

# SAFETY DATA SHEET

according to Regulation (EC) No. 453/2010

## BARACOR® 450

Revision Date: 08-Sep-2015

Revision Number: 14

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

#### 1.1. Product Identifier

Product Name BARACOR® 450  
Internal ID Code HM003497

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

Recommended Use Corrosion Inhibitor

#### 1.3. Details of the supplier of the safety data sheet

Halliburton Manufacturing Services, Ltd.  
Halliburton House, Howemoss Crescent  
Kirkhill Industrial Estate  
Dyce  
Aberdeen, AB21 0GN  
United Kingdom

www.halliburton.com

For further information, please contact

E-Mail address: fdunexchem@halliburton.com

#### 1.4. Emergency telephone number

+44 8 08 189 0979 / 1-760-476-3961

Emergency telephone - §45 - (EC)1272/2008	
Europe	112
Croatia	Centar za kontrolu otrovanja (CKO): (+385 1) 23-48-342 (Poison Control Center (PCC) - Institute for Medical Research and Occupational Health)
Cyprus	+210 7793777
Denmark	Poison Control Hotline (DK): +45 82 12 12 12
France	ORFILA (FR): + 01 45 42 59 59
Germany	Poison Center Berlin (DE): +49 030 30686 790
Italy	Poison Center, Milan (IT): +39 02 6610 1029
Netherlands	National Poisons Information Center (NL): +31 30 274 88 88 (NB: this service is only available to health professionals)
Norway	Poisons Information (NO): + 47 22 591300
Poland	Poison Control and Information Centre, Warsaw (PL): +48 22 619 66 54; +48 22 619 08 97
Romania	+40 21 318 36 06
Spain	Poison Information Service (ES): +34 91 562 04 20
United Kingdom	NHS Direct (UK): +44 0845 46 47

### SECTION 2: Hazards Identification

#### 2.1. Classification of the substance or mixture

##### REGULATION (EC) No 1272/2008

Acute Oral Toxicity	Category 4 - (H302)
Serious Eye Damage / Eye Irritation	Category 2 - (H319)
Specific Target Organ Toxicity - (Repeated Exposure)	Category 2 - (H373)

#### 2.2. Label Elements

Hazard Pictograms

**Signal Word****Warning****Hazard Statements**

H302 - Harmful if swallowed

H319 - Causes serious eye irritation

H373 - May cause damage to organs through prolonged or repeated exposure

**Precautionary Statements - EU (§28, 1272/2008)**

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear protective gloves/eye protection/face protection

P301+ P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P314 - Get medical attention/advice if you feel unwell

**Contains****Substances**

Sodium thiocyanate

**CAS Number**

540-72-7

**2.3. Other Hazards**

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

**SECTION 3: Composition/information on Ingredients****3.2. Mixtures**

Mixture

Substances	EINECS	CAS Number	PERCENT (w/w)	EU - CLP Substance Classification	REACH No.
Sodium thiocyanate	208-754-4	540-72-7	30 - 60%	Acute Tox. 4 (H302) Eye Irrit. 2 (H319) STOT RE 2 (H373)	No data available

For the full text of the H-phrases mentioned in this Section, see Section 16

**SECTION 4: First aid measures****4.1. Description of first aid measures****Inhalation**

If inhaled, move victim to fresh air and seek medical attention.

**Eyes**

In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.

**Skin**

In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention. Remove contaminated clothing and laundry before reuse.

**Ingestion**

Do NOT induce vomiting. Give nothing by mouth. Obtain immediate medical attention.

**4.2. Most Important symptoms and effects, both acute and delayed**

Harmful if swallowed. Causes eye irritation. Prolonged or repeated exposure may cause damage to organs.

**4.3. Indication of any immediate medical attention and special treatment needed**

**Notes to Physician**

Treat symptomatically

**SECTION 5: Firefighting Measures****5.1. Extinguishing media****Suitable Extinguishing Media**

All standard fire fighting media

**Extinguishing media which must not be used for safety reasons**

None known.

