STANSBERRY LEADERSHIP CTR 301 NE TUDOR RD LEES SUMMIT, MO 64086-5702



## MATERIAL SAFETY DATA SHEET (MSDS)

 $(MSDS) \\ important safety information - do not discard please route to company safety officer$ 

STANSBERRY LEADERSHIP CTR 301 NE TUDOR RD LEES SUMMIT, MO 64086-5702

MAIL ORDER

G10140110 - PO# P0007731

In order to better facilitate the distribution of compliant product safety information (Material Safety Data Sheets) to our customers, we are requesting your assistance to complete/correct the address information below. Beginning August 2008, Fisher will have the ability to e-mail MSDSs directly to your sites. If you would prefer this method of distribution, please select "Yes" and provide your company's e-mail address(eg).\*

*Yes, E-MAIL MSDSs to address(es):	Fax Number:	Phone Number:	MSDS Address:	Please update your contact information: Account Number:
):				ntact information:

If you have any additional changes for the contact person or address corrections, please send them to Mike Burkhart:

Fax number: 412-490-8098
E-mail: mike.burkhart@thermofisher.com

MSDSs WILL BE SENT UPON FIRST SHIPMENT UNLESS A SUBSTANTIAL REVISION OCCURS. REQUIRED MSDS NOT INCLUBED IN THIS MAILING BYFIL FOLLOW ONDER SEPARATE COVER. THIS PACKET MAY CONTAIN MSDSs FOR PRODUCTS MANUGACTURED BY OTHERS AND DISTRIBUTED BY FISHER SCIENTIFIC OR ACROS ORGANICS. THESE MSDSs WERE PREPARED BY THE MANUFACTURER AND FISHERNACROS DISCLAIMS ALL LIABILITY FOR THEIR CONTENT.

FISHER SCIENTIFIC HAS A COMPLETE LINE OF SAFETY PRODUCTS AND INFORMATION FOR THE LABORATORY. CONTACT YOUR LOCAL FISHER REPRESENTATIVE FOR BROCHURES, CATALOGS AND PRODUCTS. THE ACROS ORGANICS CATALOG OFFERS ONE OF THE BROADEST LINES OF ORGANIC CHEMICALS IN THE WORLD. CONTACT YOUR LOCAL FISHER REPRESENTATIVE TO PLACE AN ORDER, RECEIVE A CATALOG OR A FREE SUBSCRIPTION TO THE ACROS ORGANICS ACTA OR VISIT FISHERSCI.COM OR ACROS.COM.

MSDSs enclosed:

MSDS enclosed for:

45341 Fisher-Fresh Preserved Specimens



Risk Phrases

Chemical Name: CAS#:

57-55-6

Fisher-Fresh Preserved Specimens Material Safety Data Sheet

MSDS# 45341

Section 1 - Chemical Product and Company Identification

MSDS Fisher-Fresh Preserved Specimens

\$1619S, \$1623S, \$1626S, \$1627S, \$1628S, \$1631S, \$1635S, \$1639S, \$1642S, \$1643S, \$1655S, \$1660S, \$1670S, \$1670S, \$1672S, \$1701, \$1702, \$1702MD, \$1704, \$1704MD, \$1704, \$1704MD, \$1707, \$1707, \$1708, \$1711S, \$1711S, \$1715S, \$1711S, \$1722S, \$1800S, \$1820S, \$1825S, \$1826S, \$1826S, \$1827S, \$1828S, \$1841S, \$1844S, \$1845S, \$1850S, \$1852S, \$1852S, \$1854S, \$1875S, \$1888S, \$1890S, \$1890S, \$1800S, \$1826S, \$1800S, \$1826S, \$1 \$1500S, \$1501, \$1502, \$1503S, \$1504, \$1507, \$1508, \$1509S, \$1510S, \$1511S, \$1520S, \$1521S, \$1522S, \$1522S, \$1524S, \$1525S, \$1530S, \$1571S, \$1575S, \$1579S, \$1580S, \$1582S, \$1582S, \$1601, \$1602, \$1603, \$1604, \$1605, \$1606, \$1607, \$1608, \$1609, \$1611S, \$1613S, \$1613S, \$1615S, \$1617S, \$1602, \$1603, \$1604, \$1605, S1360S, S1362S, S1380S, S1400S, S1452S, S1456S, S1462S, S1476S, S1480S, S1494S, S1499S, S1282S, S1300S, S1310S, S1320S, S1322S, S1335S, S1338S, S1338SND, S1340S, S1346S, S1350S, S1199S, S1200S, S1202S, S1207S, S1210S, S1214S, S1221S, S1223S, S1224S, S1230S, S1280S S1126S, S1135S, S1154S, S1161S, S1162S, S1165S, S1185S, S1187S, S1190S, S1191S, S1194S, \$10048, \$10068, \$10108, \$10128, \$10148, \$10158, \$10168, \$10228, \$10308, \$10358, \$10408 \$10418, \$10428, \$10628, \$10648, \$10668, \$10675, \$10908, \$10978, \$11008, \$11018, \$11108, S0001S, S0002S, S0060S, S0085S, S0087S, S0092S, S0110S, S0182S, S0184S, S1001S, S1002

