carbon, the oxygen content should be determined and work procedures for potentially low oxygen areas should be followed.

SECTION 3: Composition/information on ingredients

3.1 Substances

Substance name	Activated carbon
EC no.	231-153-3
CAS no.	7440-44-0
Formula	C
Molecular weight	12
Other names / synonyms	Carbon black; Activated carbon

SECTION 4: First aid measures

4.1 Description of first aid measures

Following inhalation	Move to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately if symptoms occur.
Following skin contact	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.
Following eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
Following ingestion	Do not induce vomiting. Obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Cool closed containers exposed to fire with water spray.

5.2 Special hazards arising from the substance or mixture

Containers may explode when heated.
Fine dust dispersed in air may ignite.

Combustion products may include Carbon monoxide (CO), Carbon dioxide (CO₂).

After a fire, smoldering hotspots within the activated carbon may be present for a long time. Activated Carbon which has been allowed to smolder for a long time in a confined space may accumulate carbon monoxide above its lower explosion limit.

5.3 Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment.

Avoid dust formation.

Remove all sources of ignition.

Take precautionary measures against static discharges.

6.2 Environmental precautions

Should not be released into the environment.

See Section 12 for additional ecological information.

6.3 Methods and material for containment and cleaning up

Sweep up or vacuum up spillage and collect in suitable container for disposal.

Avoid dust formation.

Remove all sources of ignition.

Use spark-proof tools and explosion-proof equipment.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice.

Keep away from food, drink and animal feeding stuffs.

Do not eat, drink or smoke when using this product.

Remove and wash contaminated clothing before re-use.

7.2 Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place.

Keep away from extreme heat and sources of ignition.

Keep away from oxidizing agents.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

1. Activated carbon (CAS: 7440-44-0 EC: 231-153-3)

Parameter	PNEC
Route of exposure	Soil (agricultural)
Value	10mg/kg dw
Parameter	DNEL

Route of exposure	Inhalation
Value	1.84mg/m ³
DNEL target	Consumer - chronic effects local
Parameter	DNEL
Route of exposure	Dermal
Value	1.84mg/m ³
DNEL target	Consumer - acute effects local
Parameter	DNEL
Route of exposure	Oral
Value	1.84mg/m ³
DNEL target	Consumer - chronic effects local
Country	UK
Parameter	TWA
Value	10mg/m ³

8.2 Exposure controls

Appropriate engineering controls

Ensure that eyewash stations and safety showers are close to the workstation location.

Ensure adequate ventilation, especially in confined areas.

Use explosion-proof electrical/ventilating/lighting/equipment.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source.

Personal protection equipment

Pictograms



Eye and face protection

Safety glasses with side-shields (European standard - EN 166).

Skin protection

Protective gloves (European standard - EN 374).

Suitable materials include nitrile rubber, neoprene, natural rubber and PVC.

Body protection

Wear appropriate protective clothing.

Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly.

Environmental exposure controls

No information available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Black solid, granular
Odour	Odorless
Odour threshold	No data available
pH	2.0-4.5
Melting point / freezing point	3550 - 3697 °C
Initial boiling point and boiling range	No information available
Flash point	No data available
Evaporation rate	Not applicable
Flammability (solid, gas)	No information available
Upper/lower flammability limits	No data available
Vapour pressure	No data available
Vapour density	Not applicable
Relative density	0.4 - 0.7
Solubilit(ies)	Insoluble in water
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	1 mm Hg @ 3586°C
Viscosity	Not applicable
Explosive properties	No information available
Oxidising properties	No information available

SECTION 10: Stability and reactivity

10.1 Reactivity

Nonreactive under normal conditions.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to avoid

Incompatible products.

Excess heat.

Avoid dust formation.

Keep away from open flames, hot surfaces and sources of ignition.

10.5 Incompatible materials

Strong oxidizing agents, especially when heated.

10.6 Hazardous decomposition products

Carbon monoxide (CO).

Carbon dioxide (CO₂).

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity: LD50, -, Rat > 10000 mg/kg bw

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Serious eye damage/irritation

Based on available data, the classification criteria are not met.

Respiratory or skin sensitization

Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

There are no known carcinogenic chemicals in this product.

Reproductive toxicity

Based on available data, the classification criteria are not met.

Summary of evaluation of the CMR properties

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Not applicable. Solid.

Additional information

No information available.

SECTION 12: Ecological information

12.1 Toxicity

Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.

12.2 Persistence and degradability

Insoluble in water.

12.3 Bioaccumulative potential

May have some potential to bioaccumulate.

12.4 Mobility in soil

Spillage unlikely to penetrate soil. Is not likely mobile in the environment due to its low water solubility.

12.5 Results of PBT and vPvB assessment

No data available for assessment.

12.6 Other adverse effects

This product does not contain any known or suspected endocrine disruptors, persistent organic pollutants or have any ozone depletion potential.

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Disposal of the product**

Dispose of in accordance with local regulations.

Disposal of contaminated packaging

Dispose of waste according to applicable legislation. Handle contaminated packaging in the same way as the substance itself.

Cleaned containers may be recycled.

SECTION 14: Transport information

14.1 UN Number	None
14.2 UN Proper Shipping Name	None
14.3 Transport hazard class(es)	None
14.4 Packing group	None
14.5 Environmental hazards	None
14.6 Special precautions for user	None
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	None

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****EINECS**

231-153-3

Germany - Water Classification (VwVwS)

nwg - nicht wassergefährdend (non-hazardous to waters)

KECL

KE-04671

SARA 311/312 Hazards

Fire

SARA 313 Components

None of the ingredients is listed.

Toxic Substances Control Act (TSCA) Inventory

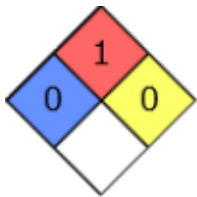
All ingredients are listed.

15.2 Chemical Safety Assessment

Yes

HMIS Rating

Activated carbon	
HEALTH	0
FLAMMABILITY	1
PHYSICAL HAZARD	0
PERSONAL PROTECTION	E

NFPA Rating

SECTION 16: Other information
Further information/disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.