**5.2. Special hazards arising from the substance or mixture****Special Exposure Hazards**

Decomposition in fire may produce harmful gases.

**5.3. Advice for firefighters****Special Protective Equipment for Fire-Fighters**

Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Use appropriate protective equipment. Avoid contact with skin, eyes and clothing. Avoid breathing vapors. Ensure adequate ventilation.

See Section 8 for additional information

**6.2. Environmental precautions**

Prevent from entering sewers, waterways, or low areas.

**6.3. Methods and material for containment and cleaning up**

Isolate spill and stop leak where safe. Contain spill with sand or other inert materials. Scoop up and remove.

**6.4. Reference to other sections**

See Section 8 and 13 for additional information.

**SECTION 7: Handling and Storage****7.1. Precautions for Safe Handling**

Avoid contact with eyes, skin, or clothing. Avoid breathing vapors. Ensure adequate ventilation. Wash hands after use. Launder contaminated clothing before reuse. Use appropriate protective equipment.

**Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice.

**7.2. Conditions for safe storage, including any incompatibilities**

Store away from acids. Store away from oxidizers. Store in a cool well ventilated area. Keep container closed when not in use. Product has a shelf life of 36 months.

**7.3. Specific End Use(s)****Exposure Scenario**

No information available

**Other Guidelines**

No information available

**SECTION 8: Exposure Controls/Personal Protection****8.1. Control parameters****Exposure Limits**

Substances	CAS Number	EU	UK	Netherlands	France
Sodium thiocyanate	540-72-7	Not applicable	TWA: 5 mg/m <sup>3</sup> STEL: 15 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>	Not applicable

Substances	CAS Number	Germany	Spain	Portugal	Finland
Sodium thiocyanate	540-72-7	TWA: 2 mg/m <sup>3</sup>	Not applicable	Not applicable	TWA: 1 mg/m <sup>3</sup> STEL: 5 mg/m <sup>3</sup>

Substances	CAS Number	Austria	Ireland	Switzerland	Norway
Sodium thiocyanate	540-72-7	Not applicable	5 mg/m <sup>3</sup> TWA (except Hydrogen cyanide, Cyanogen, and	Not applicable	TWA: 5 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>

			Cyanogen chloride, as CN)		
Substances	CAS Number	Italy	Poland	Hungary	Czech Republic
Sodium thiocyanate	540-72-7	Not applicable	Not applicable	TWA: 5 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup>	TWA: 3 mg/m <sup>3</sup>
Substances	CAS Number	Denmark	Romania	Croatia	Cyprus
Sodium thiocyanate	540-72-7	Not applicable	Not applicable	Not applicable	Not applicable

**Derived No Effect Level (DNEL)**  
**Worker**

No information available.

**General Population**

**Predicted No Effect Concentration (PNEC)**

No information available.

## 8.2. Exposure controls

### Engineering Controls

Use in a well ventilated area. Local exhaust ventilation should be used in areas without good cross ventilation.

### Personal protective equipment

If engineering controls and work practices cannot prevent excessive exposures, the selection and proper use of personal protective equipment should be determined by an industrial hygienist or other qualified professional based on the specific application of this product.

#### Respiratory Protection

In high concentrations, supplied air respirator or a self-contained breathing apparatus.

#### Hand Protection

Impervious rubber gloves.

#### Skin Protection

Rubber apron.

#### Eye Protection

Chemical goggles; also wear a face shield if splashing hazard exists.

#### Other Precautions

Eyewash fountains and safety showers must be easily accessible.