Catalog Numbers:

\$24608, \$24708, \$24908, \$25008, \$25018, \$2502, \$25058, \$25068, \$25078, \$25098, \$25288, \$25328, \$27008, \$27048, \$27708, \$27808, \$27918, \$27958, \$28008, \$28088, \$3001, \$3002, \$30568, \$30628, \$30728, \$30888, \$30988, \$30948, \$31158, \$31208, \$4001, \$4002, \$4003, \$30568, \$30628, \$30728, \$30888, \$30988, \$309948, \$31158, \$31208, \$4001, \$4002, \$4003, \$ S5103S, S5105, S5107S, S5108S, S5109S, S5110S, S5111S, S5112S, S5113, S5114, S5115, S5116 S4131S, S4141S, S4402S, S4403S, S4404S, S5001, S5002, S5091S, S5100S, S5101A, S5102SA, S4011S, S4031S, S4041S, S4047S, S4061S, S4071S, S4081S, S4091S, S4101S, S4111S, S4121S, S2352S, S2354S, S2400S, S2401, S2402, S2403S, S2404S, S2405S, S2406S, S2407S, S2408S

S9255, S9257S, S9263S, S9264S, S9265S, S9267S, S9271S, S9274S, S9277S, S9278S, S9280S, S9224S, S9226S, S9228, S9232S, S9233S, S9234S, S9235S, S9236S, S9237S, S9239S, S9253, S9254, S9205S, S9207S, S9208, S9209, S92091S, S9209S, S9210, S9212S, S9214S, S9215S, S9218S, S9222, S8203, S8203S, S8206S, S8209S, S9001, S9002, S9004, S9101S, S9201, S9202, S9203, S9204S, S5117, S5117S, S5118, S5125, S5125S, S5126S, S5127S, S5128S, S5129S, S5130S, S8202, S8202S,

Synonyms: Single-pac specimens; multi-pac specimens

Company Identification:

For information in the US, call:

201-796-7100 201-796-7100 Fair Lawn, NJ 07410

One Reagent Lane

CHEMTREC Phone Number, US: Emergency Number US:

800-424-9300

Section 2 - Composition, Information on Ingredients

Chemical Name CAS#: Risk Phrases: 43 EINECS#: 200-001-8 0.3 - 0.5Formaldehyde

Hazard Symbols:

Risk Phrases: Chemical Name: CAS#: EINECS#: Hazard Symbols: EINECS#: Hazard Symbols: 231-791-2 90.5-99.6 Water 0.1 - 9.07732-18-5 200-338-0 Propylene glycol

Text for R-phrases: see Section 16

ž



Risk Phrases

40

Section 3 - Hazards Identification

**EMERGENCY OVERVIEW** 

Warning! May cause central nervous system depression. May cause kidney damage. May cause fetal effects based upon respiratory and skin reaction. Causes eye, skin, and respiratory tract irritation. Target Organs: Kidneys, central nervous animal studies. Cannot be made non-poisonous. Contains formaldehyde which can cause cancer. May cause allergic system, liver, respiratory system.

Potential Health Effects

Causes eye irritation.

Causes skin irritation.

