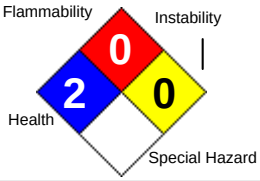
SAFETY DATA SHEET
Jasco TSP Substitute

HEALTH	2
FLAMMABILITY	0
PHYSICAL	0
PPE	X



Printed: 03/14/2013
Revision: 03/12/2013
Supercedes Revision: 12/11/2008

1. PRODUCT AND COMPANY IDENTIFICATION

Product Code: 239.2

Product Name: Jasco TSP Substitute

Manufacturer Information

Company Name: W. M. Barr
2105 Channel Avenue
Memphis, TN 38113

Phone Number: (901)775-0100

Emergency Contact: 3E 24 Hour Emergency Contact (800)451-8346

Information: W.M. Barr Customer Service (800)398-3892

Web site address: www.wmbarr.com

Preparer Name: W.M. Barr EHS Dept (901)775-0100

Synonyms

QJTS00408, GJTS00410

2. HAZARDS IDENTIFICATION

GHS Classification

GHS Classification	Placard	Key word	GHS Hazard
Acute Toxicity: Oral, Category 4	Exclamation point	Warning	Harmful if swallowed
Skin Corrosion/Irritation, Category 1B	Corrosive	Danger	Causes severe skin burns and eye damage
Serious Eye Damage/Eye Irritation, Category 1	Corrosive	Danger	Causes serious eye damage
Target Organ Systemic Toxicity (single exposure), Category 3	Exclamation point	Warning	May cause respiratory irritation,or may cause drowsiness and dizziness

GHS Hazard Phrases

H332: Harmful if inhaled.
H302: Harmful if swallowed.
H312: Harmful in contact with skin.
H319: Causes serious eye irritation.
H314: Causes severe skin burns and eye damage.
H318: Causes serious eye damage.
H335: May cause respiratory irritation.

GHS Precaution Phrases

P271: Use only outdoors or in a well-ventilated area.
P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P264: Wash hands thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P280: Wear protective gloves/clothing and eye/face protection as specified by the manufacturer/supplier or the competent authority.
P362+364: Take off contaminated clothing and wash it before reuse.
P260: Do not breathe dust/fume/gas/mist/vapours/spray.

GHS Response Phrases

P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312: Call a POISON CENTER or doctor/physician if you feel unwell.
P301+312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P330: Rinse mouth.
P302+352: IF ON SKIN: Wash with plenty of soap and water.
P321: Specific treatment (see ... on this label) ... reference to supplemental first aid instruction - if immediate administration of antidote is required.
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+313: If eye irritation persists, get medical advice/attention.
P303+361+353: IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
P363: Wash contaminated clothing before reuse.
P301+330+331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P310: Immediately call a POISON CENTER or doctor/physician.
P309+311: Call a POISON CENTER or doctor/physician if exposed or you feel unwell.

GHS Storage and Disposal Phrases

P501: Dispose of contents/container to ... (in accordance with local/regional/national/international regulation).
P405: Store locked up.
P403+233: Store container tightly closed in well-ventilated place - if product is as volatile as to generate hazardous atmosphere.

Potential Health Effects (Acute and Chronic)

INHALATION ACUTE EXPOSURE EFFECTS:
May cause dizziness; headache; irritation of the respiratory system; nausea and vomiting.

SKIN CONTACT ACUTE EXPOSURE EFFECTS:
May cause irritation, itching, redness; swelling; inflammation; discomfort or pain; possible burns. May cause more severe effects on covered skin.

EYE CONTACT ACUTE EXPOSURE EFFECTS:
This material is an eye irritant. May cause irritation; redness and swelling of the conjunctiva; excess blinking and tear production; possible burns, eye damage, blindness.

INGESTION ACUTE EXPOSURE EFFECTS:
Moderately toxic if ingested. Small amounts swallowed incidentally are not likely to cause injury, however, larger amounts may cause injury.