**Environmental Exposure Controls** Do not allow material to contaminate ground water system

## SECTION 9: Physical and Chemical Properties

### 9.1. Information on basic physical and chemical properties

**Physical State:** Liquid

**Color:** Clear colorless

**Odor:** Odorless

**Odor Threshold:** No information available

#### Property

#### Values

Remarks/ - Method

**pH:**

8.1

**Freezing Point/Range**

No data available

**Melting Point/Range**

No data available

**Boiling Point/Range**

122 °C / 252 °F

**Flash Point**

125 °C / 257 °F PMCC

**Flammability (solid, gas)**

No data available

upper flammability limit

No data available

lower flammability limit

No data available

**Evaporation rate**

No data available

**Vapor Pressure**

No data available

**Vapor Density**

No data available

**Specific Gravity**

1.3

**Water Solubility**

Soluble in water

**Solubility in other solvents**

No data available

**Partition coefficient: n-octanol/water**

No data available

**Autoignition Temperature**

No data available

**Decomposition Temperature**

No data available

**Viscosity**

No data available

**Explosive Properties**

No information available

**Oxidizing Properties**

No information available

### 9.2. Other information

**VOC Content (%)**

No data available

## SECTION 10: Stability and Reactivity

**10.1. Reactivity**

Not expected to be reactive.

**10.2. Chemical Stability**

Stable

**10.3. Possibility of Hazardous Reactions**

Will Not Occur

**10.4. Conditions to Avoid**

None anticipated

**10.5. Incompatible Materials**

Chlorates. Peroxides. Strong acids. Mineral acids.

**10.6. Hazardous Decomposition Products**

Oxides of nitrogen. Oxides of sulfur. Cyanides.

**SECTION 11: Toxicological Information****11.1. Information on Toxicological Effects****Acute Toxicity****Inhalation**

May cause respiratory irritation.

**Eye Contact**

Causes eye irritation.

**Skin Contact**

May cause skin irritation.

**Ingestion**

Harmful if swallowed. May cause vomiting, disorientation, weakness, low blood pressure, convulsions and possibly death which may be delayed.

**Chronic Effects/Carcinogenicity**

Prolonged or repeated skin exposure may cause dermatitis. Repeated ingestions of small amounts may cause hives, abnormal bleeding, enlarged thyroid, weakness, confusion, diarrhea, psychosis, and collapse.

**Toxicology data for the components**

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium thiocyanate	540-72-7	764 mg/kg (Rat)	>2000 mg/kg (Rat) (similar substance)	No data available

Substances	CAS Number	Skin corrosion/irritation
Sodium thiocyanate	540-72-7	Non-irritating to the skin

Substances	CAS Number	Eye damage/irritation
Sodium thiocyanate	540-72-7	Causes eye irritation (similar substances)

Substances	CAS Number	Skin Sensitization
Sodium thiocyanate	540-72-7	No data of sufficient quality are available.

Substances	CAS Number	Respiratory Sensitization
Sodium thiocyanate	540-72-7	No information available

Substances	CAS Number	Mutagenic Effects
Sodium thiocyanate	540-72-7	In vitro tests did not show mutagenic effects

Substances	CAS Number	Carcinogenic Effects
Sodium thiocyanate	540-72-7	No data of sufficient quality are available.

Substances	CAS Number	Reproductive toxicity
Sodium thiocyanate	540-72-7	No information available

Substances	CAS Number	STOT - single exposure
Sodium thiocyanate	540-72-7	No data of sufficient quality are available.

Substances	CAS Number	STOT - repeated exposure
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Sodium thiocyanate	540-72-7	Causes damage to organs through prolonged or repeated exposure: (Thyroid) (similar substances)
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Substances	CAS Number	Aspiration hazard
Sodium thiocyanate	540-72-7	Not applicable

## SECTION 12: Ecological Information

### 12.1. Toxicity Ecotoxicity Effects

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
Sodium thiocyanate	540-72-7	EC50 (72h) 59 mg/L (Microcystis aeruginosa) (similar substance)	LC50 (96h) 65 mg/L (Oncorhynchus mykiss) (similar substance) NOEC (124d) 1.84 mg/L (Pimephales promelas) (similar substance)	No information available	EC50 (48h) 3.56 mg/L (Daphnia magna) (similar substance) NOEC (21d) 1.25 mg/L (Daphnia magna) (similar substance)

### 12.2. Persistence and degradability

Substances	CAS Number	Persistence and Degradability
Sodium thiocyanate	540-72-7	(80%% @ 28d)

### 12.3. Bioaccumulative potential

Substances	CAS Number	Log Pow
Sodium thiocyanate	540-72-7	-2.52

### 12.4. Mobility in soil

Substances	CAS Number	Mobility
Sodium thiocyanate	540-72-7	No information available

### 12.5. Results of PBT and vPvB assessment

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

### 12.6. Other adverse effects

#### Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors

## SECTION 13: Disposal Considerations

### 13.1. Waste treatment methods

#### Disposal Method

Disposal should be made in accordance with federal, state, and local regulations.