Ingestion: depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause central nervous system

Inhalation: Causes respiratory tract irritation.

nasopharyngeal cancer in humans, a rare cancer in developed countries. There is limited evidence that Contains formaldehyde which can cause cancer in humans. There is sufficient evidence that formaldehyde causes

formaldehyde causes cancer of the nasal cavity and paranasal sinuses and strong but not sufficient evidence for

Section 4 - First Aid Measures

eyelids. Get medical aid immediately. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower

removing contaminated clothing and shoes. Discard contaminated clothing in a manner which limits further Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while

Skin:

Eyes:

Ingestion: unconscious person. Get medical aid immediately. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an

Inhalation: give artificial respiration. If breathing is difficult, give oxygen Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing,

Physician:

Notes to

Section 5 - Fire Fighting Measures

Information: General breathing apparatus (SCBA) to prevent contact with thermal decomposition products. Wear appropriate protective clothing to prevent contact with skin and eyes. Wear a self-contained

Extinguishing For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam

Autoignition Not applicable Temperature:

Flash Point: Not applicable

Explosion Limits: Not available Lower:

Explosion Limits: Not available Upper:

NFPA Rating: health: 2; flammability: 1; instability: 0;

Section 6 - Accidental Release Measures

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

Spills/Leaks: runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Provide ventilation. Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid

Section 7 - Handling and Storage

Handling: "Skin, and clothing. Avoid ingestion and inhalation. Use only with adequate ventilation. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes,

Storage: Keep away from sources of ignition. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH Ceili	NIOSH 	OSHA - Final PELS   O.75 ppm TWA;   0.5 ppm Action   Level; 0.75 ppm   TWA; 2 ppm STEL   (Irritant and
Propylene glycol	none listed	none listed	none listed
Water	none listed	listed	none listed

OSHA Vacated PELs: Formaldehyde: 3 ppm TWA (unless specified in 1910.1048) Propylene glycol: None listed Water

**Engineering Controls:** 

adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits. See 29CFR 1910.1048 for regulatory requirements pertaining to all occupational exposures to formaldehyde, i.e., from formaldehyde gas, its solutions, and materials that release formaldehyde. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use

Exposure Limits

Personal Protective Equipment

Eyes: 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 gloves to prevent skin exposure.

> Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a

Section 9 - Physical and Chemical Properties

Physical State: Solid Color: not available

Odor: mild odor

Vapor Pressure: Not available pH: Not available

Vapor Density: >1

Evaporation Rate: Not available Viscosity: Not available

Boiling Point: Not available

Decomposition Temperature: Not available Freezing/Melting Point: Not available

Specific Gravity/Density: Not available Solubility in water: Not available

Molecular Formula: Mixture

Molecular Weight: Not available Section 10 - Stability and Reactivity

Conditions to Avoid: Chemical Stability: Incompatibilities with Other Materials High temperatures, confined spaces. Stable under normal temperatures and pressures.

Hazardous Decomposition Products Strong oxidizing agents Strong oxidizing agents.

Hazardous Polymerization Has not been reported.

Section 11 - Toxicological Information

RTECS#: CAS# 50-00-0: LP8925000 CAS# 57-55-6: TY2000000 CAS# 7732-18-5: ZC0110000

Draize test, rabbit, eye: 750 ug Severe; CAS# 50-00-0: Draize test, rabbit, eye: 750 ug/24H Severe;

Draize test, rabbit, eye: 37% Severe; Draize test, rabbit, eye: 10 mg Severe;

Draize test, rabbit, skin: 50 mg/24H Moderate; Draize test, rabbit, skin: 2 mg/24H Severe;

Inhalation, mouse: LC50 = 505 mg/m3/2H; Inhalation, mouse: LC50 = 454 mg/m3/4H;

Inhalation, rat: LC50 = 578 mg/m3/2H; Inhalation, rat: LC50 = 203 mg/m3;

Oral, mouse: LD50 = 42 mg/kg; Inhalation, rat: LC50 = 250 ppm/2H;

Oral, rat: LD50 = 100 mg/kg; Oral, mouse: LD50 = 500 mg/kg; Oral, mouse: LD50 = 385 mg/kg;

Skin, rabbit: LD50 = 270 uL/kg; Skin, rabbit: LD50 = 270 mg/kg; Oral, rat: LD50 = 500 mg/kg;

LD50/LC50:

Draize test, rabbit, eye: 500 mg/24H Mild; CAS# 57-55-6: Draize test, rabbit, eye: 100 mg Mild;