CHRONIC EXPOSURE EFFECTS:
Effects on animals have been reported to include the blood (hemolysis) and secondary effects on the kidney and liver. May cause skin and eye damage.

OSHA Regulatory Status:

This material is classified as hazardous under OSHA regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components (Chemical Name)	CAS #	Concentration	RTECS #
1. Diethylene glycol monobutyl ether {2-(2-Butoxyethoxy)ethanol {(a glycol ether)}	112-34-5	<10.0 %	KJ9100000

Hazardous Components (Chemical Name)	CAS #	Concentration	RTECS #
2. Silicic acid (H2SiO3), Disodium salt {Sodium metasilicate (pentahydrate)}	6834-92-0	1.0 -5.0 %	VV9275000
3. Sodium xylenesulfonate	1300-72-7	1.0 -5.0 %	ZE5100000
4. Alcohol ethoxylate (Alcohols, C9-11, Ethoxylated)	68439-46-3	< 5.0 %	AZ8100000

4. FIRST AID MEASURES

Emergency and First Aid Procedures

Skin:

Remove contaminated clothing. Immediately wash skin thoroughly with large amounts of water and mild soap, if available. Seek medical attention if irritation develops or persists.

Eyes:

Immediately begin to flush eyes with water, remove any contact lens. Continue to flush the eyes for at least 15 minutes. Seek medical attention.

Inhalation:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.

Ingestion:

If swallowed, do NOT induce vomiting. Seek immediate medical attention. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

Signs and Symptoms Of Exposure

See Potential Health Effects.

5. FIRE FIGHTING MEASURES

Flash Pt: No data.

Explosive Limits: LEL: No data. UEL: No data.

Autoignition Pt: No data available.

Fire Fighting Instructions

Use NIOSH/MSHA approved positive pressure self-contained breathing apparatus when any material is involved in a fire.

Flammable Properties and Hazards

Flashpoint: No flash to boiling. Will not burn.

Hazardous Combustion Products

Carbon dioxide, carbon monoxide

Suitable Extinguishing Media

Carbon dioxide, dry powder, or foam.

Unsuitable Extinguishing Media

None known.

6. ACCIDENTAL RELEASE MEASURES

Steps To Be Taken In Case Material Is Released Or Spilled

Isolate the immediate area. Prevent unauthorized entry. Stay upwind, out of low areas, and ventilate closed spaces before entering. Do not touch or walk through spilled material. Stop leak if you can do so without risk. Prevent entry into waterways, sewers, or confined areas. A vapor suppressing foam may be used to reduce vapors. Absorb or cover with dry earth, sand, or other non-combustible material and transfer to compatible containers. For large spills, dike ahead of the spill.

7. HANDLING AND STORAGE

Precautions To Be Taken in Handling

Read carefully all cautions and directions on product label before use. Since empty container retains residue, follow all label warnings even after container is empty. Dispose of empty container according to all regulations. Do not reuse this container.

Precautions To Be Taken in Storing

Keep container tightly closed when not in use. Store in a cool, dry place. Do not store near flames or at elevated temperatures.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Hazardous Components (Chemical Name)	CAS #	OSHA PEL	ACGIH TLV	Other Limits
1. Diethylene glycol monobutyl ether {2-(2-Butoxyethoxy)ethanol {(a glycol ether)}	112-34-5	No data.	No data.	No data.
2. Silicic acid (H2SiO3), Disodium salt {Sodium metasilicate (pentahydrate)}	6834-92-0	No data.	No data.	No data.
3. Sodium xylenesulfonate	1300-72-7	No data.	No data.	No data.
4. Alcohol ethoxylate (Alcohols, C9-11, Ethoxylated)	68439-46-3	No data.	No data.	No data.

Respiratory Equipment (Specify Type)

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

If the work area is not properly ventilated to keep airborne levels below their exposure limits, you must use a properly fitted and maintained NIOSH approved respirator for organic vapors. A dust mask does not provide protection against vapors.

