micromeritics®

# SAFETY DATA SHEET

# Tween 20

**Date of Preparation:** 06/30/2014

**SDS #: 004-16263-00MSDS**

## SECTION 1: IDENTIFICATION

**Product Identification:** Tween 20
**CAS Number:** Not applicable
**Catalog Numbers:** BP337-100, BP337-500
**Other Designations:** Campul, PMSL
**Volumes:** None
**Recommended Use:** Surfactant
**Restrictions:** For laboratory use only.
**Supplier Information:**

| | | |
|---|---|---|
| Micromeritics Instrument Corp. | Contact: | Human Resources |
| 4356 Communications Drive | Phone: | (770) 662-3620 |
| Norcross, GA 30093-2901 USA | Fax: | (770) 662-3696 |

**Manufacturer:** Fisher Scientific, 1 Reagent Lane, Fair Lawn, NJ. 07410 (201) 796-7100, (800) 424-9300

## SECTION 2: HAZARDS IDENTIFICATION

**GHS Classification:** Not applicable
**Signal word:** Not applicable
**Hazard Statements:**
H303: May be harmful if swallowed
H320: Causes eye irritation
H335: May cause respiratory irritation

**Pictograms:** Not applicable

**Precautionary Statements:** Not applicable

**Potential Health Effects**
**Appearance:** Light amber to amber liquid
**Caution –** May cause eye and skin, May cause respiratory and digestive tract irritation.
**Target Organs:** none
**Potential Health Effects**
**Eye:** May cause mild eye irritation
**Skin:** May cause skin irritation

**Ingestion:** May cause gastrointestinal irritation with nausea, vomiting and diarrhea.
**Inhalation:** May cause respiratory tract irritation
**Chronic Effects:** Adverse reproductive effects have been reported in animals.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

| Ingredient Name | CAS Number | % wt |
|---|---|---|
| Polysorbate 20 | 9005-64-5 | 100 |

**Trace Impurities:**

| | OSHA PEL | | ACGIH TLV | | NIOSH REL | | NIOSH |
|---|---|---|---|---|---|---|---|
| **Ingredient** | **TWA** | **STEL** | **TWA** | **STEL** | **TWA** | **STEL** | **IDLH** |
| None | none estab. | none estab. | none estab. | none estab. | none estab. | none estab. | none estab. |

## SECTION 4: FIRST-AID MEASURES

**Eyes:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
**Skin:** Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.
**Ingestion:** Never give anything by mouth to an unconscious person. Get medical aid. Do not induce vomiting. If victim is conscious and alert, give 2-4 cups of milk or water.
**Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other systems appear.
**Notes to Physician:** Treat symptomatically and supportively.

## SECTION 5: FIRE-FIGHTING MEASURES

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.
**Extinguishing Media:** In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**Protective Precautions, Protective:** Avoid raising and breathing dust, and provide adequate ventilation.
**Equipment and Emergency Procedures:** As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator, and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).

**Environmental Precautions:** Take steps to avoid release into the environment, if safe to do so.

**Steps to Be Taken In Case Material Is Released Or Spilled:** Contain spill and collect, as appropriate. Transfer to a chemical waste container for disposal in accordance with local regulations.

## SECTION 7: HANDLING AND STORAGE

**Precautions to Be Taken in Handling:** Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid prolonged or repeated exposure.
**Precautions to Be Taken in Storing**: Keep container tightly closed. Store in accordance with information listed on the product insert.
**Hazard Label Information:** Avoid contact with skin and eyes. Do not reuse this container. Use with adequate ventilation. Wash thoroughly after handling.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**OSHA Vacated PEL's:** Polysorbate 20: No OSHA Vacated PELs are listed for this chemical.
**Personal Protective Equipment**
**Eyes:** Wear safety glasses and chemical goggles if splashing is possible. Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
**Skin:** Wear appropriate protective gloves and clothing to prevent skin exposure. Wear appropriate protective gloves to prevent skin exposure.
**Clothing:** Wear appropriate protective clothing to prevent skin exposure.
**Respirators:** Wear a NIOSH/MSHA or European Standard EN 149 approved full-face piece airline respirator in the positive pressure mode with emergency escape provisions. Follow the NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
**Control of environmental exposure:** Do not let product enter drains.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**Flash Point:** > 150 deg C (> 302.00 deg F)
**Autoignition Temperature:** Not Applicable
**Explosion Limits, Lower:** Not Available
**Upper:** Not Available

**Physical State:** Liquid
**Appearance:** Light amber to amber
**Odor:** None reported
**pH:** Not available
**Vapor Pressure:** Not available
**Vapor Density:** Not available
**Evaporation Rate:** Not available
**Viscosity:** Not available

**Boiling Point:** > 100 ˚C
**Freezing/Melting Point:** Not available
**Decomposition Temperature:** Not available
**Solubility:** 100 g/l
**Specific Gravity / Density:** 1.1060
**Molecular Formula:** C58H114O26
**Molecular Weight:** 1226.7824

## SECTION 10: STABILITY AND REACTIVITY

**Chemical Stability:** Stable under normal temperatures and pressures.
**Conditions to Avoid:** Incompatible materials.
**Incompatibilities with other Materials:** Oxidizers
**Hazardous Decomposition Products:** Carbon monoxide, carbon dioxide.
**Hazardous Polymerization:** Has not been reported.