Fisher-Fresh Preserved Specimens Material Safety Data Sheet

MSDS# 45341

Section 1 - Chemical Product and Company Identification

MSDS Fisher-Fresh Preserved Specimens

\$00018, \$0002\$, \$0060\$, \$0085\$, \$0087\$, \$0092\$, \$0110\$, \$0182\$, \$0184\$, \$1001\$, \$1002, \$1004\$, \$1006\$, \$1010\$, \$10102\$, \$1004\$, \$1006\$, \$1010\$, \$1010\$, \$10105\$, \$1022\$, \$1030\$, \$1035\$, \$1040\$, \$1040\$, \$1022\$, \$1030\$, \$1010\$, \$1110\$, \$1110\$, \$1110\$, \$1112\$, \$1135\$, \$1162\$, \$1064\$, \$1065\$, \$1065\$, \$1097\$, \$1197\$, \$1100\$, \$1101\$, \$1110\$, \$11194\$, \$1125\$, \$1135\$, \$1134\$, \$1164\$, \$1165\$, \$1187\$, \$1199\$, \$1190\$, \$1194\$, \$1194\$, \$1199\$, \$1190\$, \$120\$, \$1190\$, \$1190\$, \$1194\$, \$1199\$, \$1199\$, \$120\$, \$120\$, \$1210\$, \$1214\$, \$1221\$, \$1223\$, \$1235\$, \$1230\$, \$1230\$, \$136\$, \$1350\$, \$1325\$, \$1335\$, \$1338\$, \$1338\$, \$1340\$, \$1340\$, \$1346\$, \$1350\$, S1360S, S1362S, S1380S, S1400S, S1452S, S1456S, S1462S, S1476S, S1480S, S1494S, S1499S, S1619S, S1623S, S1626S, S1627S, S1628S, S1631S, S1635S, S1639S, S1642S, S1643S, S1655S, \$1602, \$1603, \$1604, \$1605, \$1606, \$1607, \$1608, \$1609, \$16118, \$16138, \$16158, \$16178, \$1522S, \$1524S, \$1525S, \$1530S, \$1571S, \$1575S, \$1579S, \$1580S, \$1582S, \$1583S, \$1601, \$1500S, \$1501, \$1502, \$1503S, \$1504, \$1507, \$1508, \$1509S, \$1510S, \$1511S, \$1520S, \$1521S,

Catalog Numbers: \$1660S, \$1670S, \$1671S, \$1672S, \$1700, \$1701, \$1702, \$1702ND, \$1704, \$1704ND, \$1705, \$1707, \$1708, \$1710S, \$1711S, \$1713S, \$1715S, \$1716S, \$1722S, \$1800S, \$1820S, \$1825S, \$1826S, \$1877S, \$1826S, \$18711S, \$1711S, \$1715S, \$1716S, \$1722S, \$1800S, \$1820S, \$1825S, \$1826S, \$1826S, \$1827S, \$1826S, \$1827S, \$1828S, \$1834S, \$1841S, \$1844S, \$1846S, \$1850S, \$1852S, \$1852S, \$1855S, \$1888S, \$1857S, \$1889S, \$1896S, \$1895S, \$1896S, \$1890S, \$2001S, \$2000S, \$2001S, \$2000S, \$2000S, \$2020S, \$2021S, \$2022S, \$2023S, \$2030S, \$2018S, \$2100S, \$2110S, \$2152S, \$2195S, \$2201S, \$2201S, \$2203S, \$2204S, \$2206S, \$2210S, \$2218S, \$2300S, \$2310S, \$2301S, \$2304S, \$2310S, \$2350S, \$2352S, \$2352S, \$2340S, \$2400S, \$2401, \$2402, \$2403S, \$2404S, \$2406S, \$2407S, \$2408S, \$2406S, \$2400S, \$2400S, \$2300S, \$2301S, \$2300S, \$2307S, \$2508S, \$250 \$2532S, \$2700S, \$2704S, \$2770S, \$2780S, \$2791S, \$2795S, \$2800S, \$2800S, \$3001, \$3002, \$30256S, \$3062S, \$3072S, \$3080S, \$3088S, \$3093S, \$3094S, \$3115S, \$3120S, \$4001, \$4002, \$4003, \$4011S, \$4031S, \$4041S, \$4047S, \$4061S, \$4071S, \$4081S, \$4091S, \$4101S, \$4111S, \$4121S, \$4131S, \$4141S, \$4402S, \$4403S, \$4404S, \$5001, \$5002, \$5091S, \$5100S, \$5101A, \$5102SA, S9224S, S9226S, S9228, S9232S, S9233S, S9234S, S9235S, S9236S, S9237S, S9239S, S9253, S9254, \$9205S, \$9207S, \$9208, \$9209, \$92091S, \$9209S, \$9210, \$9212S, \$9214S, \$9215S, \$9218S, \$9222 \$8203, \$8203\$, \$8206\$, \$8209\$, \$9001, \$9002, \$9004, \$9101\$, \$9201, \$9202, \$9203, \$9204\$, S5117, S51178, S5118, S5125, S51258, S51268, S51278, S51288, S51298, S51308, S8202, S82028, S5103S, S5105, S5107S, S5108S, S5109S, S5110S, S5111S, S5112S, S5113, S5114, S5115, S5116, S9257S, S9263S, S9264S, S9265S, S9267S, S9271S, S9274S, S9277S, S9278S, S9280S