Eye Protection

Safety glasses, chemical goggles, or face shields are recommended to safeguard against potential eye contact, irritation, or injury. Contact lenses should not be worn while working with chemicals.

Protective Gloves

Nitrile, neoprene, natural rubber

Other Protective Clothing

Various application methods can dictate use of additional protective safety equipment, such as impermeable aprons, etc., to minimize exposure.

Engineering Controls (Ventilation etc.)

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Use only with adequate ventilation to prevent buildup of vapors. Do not use in areas where vapors can accumulate and concentrate, such as basements, bathrooms or small enclosed areas. Whenever possible, use outdoors in an open air area. If using indoors open all windows and doors and maintain a cross ventilation of moving fresh air across the work area. If strong odor is noticed or you experience slight dizziness, headache, nausea or eye-watering -- STOP -- ventilation is inadequate. Leave area immediately and move to fresh air.

Work/Hygienic/Maintenance Practices

Wash hands thoroughly after use and before eating, drinking, or smoking. Do not eat, drink, or smoke in the work area. Discard any clothing or other protective equipment that cannot be decontaminated.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical States: [ ] Gas [X] Liquid [ ] Solid

Melting Point: No data.

Boiling Point: > 200 F

Autoignition Pt: No data.

Flash Pt: No data.

Specific Gravity (Water = 1): 1.0413 - 1.0713

Vapor Pressure (vs. Air or mm Hg): No data.

Vapor Density (vs. Air = 1): > air

Evaporation Rate: < 1 (BuAC=1)

Solubility in Water: Complete

Percent Volatile: 93 % by weight.

VOC / Volume: 0 % WT

Viscosity: 5 CPS

pH: 12.7 - 13.4

Appearance and Odor

Appearance: Blue, Free and Clear

10. STABILITY AND REACTIVITY

Stability: Unstable [ ] Stable [X]

Conditions To Avoid - Instability

No data available.

Incompatibility - Materials To Avoid

Strong oxidizers and acids.

Hazardous Decomposition Or Byproducts

Carbon dioxide and carbon monoxide

Possibility of Hazardous Reactions: Will occur [ ] Will not occur [X]

Conditions To Avoid - Hazardous Reactions

No data available.

11. TOXICOLOGICAL INFORMATION

Toxicological Information

CAS# 112-34-5:
Acute toxicity, LD50, Oral, Rat, 5660. MG/KG.
Result:
Brain and Coverings: Other degenerative changes.
Biochemical:Metabolism (intermediary): Other.
- Dow Chemical Company Reports., Dow Chemical USA, Health and Environment Research, Toxicology Research Lab, Midland, MI 48640, Vol/p/yr: MSD-41,

Standard Draize Test, Eyes, Species: Rabbit, 20.00 MG, Severe.
Result:
Behavioral: Anticonvulsant.
- American Journal of Ophthalmology., Ophthalmic Pub. Co., 435 N. Michigan Ave., Suite 1415, Chicago, IL 60611, Vol/p/yr: 29,1363, 1946

Standard Draize Test, Eyes, Species: Rabbit, 20.00 MG, 24 H, Moderate.
Result:

Behavioral: Abuse.
Endocrine: Differential effect of sex or castration on observed toxicity.
- Prehled Prumyslove Toxikologie, Marhold, J., Organicke Latky, Prague Czechoslovakia, Vol/p/yr: -,635, 1986

CAS# 6834-92-0:
Acute toxicity, LD50, Oral, Rat, 1153. MG/KG.
Result:
Gastrointestinal:Ulceration or bleeding from stomach.
Gastrointestinal:Ulceration or bleeding from duodenum.
Gastrointestinal:Ulceration or bleeding from small intestine.
- Toxicology Letters., Elsevier Science Pub. B.V., POB 211, 1000 AE, Amsterdam 1000 AE Netherlands, Vol/p/yr: 31(Suppl),, 1986

