HATENBOERWATER

MSDS FOR TN5 4x8 ACTIVATED CARBON

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifiers

Product name (Trade name)	TN5 4x8
Brand	Eurocarb
Reach no. Or EC no.	01-2119488894-16-0010

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

Identified uses	Vapour phase adsorbent and chemisorbent
Uses advised against	None

1.3 Details of the supplier of the safety data sheet

Company	HATENBOER WATER
Address	3113 AR Schiedam - Netherlands T +(31) 10 409 12 00 info@hatenboer-water.com www.hatenboer-water.com
Telephone	+(31) 10 409 12 00
Fax	+(31) 10 409 12 10
National Contact	info@hatenboer-water.com

1.4 Emergency telephone number

Emergency telephone no.	+44 (0) 117 982 0333 (09.00-17.00, GMT) 999 Emergency (UK only) +31 30 274 88 88 Emergency (Netherlands only)

SECTION 2: Hazards Identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Not a hazardous substance according to regulation (EC) No. 1272/2008

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

Supplemental information: Wet activated carbon absorbs oxygen selectively from air.

2.3 Other hazards

Moist material will selectively adsorb oxygen from air. Enclosed tanks and spaces should only be entered with continuous oxygen monitoring and use of appropriate forced ventilation or a self-contained breathing appliance should be worn.
The material is a potential nuisance dust and should be carefully handled to minimise dust generation. Adequate exhaust ventilation should be available to eliminate the risk of dust inhalation or a dust mask should be worn. Avoid contact with eyes and skin.

SECTION 3: Composition / information on ingredients

Component	Classification	Percentage (weight)
Activated carbon, HDS CAS: 7440-44-0 REACH: 01-2119488894-16-0010	Non hazardous	≤100%
Moisture CAS: N/A REACH: N/A	Non hazardous	≤15%

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice
Consult a physician and show this data sheet if concerned

If inhaled
Move person affected into fresh air. If a cough or respiratory symptoms develop consult a physician.

In case of skin contact
Wash the affected area with soap and water.

In case of eye contact
Treat immediately by flushing with copious amounts of water or eye bath solution. If redness, itching, or a burning sensation develops consult a physician.

If swallowed
Give water to drink, never administer to an unconscious person. If gastro-intestinal symptoms develop consult a physician showing this data sheet.

4.2 Most important symptoms and effects, both acute and delayed
The most important symptoms and effects are described in section 2 or 11.

4.3 Indication of any immediate medical attention and special treatment needed
No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media
Water spray preferable, avoid methods that generate or disturbs excessive dust.

5.2 Special hazards arising from substance or mixture
Used material may release additional combustion products. Airborne dust is a weak explosion hazard. Wetted material may cause oxygen depletion in confined spaces.

5.3 Advice for firefighters
Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment, and emergency procedures
Use personal protective equipment. Avoid dust formation. Ensure adequate ventilation. Avoid breathing dust.

6.2 Environmental precautions
Do not let product enter water-ways.

6.3 Methods and materials for containment and clean up
Preferably vacuum up or sweep up and keep in a suitable closed container for disposal.

6.4 Reference to other sections
For disposal consideration see section 13, for personal protective equipment recommendations see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust. Provide adequate exhaust ventilation where dust is generated.

7.2 Conditions for safe storage, including any incompatibilities

Store indoors or under cover in frost-free conditions. Avoid direct sunlight. Do not store at high temperatures. Keep away from contaminating vapours and sources of ignition. Ensure packaging remains sealed. Keep away from strong acids and strong oxidisers.

7.3 Specific end use(s)

See section 1.2

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Carbon						
Limit value type (country of origin)	**Substance name**	**Occupational exposure limit value**		**Recommended monitoring procedures**	**Peak limitation**	**Source**
		Long term (mg/m3)	**Short term**			
Germany	Activated carbon alveolar fraction	1.5	-	Personal air sampling for alveolar fraction	-	DFG Deutsche Forschungsgemeinschaft: MAK-und BAT-Werte-Liste 2010, Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe, Mitteilung 46; VCH
	Activated carbon respirable fraction	4	-	Personal air sampling for respirable fraction	-	
Biological limit values: No biological limit value has been set Additional exposure limits under the conditions of use: None.						

DNEL/DMEL		**Exposure route**	**Exposure frequency**	**Critical component**	**Remarks**
Worker	**Consumer**				
3mg/m3	0.5mg/m3	Inhalation	Short term (acute) Long term (repeated)	Activated carbon	The interim inhalation DNEL long-term exposure for local effects was based on OEL (TWA, 8hr) set by the American Conference of Governmental Industrial Hygienists (ACGIH, 2001) for inhalable dust of carbon black. The OEL is intended to minimise excessive dirtiness and effects on lung function
No PNEC is derived as the substance is highly insoluble and no ecotoxicity information is available.					