Synonyms: Single-pac specimens; multi-pac specimens

CHEMTREC Phone Number, US: Emergency Number US: For information in the US, call: Company Identification: -Fair Lawn, NJ 07410 800-424-9300 201-796-7100 201-796-7100 One Reagent Lane

Section 2 - Composition, Information on Ingredients

Hazard Symbols:	EINECS#:	%:	Chemical Name:	CAS#:	Risk Phrases: 43
XI	200-001-8	0.3-0.5	Formaldehyde	50-00-0	÷

Hazard Symbols: EINECS#: Chemical Name: CAS#: Risk Phrases: EINECS#: Chemical Name CAS#: Risk Phrases: Hazard Symbols: Water 0.1 - 9.090.5-99.6 Propylene glycol 231-791-2 7732-18-5 200-338-0 57-55-6

Text for R-phrases; see Section 16

ž

Hazard Symbols:

Risk Phrases 40

Section 3 - Hazards Identification

**EMERGENCY OVERVIEW** 

Warning! May cause central nervous system depression. May cause kidney damage. May cause fetal effects based upon respiratory and skin reaction. Causes eye, skin, and respiratory tract irritation. Target Organs: Kidneys, central nervous animal studies. Cannot be made non-poisonous. Contains formaldehyde which can cause cancer. May cause allergic system, liver, respiratory system.

Potential Health Effects

Causes eye irritation.

Causes skin irritation.

Ingestion: depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause central nervous system

Inhalation: Causes respiratory tract irritation.

nasopharyngeal cancer in humans, a rare cancer in developed countries. There is limited evidence that Contains formaldehyde which can cause cancer in humans. There is sufficient evidence that formaldehyde causes

Chronic: formaldehyde causes cancer of the nasal cavity and paranasal sinuses and strong but not sufficient evidence for

Section 4 - First Aid Measures

eyelids. Get medical aid immediately. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower

Eyes:

Skin: removing contaminated clothing and shoes. Discard contaminated clothing in a manner which limits further Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while

Ingestion unconscious person. Get medical aid immediately. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an

Inhalation: give artificial respiration. If breathing is difficult, give oxygen. Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing

Physician: Notes to

General

Information:

Wear appropriate protective clothing to prevent contact with skin and eyes. Wear a self-contained breathing apparatus (SCBA) to prevent contact with thermal decomposition products.

Section 5 - Fire Fighting Measures

Extinguishing For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam

Autoignition Not applicable Temperature:

Flash Point: Not applicable

Explosion Limits: Not available Lower:

Explosion Limits: Not available Upper:

NFPA Rating: health: 2; flammability: 1; instability: 0;

Section 6 - Accidental Release Measures

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

Spills/Leaks: runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Provide ventilation. Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid

Section 7 - Handling and Storage

Handling: Skin, and clothing. Avoid ingestion and inhalation. Use only with adequate ventilation. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes,

Storage: Keep away from sources of ignition. Store in a cool, dry, well-ventilated area away from incompatible

## Section 8 - Exposure Controls, Personal Protection

Water	Propylene glycol   none listed	Formaldehyde   0.3	Chemical Name   ACGIH
none listed	listed	0.3 ppm Ceiling	ACGIH
none listed	none listed	10.016 ppm TWAR 20	NIOSH  OSHA - Final PELs
none listed	none listed	0.75 ppm TWA; 0.5 ppm Action Level; 0.75 ppm TWA; 2 ppm SYEL (Irritant and potential cancer ha zard - see 29 [CER 1910.1048]	OSHA - Final PELs

OSHA Vacated PELs: Formaldehyde: 3 ppm TWA (unless specified in 1910.1048) Propylene glycol: None listed Water

Engineering Controls:

adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits. See 29CFR 1910.1048 for regulatory requirements pertaining to all occupational exposures to Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use formaldehyde, i.e., from formaldehyde gas, its solutions, and materials that release formaldehyde.