Standard Draize Test, Skin, Human, 250.0 MG, 24 H, Severe.
Result:
Effects on Embryo or Fetus: Extra embryonic structures (e.g., placenta, umbilical cord).
Effects on Embryo or Fetus: Other effects to embryo.
Specific Developmental Abnormalities: Musculoskeletal system.
- Toxicology and Applied Pharmacology, Academic Press, Inc., 1 E. First St., Duluth, MN 55802, Vol/p/yr: 31,481, 1975

Hazardous Components (Chemical Name)	CAS #	NTP	IARC	ACGIH	OSHA
1. Diethylene glycol monobutyl ether {2-(2-Butoxyethoxy)ethanol {(a glycol ether)}	112-34-5	n.a.	n.a.	n.a.	n.a.
2. Silicic acid (H2SiO3), Disodium salt {Sodium metasilicate (pentahydrate)}	6834-92-0	n.a.	n.a.	n.a.	n.a.
3. Sodium xylenesulfonate	1300-72-7	n.a.	n.a.	n.a.	n.a.
4. Alcohol ethoxylate (Alcohols, C9-11, Ethoxylated)	68439-46-3	n.a.	n.a.	n.a.	n.a.

12. ECOLOGICAL INFORMATION

Results of PBT and vPvB assessment

CAS# 112-34-5:
LC50, Water Flea (Daphnia magna), 2850. MG/L, 24 H, Intoxication,, Water temperature: 20 C - 22 C C, pH: 7.70, Hardness: 16.00 dH.
Result:
Sex Effects.
- Results of the Damaging Effect of Water Pollutants on Daphnia magna (Befunde der Schadwirkung Wassergefahrdender Stoffe Gegen Daphnia magna), Bringmann, G., and R. Kuhn, 1977

CAS# 68439-46-3:
LC50, Fathead Minnow (Pimephales promelas), 11000. UG/L, 96 H, Mortality, Water temperature: 22 C C.
Result:
Sex Effects.
- Acute Toxicity and Structure-Activity Relationships of Nine Alcohol Ethoxylate Surfactants to Fathead Minnow and Daphnia magna, Wong, D.C.L., P.B. Dorn, and E.Y. Chai, 1997

LC50, Fathead Minnow (Pimephales promelas), embryo(s), 4.870 MG/L, 28 D, Mortality, Water temperature: 21 C - 25 C C, pH: 7.60, Hardness: 10.00 MG/L.
Result:
Age Effects.

- Effects of a Homologous Series of Linear Alcohol Ethoxylate Surfactants on Fathead Minnow Early Life Stages, Lizotte, R.E.,Jr., D.C.L. Wong, P.B. Dorn, and J.H.,Jr. Rodgers, 1999

Effective concentration to {0} % of test organisms, Fathead Minnow (Pimephales promelas), embryo(s), 10.27 MG/L, 16 - 19 D, Mortality, Water temperature: 21 C - 25 C C, pH: 7.60, Hardness: 10.00 MG/L.
Result:
Age Effects.
- Effects of a Homologous Series of Linear Alcohol Ethoxylate Surfactants on Fathead Minnow Early Life Stages, Lizotte, R.E.,Jr., D.C.L. Wong, P.B. Dorn, and J.H.,Jr. Rodgers, 1999

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method

Dispose of in accordance with local, state, and federal laws.

14. TRANSPORT INFORMATION

Globally Harmonized System of Classification and Labelling

Acute Toxicity: Oral, Category 4 - Warning! Harmful if swallowed
Skin Corrosion/Irritation, Category 1B - Danger! Causes severe skin burns and eye damage
Serious Eye Damage/Eye Irritation, Category 1 - Danger! Causes serious eye damage
Target Organ Systemic Toxicity (single exposure), Category 3 - Warning! May cause respiratory irritation,or may cause drowsiness and dizziness

LAND TRANSPORT (US DOT)

DOT Proper Shipping Name Compound Cleaning Liquid

Additional Transport Information

For D.O.T. information, contact W.M. Barr Technical Services at 1-800-398-3892.