8.2 Exposure controls

Occupational exposure controls

A good basic standard of occupational hygiene is to be implemented for all handling of activated carbon outside a container. Wash hands and face before breaks and immediately after handling the product.

Safety controls

Low oxygen work procedures should be in place – 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 vessels oxygen content should be determined and work procedures for potentially low levels of oxygen should be followed. Alternatively the room may be fitted with oxygen level sensors having an alarm setting at 18 vol. %.

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11mm

Breakthrough time: 480 min

Body protection

Standard protective work clothes

Respiratory protection

Where risk assessment shows masks are required due to volumes handled or poor ventilation use type N100(US) or type P3(EN 143) dust masks.

Environmental exposure controls

Product related measures to prevent exposure

Local exhaust ventilation to remove material at source

Contained storage

Regulated waste disposal

Do not let product enter drains

Instructional measures to prevent exposure

Inclusion of ISO 14001

Appropriate documentation such as work instruction procedures

SECTION 9: physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Form: Solid Colour: Black
Odour	No odour
Odour threshold	N/A
pH	No data available
Melting point / freezing point	>1000°C
Initial boiling point and boiling range	>1000°C
Flash point	N/A
Evaporation rate	N/A
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	N/A
Vapour pressure	N/A
Vapour density	N/A
Relative density (dry)	300-640 kg/m3
Water solubility	No data available
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	N/A
Explosive properties	No data available
Oxidising properties	N/A

9.2 Other safety information

The physical and chemical properties of the spent material may be different to that of the virgin carbon.

SECTION 10: Stability and reactivity

10.1 Reactivity

This product shows no reactivity under the specified conditions of storage, shipment, and use.

10.2 Chemical stability

This product is stable under the specified conditions of storage, shipment, and use.

10.3 Possibility of hazardous reactions

Contact with strong oxidisers, i.e. chlorine, liquid oxygen, ozone, may result in rapid combustion / possible explosion.

10.4 Conditions to avoid

Keep operating temperatures below 200°C. Do not store in direct sunlight.

10.5 Incompatible materials

Keep away from strong acids and strong oxidisers.

10.6 Hazardous decomposition products

Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

11.1 Information on toxicological information

Acute toxicity

Activated Carbon			
	Effect Dose	Species	Comments
Acute toxicity, oral	LD50>2000mg/kg bw	Rat, female	Reliable without constriction
Acute toxicity, inhaled	LC0 (1h): 64.4mg/l air (nominal) or 8.5mg/l air (analytical) (no deaths, but multiple effects were observed (contamination of fur, general stress, lung rales, weight loss, lung discoloration))	Rat	Reliable with restrictions

Skin Corrosion / Irritation

Activated carbon, High density skeleton – No data available

Serious eye damage / irritation

Activated carbon, High density skeleton – No data available

Respiratory or skin sensitization

Activated carbon, High density skeleton – Not sensitizing

Germ cell mutagenicity

Activated carbon, High density skeleton – No data available

Carcinogenicity

Activated carbon, High density skeleton – No data available

Reproductive toxicity

Activated carbon, High density skeleton – No data available

Specific target organ toxicity

Activated carbon, High density skeleton – No data available

SECTION 12: Ecological information

12.1 Toxicity
No information is available. As activated carbon is highly insoluble in water no toxicity is expected.
12.2 Persistence and degradability
No data available
12.3 Bioaccumulative potential
No data available
12.4 Mobility in soil
No data available
12.5 Results of a PBT and vPvB assessment
This mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher
12.6 Other adverse effects
No data available

SECTION 13: Disposal considerations

13.1 Waste treatment method
Offer surplus and non-recyclable produce to a licensed disposal company.
Dispose of contaminated packaging in accordance with regulations.

SECTION 14: Transport information

14.1 UN Number
None

14.2 UN proper shipping name
ADR/RID: Not regulated
AND: Not regulated
IMDG/IMO: Not regulated
ICOA/IATA: Not regulated

14.3 Transport hazard classes
None

14.4 Packing group
None

14.5 Environmental hazards
Not classified

14.6 Special precautions for user
See section 2

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code
Not applicable

14.8 Additional Information
Wet activated carbon selectively absorbs oxygen from the air. When entering a confined space with wet activated carbon always use oxygen monitoring equipment.

SECTION 15: Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
No data available

15.2 Chemical Safety Assessment
For this product a chemical safety assessment was not carried out

SECTION 16: Other information

Full list of H-statements
None