#### Contaminated Packaging

Follow all applicable national or local regulations.

## SECTION 14: Transport Information

### IMDG/IMO

UN Number:	Not restricted
UN Proper Shipping Name:	Not restricted
Transport Hazard Class(es):	Not applicable
Packing Group:	Not applicable
Environmental Hazards:	Not applicable

### RID

UN Number:	Not restricted
UN Proper Shipping Name:	Not restricted
Transport Hazard Class(es):	Not applicable

<b>Packing Group:</b>	Not applicable
<b>Environmental Hazards:</b>	Not applicable

**ADR**

<b>UN Number:</b>	Not restricted
<b>UN Proper Shipping Name:</b>	Not restricted
<b>Transport Hazard Class(es):</b>	Not applicable
<b>Packing Group:</b>	Not applicable
<b>Environmental Hazards:</b>	Not applicable

**IATA/ICAO**

<b>UN Number:</b>	Not restricted
<b>UN Proper Shipping Name:</b>	Not restricted
<b>Transport Hazard Class(es):</b>	Not applicable
<b>Packing Group:</b>	Not applicable
<b>Environmental Hazards:</b>	Not applicable

**14.1. UN Number:** Not restricted**14.2. UN Proper Shipping Name:** Not restricted**14.3. Transport Hazard Class(es):** Not applicable**14.4. Packing Group:** Not applicable**14.5. Environmental Hazards:** Not applicable**14.6. Special Precautions for User:** None**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:** Not applicable**SECTION 15: Regulatory Information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****International Inventories**

<b>EINECS Inventory</b>	This product, and all its components, complies with EINECS
<b>US TSCA Inventory</b>	All components listed on inventory or are exempt.
<b>Canadian DSL Inventory</b>	All components listed on inventory or are exempt.

**Legend****TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List

**Germany, Water Endangering Classes (WGK)**      WGK 1: Low hazard to waters.

**15.2. Chemical Safety Assessment**

No information available

**SECTION 16: Other Information****Full text of H-Statements referred to under sections 2 and 3**

H302 - Harmful if swallowed

H319 - Causes serious eye irritation

H373 - May cause damage to organs through prolonged or repeated exposure

**Key or legend to abbreviations and acronyms**

bw – body weight

CAS – Chemical Abstracts Service

CLP – REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on Classification, Labelling and Packaging of substances and mixtures

EC – European Commission

EC10 – Effective Concentration 10%

EC50 – Effective Concentration 50%

EEC – European Economic Community

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ErC50 – Effective Concentration growth rate 50%  
IBC Code – International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk  
LC50 – Lethal Concentration 50%  
LD50 – Lethal Dose 50%  
LL0 – Lethal Loading 0%  
LL50 – Lethal Loading 50%  
MARPOL – International Convention for the Prevention of Pollution from Ships  
mg/kg – milligram/kilogram  
mg/L – milligram/liter  
NIOSH – National Institute for Occupational Safety and Health  
NOEC – No Observed Effect Concentration  
NTP – National Toxicology Program  
OEL – Occupational Exposure Limit  
PBT – Persistent Bioaccumulative and Toxic  
PC – Chemical Product category  
PEL – Permissible Exposure Limit  
ppm – parts per million  
PROC – Process category  
REACH – REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals  
STEL – Short Term Exposure Limit  
SU – Sector of Use category

**Key literature references and sources for data**

[www.ChemADVISOR.com/](http://www.ChemADVISOR.com/)

**Revision Date:** 08-Sep-2015

**Revision Note**

SDS sections updated: 1

**This safety data sheet complies with the requirements of Regulation (EC) No. 453/2010**

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**End of Safety Data Sheet**