The shipper / supplier may apply one of the following exceptions: Combustible Liquid, Consumer Commodity, Limited Quantity, Viscous Liquid, Does Not Sustain Combustion, or others, as allowed under 49CFR Hazmat Regulations. Please consult 49CFR Subchapter C to ensure that subsequent shipments comply with these exceptions.

15. REGULATORY INFORMATION

US EPA SARA Title III

Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
1. Diethylene glycol monobutyl ether {2-(2-Butoxyethoxy)ethanol {(a glycol ether)}	112-34-5	No	No	Yes-Cat. N230	No
2. Silicic acid (H2SiO3), Disodium salt {Sodium metasilicate (pentahydrate)}	6834-92-0	No	No	No	No
3. Sodium xylenesulfonate	1300-72-7	No	No	No	No
4. Alcohol ethoxylate (Alcohols, C9-11, Ethoxylated)	68439-46-3	No	No	No	No

Other US EPA or State Lists

Hazardous Components (Chemical Name)	CAS #	CAA HAP,ODC	CWA NPDES	TSCA	CA PROP.65
1. Diethylene glycol monobutyl ether {2-(2-Butoxyethoxy)ethanol {(a glycol ether)}	112-34-5	HAP	No	Inventory, 4 Test	No
2. Silicic acid (H2SiO3), Disodium salt {Sodium metasilicate (pentahydrate)}	6834-92-0	No	No	Inventory	No
3. Sodium xylenesulfonate	1300-72-7	No	No	Inventory	No
4. Alcohol ethoxylate (Alcohols, C9-11, Ethoxylated)	68439-46-3	No	No	Inventory	No

SARA (Superfund Amendments and Reauthorization Act of 1986) Lists:

Sec.302:	EPA SARA Title III Section 302 Extremely Hazardous Chemical with TPQ. * indicates 10000 LB TPQ if not volatile.
Sec.304:	EPA SARA Title III Section 304: CERCLA Reportable + Sec.302 with Reportable Quantity. ** indicates statutory RQ.
Sec.313:	EPA SARA Title III Section 313 Toxic Release Inventory. Note: -Cat indicates a member of a chemical category.
Sec.110:	EPA SARA 110 Superfund Site Priority Contaminant List

TSCA (Toxic Substances Control Act) Lists:

Inventory:	Chemical Listed in the TSCA Inventory.
5A(2):	Chemical Subject to Significant New Rules (SNURS)
6A:	Commercial Chemical Control Rules
8A:	Toxic Substances Subject To Information Rules on Production
8A CAIR:	Comprehensive Assessment Information Rules - (CAIR)
8A PAIR:	Preliminary Assessment Information Rules - (PAIR)
8C:	Records of Allegations of Significant Adverse Reactions
8D:	Health and Safety Data Reporting Rules
8D TERM:	Health and Safety Data Reporting Rule Terminations
12(b):	Notice of Export

Other Important Lists:

CWA NPDES:	EPA Clean Water Act NPDES Permit Chemical
CAA HAP:	EPA Clean Air Act Hazardous Air Pollutant
CAA ODC:	EPA Clean Air Act Ozone Depleting Chemical (1=CFC, 2=HCFC)
CA PROP 65:	California Proposition 65

International Regulatory Lists:

EPA Hazard Categories:

This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312 as indicated:

[X] Yes [ ] No Acute (immediate) Health Hazard

[ ] Yes [X] No Chronic (delayed) Health Hazard

[ ] Yes [X] No Fire Hazard

[ ] Yes [X] No Sudden Release of Pressure Hazard

[ ] Yes [X] No Reactive Hazard

16. OTHER INFORMATION

Company Policy or Disclaimer

The information contained herein is presented in good faith and believed to be accurate as of the effective date shown above. This information is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. Any use of this data and information must be determined by the user to be in accordance with applicable federal, state and local laws and regulations.

Revision Date: 03/12/2013

N.A.=Not available, N.P.=Not applicable, N.D.=Not determined, N.E.=Not established, N.R.=Not required