## SECTION 11: TOXICOLOGICAL INFORMATION

**RTECS#:**
**CAS#:** 9005-64-5: TR7400000
**LD50 / LC50:**
**CAS#:** 9005-64-5:
Oral, mouse: LD50 > 33 mg/kg;
Oral, rat: LD50 = 367000 µL/kg;
**Carcinogenicity:**
CAS#: 9005-64-5: Not listed by ACGIH, IARC, NTP, or CA Prop. 65
**Epidemiology:** No information available
**Teratogenicity:** No information available
**Reproductive Effects:** Adverse reproductive effects have occurred in experimental animals.
**Mutagenicity:** No information available
**Neurotoxicity:** No information available

## SECTION 12: ECOLOGICAL INFORMATION

**Ecotoxicity:** No data available. No information available.
**Environmental:** No information available.
**Physical:** No information available.
**Other:** None.

## SECTION 13: DISPOSAL CONSIDERATIONS

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.
**RCRA P-Series:** None listed
**RCRA U- Series:** None listed

**Waste treatment methods**
**Product:** Offer surplus and non- recyclable solutions to a licensed disposal company.
**Contaminated packaging:** Dispose of as unused product.

## SECTION 14: TRANSPORT INFORMATION

**DOT Transportation Data (49 CFR 172.101):**

**Shipping Name:** Not regulated
**Shipping Symbols:** Not Applicable
**Hazard Class:** Not regulated
**ID No.:** Not regulated
**Packing Group:** Not Applicable
**Label:** Not Applicable
**Special Provisions (172.102):**
Not Applicable

**Packaging Authorizations**
**a) Exceptions:** Not Applicable
**b) Non-bulk Packaging:** Not Applicable
**c) Bulk Packaging:** Not Applicable

**Quantity Limitations**
**a) Passenger, Aircraft, or Railcar:** Not Applicable
**b) Cargo Aircraft Only:** Not Applicable

**Vessel Stowage Requirements**
**a) Vessel Stowage:** Not Applicable
**b) Other:** Not Applicable

Canadian TDG Hazard Class & PIN – Not regulated

## SECTION 15: REGULATORY INFORMATION

**UNITED STATES FEDERAL:**
**TSCA**
CAS#: 9005-64-5 is listed on the TSCA inventory.
**Health & Safety Reporting List:** None of the chemicals are on the Health and Safety Reporting List
**Chemical Test Results:** None of the chemicals in this product are under a Chemical Test Rule
**Section 12b:** None of the chemicals are listed under TSCA Section 12b.
**TSCA Significant New Use Rule:** None of the chemicals in this material have a SNUR under TSCA
**CERCLA Hazardous Substances & Corresponding RQ's:** None of the chemicals in this material have an RQ
**SARA Section 302 Extremely Hazardous Substances:** None of the chemicals in this product have a TPQ
**SARA Codes:** CAS# 6381-92-6: immediate

**Section 313:** No chemicals are reportable under Section 313

**Clean Air Act:**

This material does not contain any hazardous air pollutants
This material does not contain any Class 1 Ozone depletors
This material does not contain any Class 2 Ozone depletors

**Clean Water Act:**

None of the chemicals in this product are listed as Hazardous Substances under the CWA.
None of the chemicals in this product are listed as Priority Pollutants under the CWA.
None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

**OSHA:** None of the chemicals in this product are considered highly hazardous by OSHA.

**State:**

CAS#: 9005-64-5 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

**California Prop 65:** California No significant risk Level: None of the chemicals in this product are listed.

**EUROPEAN / INTERNATIONAL REGULATIONS:**

**European Labeling in Accordance with EC Directives**

**Hazard Symbols:** Not available.

**Risk Phrases:**

**Safety Phrases:**

**WGK (Water Danger / Protection):**

CAS#: 9005-64-5 :1

**Canada – DSL / NDSL**

**Canada – WHMIS**

## SECTION 16: OTHER INFORMATION

**Prepared By:** Zuniga, A.

**Revision Notes:** Not Applicable

**Additional Hazard Rating Systems:** Not Applicable

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