



Cover Sheet



INSTRUMENT CORPORATION
 ONE MICROMERITICS DR.
 NORCROSS, GA 30093-1877 U.S.A.

MSDS, Tween 20

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Micromeritics Material Safety Data Sheet

Title : Tween 20
Date of Preparation : 08/03/2006

MSDS No. : 004/16263/00MSDS
Revision : -

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: Tween 20

Chemical Formula: n/a

Catalog Numbers: BP337-100, BP337-500

Other Designations: Campul; PMSL

Supplier: Micromeritics Instrument Corp.
1 Micromeritics Dr.
Norcross, GA 30093-1877 USA

Contact: Human Resources
Phone: (770) 662-3620
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Manufacturer: Fisher Scientific, 1 Reagent Lane, Fair Lawn, NJ. 07410
(201) 796-7100, (800) 424-9300

Section 2 - Composition / Information on Ingredients

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

Trace Impurities:	OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH IDLH
	TWA	STEL	TWA	STEL	TWA	STEL	
Ingredient							

Section 3 - Hazards Identification

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

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.

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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 cupfuls 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.

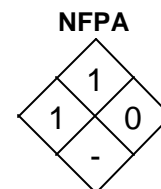
Flash Point: > 150 deg C (> 302.00 deg F)

Autoignition Temperature: Not Applicable

Explosion Limits, Lower: Not Available

Upper: Not Available

NFPA Rating: (estimated) Health: 1; Flammability: 1; Instability: 0



Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills / Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

Section 7 - Handling and Storage

Handling: Use with adequate ventilation. Avoid prolonged or repeated contact with skin. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

Storage: Keep from freezing. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Store at around 20°C

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Use adequate ventilation to keep airborne concentrations low. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits:

Chemical Name	ACGIH	NIOSH	OSHA – Final PELs

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Tween 20

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Polysorbate 20

None listed

None listed

None listed

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.

Section 9 - Physical and Chemical Properties

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 deg 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

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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

Section 14 - Transport Information

United States DOT: Not regulated as a hazardous material.

Canada TDG: 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:

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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: J. Pittman

Revision Notes:

Disclaimer: *The information and recommendations set forth herein are taken from sources believed to be accurate as of the date hereof; however the original manufacturer, Fisher Scientific, makes no warranty with respect to accuracy of the information or the suitability of the recommendations, and assumes no liability to any user thereof.*

MSDS Creation Date (by Fisher Scientific): 07-15-1999

Last Revision Date (by Fisher Scientific): Revision #6 – 06-19-2006