



# MATERIAL SAFETY DATA SHEET

## 1. Chemical Product and Company Identification

Description: Turbidity Calibration Standard  
Product Code: Signet Part Numbers 3822-4001, 3822-4003  
Product Type: Amco Clear Microspheres: stabile premixed polymer standards  
Application: Calibration of turbidity instrument

### Manufacturer/Supplier Information

MSDS prepared by:  
Georg Fischer Signet LLC  
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El Monte, California 91731

Date Prepared: July 29, 2008  
For additional health, safety or regulatory information, call (626) 571-2770

**For Chemical Emergency  
Spill Leak Fire Exposure or Accident  
Call CHEMTREC Day or Night**

**DOMESTIC NORTH AMERICA 800-424-9300  
INTERNATIONAL, CALL 703-527-3887 (collect calls accepted)**

## 2. Chemical Content

Chemical	CAS No.	% w/v
Water, deionized	7732-18-5	>99.5%
Sodium Azide	26628-22-8	<0.025%
Confidential Polymer		<0.2%

And one of the following surfactants

Triton X-100	<0.02%
Sodium Dodecyl Sulfate (SDS)	<0.02%
Tergitol	<0.02%

## 3. Hazards Identification

Hazardous Ingredient(s):	OSHA PEL	ACGIH TLV	Other Limits Recommended
Sodium Azide	0.1 ppm skin	0.1 ppm ceiling	None
CAS #: 26628-22-8 as HN <sub>3</sub>	0.3 mg/m <sup>3</sup> as NaN <sub>3</sub>		

**OTHER LIMITS RECOMMENDED:** see toxicity data, section 5

## 4. Health Hazard Effects and First Aid Measures

**ROUTES OF ENTRY:** Inhalation: No Skin: Yes Ingestion: Yes  
**HEALTH HAZARDS (ACUTE & CHRONIC):** Not expected to be a health hazard.  
**CARCINOGENICITY:** OSHA? NTP? IARC Monographs? Not listed  
**TOXICITY DATA (RTECS, 1986) Sodium Azide:**

Oral rat LD50: 27mg/kg  
Skin rabbit LD50: 20mg/kg

**SIGNS AND SYMPTOMS OF EXPOSURE:** Nausea, vomiting, headache, restlessness, and diarrhea.  
**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:** None

## **EMERGENCY FIRST AID PROCEDURES:**

**Eye Exposure:** Wash eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

**Skin Exposure:** In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately

**Ingestion:** If swallowed, induce vomiting immediately by giving two glasses of water, or milk if available and sticking finger down throat. Call a physician immediately. Never give anything by mouth to an unconscious person.

**Inhalation:** Not applicable.

## **5. Fire Fighting Procedures**

**FLASH POINT (METHOD USED):** Not flammable

**FLAMMABLE LIMITS:**       **LEL:** Not applicable       **UEL:** Not applicable

**FIRE EXTINGUISHING MEDIA:** Suitable to cause of fire

**SPECIAL FIRE FIGHTING PROCEDURES:** Suitable to cause of fire

**UNUSUAL FIRE AND EXPLOSIVE HAZARDS:** None

## **6. Handling and Storage**

**Steps to be taken if material is released or spilled:** Wear standard laboratory protective gear and use standard laboratory safety equipment. Absorb solution with inert material.

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:** Store away from extremes in temperature. Prevent from freezing. Freezing causes flocculation. Do not break seal. If seal is broken, the value of the standard is no longer valid. Do not shake. Shaking induces air bubbles and increases the turbidity.

**OTHER PRECAUTIONS:** None

## **7. Exposure Controls & Personnel Protection**

**RESPIRATORY PROTECTION:** Not necessary in normal use.

**VENTILATION SYSTEMS:** General mechanical ventilation satisfactory in normal use.

**EYE PROTECTION:** Safety glasses

**SKIN PROTECTION:** Rubber gloves

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:** Lab coat, eye wash, safety shower

**WORK/HYGIENIC PRACTICES:** Wash well after handling. Avoid skin contact.

## **8. Physical and Chemical Properties**

**BOILING POINT:** 100° C, (212° F)

**SOLUBILITY IN WATER:** Infinite in water

**VAPOR PRESSURE (mm Hg):** 760mm

**MELTING POINT:** 0° C, (32° F)

**VAPOR DENSITY (AIR=1):** 0.95

**SPECIFIC GRAVITY (H<sub>2</sub>O = 1):** 1.00

**APPEARANCE AND ODOR:** clear to slightly turbid solution with no odor

**EVAPORATION RATE (BUTYL ACETATE = 1):** NA

## **9. Stability and Reactivity**

**STABILITY:** Stable. May flocculate at temperatures below 0°C

**CONDITIONS TO AVOID:** Extremes in temperature.

**INCOMPATIBILITIES (MATERIALS TO AVOID):** Water reactive chemicals

**HAZARDOUS DECOMPOSITION PRODUCTS:** None

**HAZARDOUS POLYMERIZATION:** Will not occur

## **10. Toxicological Information**

## **11. Ecological Information**

**12. Disposal Considerations:**

**WASTE DISPOSAL METHOD:** DISPOSE OF IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS.

**13. Transportation Information**

**D.O.T.:**

**D.O.T. Proper Shipping Name:** Not Currently Regulated

**DOT Hazard Class:** NA

**DOT Subsidiary Risk:** NA

**14. Regulatory Information - (NOT ALL INCLUSIVE)**

**U.S. Federal Regulations:**

**O.S.H.A.:** This product meets the criteria for a hazardous substance as defined in the Hazard Communication Standard. (29 CFR 1910.1200)

**E.P.A.:**

**S.A.R.A. Title III Section 311/312 Categorization (40 CFR 370):** Immediate (Acute) Health Hazard

Delayed (Chronic) Health Hazard

**S.A.R.A. Title III Section 313 (40 CFR 372):** This product contains a chemical(s) subject to the reporting requirements of Section 313 of Title III of SARA.

Formaldehyde

**302 (EHS) TPQ (40 CFR 355):** Formaldehyde 500 lbs.

**304 CERCLA RQ (40 CFR 302.4):** Formaldehyde 1000 lbs.

**304 EHS RQ (40 CFR 355):** Formaldehyde - RQ 100 lbs

**Clean Water Act (40 CFR 116.4):** Formaldehyde - RQ 100 lbs.

**RCRA:** Contains no RCRA regulated substances.

**C.P.S.C.:** Not applicable

**State Regulations:**

**California Prop. 65:** No Prop. 65 listed chemicals are present in this product.

**Identification of Prop. 65 Ingredient(s):** None

**California Perchlorate Rule CCR Title 22 Chap 33:**

**Trade Secret Registry:** Not applicable

**National Inventories:**

**U.S. Inventory Status:** All ingredients in this product are listed on the TSCA 8(b) Inventory (40 CFR 710).

**TSCA CAS Number:** Not applicable.

**15. Disclaimer:**

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**Revision**

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