

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

- 1.1 Product identifier
 - Product Name: Total Iron Binding Capacity (TIBC)
- 1.2 Relevant identified uses of the substance or mixture and uses advised against

For the quantitative determination of direct total iron binding capacity (TIBC) reagent concentration in serum.

- 1.3 Details of the supplier of the safety data sheet
 - Name of Manufacturer: Arena BioScien, SEA
 - Address of Manufacturer: Block 5, Street 9 Ismailia free zone. Ismailia- Egypt
 - Telephone: +202 21813500/ +201113102057
 - Email: admin@arenabioscientific.com

SECTION 2 Hazards identification

Hazard classification

This product is not hazardous according to OSHA 29 CFR 1910.1200.

GHS label elements

Not applicable.

Signal word

Not applicable.

General hazard

May cause eye, skin and respiratory tract irritation.

Potential health effects

Routes of exposure Inhalation. Ingestion. Skin contact. Eye contact.

Other hazards

Eyes

May cause irritation.

Skin

May cause irritation. May be harmful in contact with skin.

Inhalation

May cause irritation. May be harmful if inhaled.

Ingestion

May be harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chronic effects

Direct TIBC Buffer: Experiments have shown reproductive toxicity effects on laboratory animals. May cause adverse kidney effects.

Direct TIBC Color Reagent: None known

SECTION 3 Composition/information on ingredients

3.1 Substances

KIT COMPONENT	INGREDIENT
R1: Reagent 1	- Acetate Buffer pH 4.8
	- Chromazurol
	Surfactant
R2: Reagent 2	MOPs Buffer pH 8
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C: Calibrator

SECTION 4 First aid measures

Skin contact

Remove contaminated clothing and wash with soap and plenty of water. Seek medical attention.

Eye contact

Immediately flush with plenty of water or eye wash solution for up to ten minutes.

Seek medical attention.

Inhalation

Remove victim to fresh air. Seek medical attention.

Ingestion

Wash out mouth thoroughly with water. Seek medical attention.

SECTION 5 Fire-fighting measures

Flammable

No

Hazardous combustion products

No information available.

Extinguishing media

Extinguish with water spray, carbon dioxide, dry chemical or material appropriate for the surrounding fire.

Protection of firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapors.

Firefighting instructions

Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6 Accidental release measures

Personal precautions

Wear appropriate protective equipment and clothing during clean-up.

Do not touch damaged containers or spilled material unless wearing gloves appropriate protective clothing. Ensure adequate ventilation and treat material as you would hazardous materials.

Environmental precautions

Do not allow to enter drains, sewers or watercourses.

Methods for containment and cleaning up

Absorb spill with vermiculite or other inert material. Place in suitable container for prompt disposal. Label the container as potentially hazardous. Spill areas can be decontaminated with 0.5% sodium hypochlorite, e.g., a fresh 1:10 dilution of common household bleach. Dispose of waste in accordance with all applicable federal, state, local and provincial environmental regulations.



Handling

Wear safety glasses, disposable gloves and protective clothing. Wash thoroughly after handling. Handle and open container with care.

Storage

Store at 2-8°C.

SECTION 8 Exposure controls/personal protection

- 8.1 Control parameters
 - There are no recommended or established controls for this product.
- 8.2 Exposure controls
 - Eyewash bottles should be available.
 - Engineering controls should be provided to prevent the need for ventilation.
 - No respiratory protection is needed if ventilation/extraction is adequate, otherwise wear approved dust mask, NIOSH N95 (US) or type FFP1 (EN143) dust masks.
 - Wear protective gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and standard EN 374.
 - Wear safety glasses approved to standard for ANSI Z87 or EN 166.

SECTION 8 Exposure controls/personal protection (continued...)

- Wear suitable protective clothing in accordance with good chemical hygiene practices.



Gloves



Safety Glasses



Lab Coat

SECTION 9 Physical and chemical properties

Direct TIBC Buffer Physical state: Liquid.

Color: Clear.

Odor: No information available.

Odor threshold: No information available.

pH value: No information available.

Vapor pressure: No information available. Vapor density: No information available.

Boiling point (°C): Not applicable.

Melting point (°C): No information available. Solubility in water :No information available. Specific gravity :No information available

Direct TIBC Color Reagent

Physical state: Liquid. Color: Dark purple.

Odor: No information available.

Odor threshold: No information available.

pH value: No information available.

Vapor pressure: No information available.



Vapor density: No information available.

Boiling point (°C): Not applicable.

Melting point (°C): No information available.

Solubility in water: Soluble.

Specific gravity: No information available

SECTION 10 Stability and reactivity

Chemical stability: Stable under normal conditions.

Incompatible materials: None known.

Hazardous decomposition products : None known.

Conditions to avoid :Excess heat.

Possibility of hazardous reactions: Hazardous polymerization does not occur.

SECTION 11 Toxicological information

Chronic effects

Direct TIBC Buffer: Experiments have shown reproductive toxicity effects on

laboratory animals. May cause adverse kidney effects.

Direct TIBC Color Reagent: None known.

Carcinogenicity

Direct TIBC Buffer: There are no known carcinogenic chemicals in this product.

Direct TIBC Color Reagent: Thiourea - reasonably anticipated to be a human

carcinogen.

SECTION 12 Ecological information

12.1 Toxicity

- Quantitative data on the toxic effects of this product is not available.

12.2 Persistence and degradability

- The test kit contains plastic and other components that are not readily degradable.

12.3 Bioaccumulation Potential

- No information available

12.4 Mobility in soil

- No information available

12.5 Results of PBT and vPvB assessment

- Not a PBT according to REACH Annex XIII
- PBT/vPvB assessment not available

12.6 Other Adverse Effects

- To the best of our knowledge, the properties of this material have not been fully evaluated.
- On available data, substance is not harmful to the environment.

SECTION 13 Disposal considerations

Waste disposal

Contaminated instruments and surfaces should be disinfected in accordance with your employer's chemical-specific and universal/ standard precautions.

Dispose in accordance with all applicable regulations.

SECTION 14 Transport information

14.1 UN Number

- Not classified as hazardous for transport

14.2 UN Proper Shipping Name

- Not applicable

14.3 Transport hazard class(es)



- Not applicable
- 14.4 Packing group
 - Not applicable
- 14.5 Environmental hazards
- Not Classified
- 14.6 Special precautions for user
- Not Classified
- 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code
- Not Classified
- 14.8 Domestic Surface Transport (US DOT)
- Proper Shipping Name: Not applicable
- DOT UN No.: Not applicable
- DOT Hazard Class: Not applicable

SECTION 14 Transport information (continued...)

- DOT Packing Group: Not applicable
- 14.9 International Road/Rail (ADR/RID)
 - Proper Shipping Name: Not applicable
 - ADR UN No.: Not applicable
 - ADR Hazard Class: Not applicable
 - ADR Packing Group: Not applicable
 - Tunnel Code: Not applicable
- 14.10 Ocean/Sea (IMO/IMDG)
 - Proper Shipping Name: Not applicable
 - IMDG UN No.: Not applicable
- IMDG Hazard Class: Not applicable
- IMDG Packing Group: Not applicable
- 14.11 Air (ICAO/IATA)
 - Proper Shipping Name: Not applicable
 - ICAO Un No.: Not applicable
 - ICAO Hazard Class: Not applicable
 - ICAO Packing Group: Not applicable

SECTION 15 Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture This Safety Data Sheet is provided in compliance with the EC Directive 1907/2006- 453/2010.
 - This Safety Data Sheet is provided in compliance with the EC Directive 1907/2006- 453/2010, WHMIS 2015 requirements as specified in the Hazardous Products Act (HPA) and the Hazardous Products Regulations (HPR), and with the OSHA Hazard Communication Standard 29 CFR 1910.1200.
 - Regulation (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) applies in Europe.

SECTION 16 Other information

Date of Preparation: September 2019

Revision: Rev. 0 Replaces: New issue

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