Exposure Limits

Personal Protective Equipment

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 gloves to prevent skin exposure.

> Clothing: Wear appropriate protective clothing to prevent skin exposure.

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a Respirators. 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: Solid

Odor: mild odor Color: not available

pH: Not available

Vapor Pressure: Not available

Vapor Density: >1

Evaporation Rate: Not available

Boiling Point: Not available Viscosity: Not available

Decomposition Temperature: Not available Solubility in water: Not available.

Freezing/Melting Point: Not available

Specific Gravity/Density: Not available Molecular Formuła: Mixture

Molecular Weight: Not available

Section 10 - Stability and Reactivity

Hazardous Polymerization Incompatibilities with Other Materials Hazardous Decomposition Products Strong oxidizing agents

Conditions to Avoid: Chemical Stability:

Strong oxidizing agents High temperatures, confined spaces. Stable under normal temperatures and pressures.

Section 11 - Toxicological Information Has not been reported.

RTECS#: CAS# 7732-18-5: ZC0110000 CAS# 57-55-6: TY2000000 CAS# 50-00-0: LP8925000

Draize test, rabbit, eye: 750 ug Severe; CAS# 50-00-0: Draize test, rabbit, eye: 750 ug/24H Severe;

Draize test, rabbit, eye: 10 mg Severe; Draize test, rabbit, eye: 37% Severe;

Draize test, rabbit, skin: 50 mg/24H Moderate; Draize test, rabbit, skin: 2 mg/24H Severe;

Inhalation, mouse: LC50 = 505 mg/m3/2H; Inhalation, mouse: LC50 = 454 mg/m3/4H;

Inhalation, rat: LC50 = 578 mg/m3/2H; Inhalation, rat: LC50 = 203 mg/m3

Oral, mouse: LD50 = 42 mg/kg; Inhalation, rat: LC50 = 250 ppm/2H;

Oral, mouse: LD50 = 385 mg/kg;

Oral, mouse: LD50 = 500 mg/kg;

LD50/LC50: Oral, rat: LD50 = 100 mg/kg; Oral, rat: LD50 = 500 mg/kg; Skin, rabbit: LD50 = 270 uL/kg; Skin, rabbit: LD50 = 270 mg/kg;

CAS# 57-55-6: Draize test, rabbit, eye: 100 mg Mild

Draize test, rabbit, eye: 500 mg/24H Mild;

```
Not available
                                                                                                               Other:
                                                                                                                                                          Formaldehyde - ACGIH: A2 - Suspected Human Carcinogen California: carcinogen, initial date 1/1/88
Carcinogenicity: (gas) NTP: Suspect carcinogen IARC: Group 1 carcinogen
Carcinogenicity: Propylene glycol - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Water - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
                                                                                                               See actual entry in RTECS for complete information.
                                                                                                                                                                                                                                                                                                                                                                                                                  CAS# 7732-18-5: Oral, rat: LD50 = >90 mL/kg;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Skin, rabbit: LD50 = 20800 \text{ mg/kg};
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Skin, rabbit: LD50 = 20800 mg/kg;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Oral, rat: LD50 = 20 \text{ gm/kg};
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Oral, rabbit: LD50 = 18500 mg/kg;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Oral, mouse: LD50 = 22 gm/kg;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Oral, mouse: LD50 = 20300 \text{ mg/kg};
                                                       Section 12 - Ecological Information
```

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

Section 13 - Disposal Considerations

Shipping Name: AVIATION REGULATED LIQUID, N.O.S. Hazard Class: 9 Shipping Name: Not available Canada TDG Packing Group: UN Number: UN3334 US DOT

USA RQ: CAS# 50-00-0: 100 lb final RQ; 45.4 kg final RQ

Packing Group:

UN Number:

Hazard Class:

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XN

Risk Phrases: R 40 Limited evidence of a carcinogenic effect

Safety Phrases:

WGK (Water Danger/Protection)

CAS# 57-55-6: 0 CAS# 50-00-0: 2

CAS# 7732-18-5: Not available

Canada

CAS# 50-00-0 is listed on Canada's DSL List CAS# 57-55-6 is listed on Canada's DSL List

CAS# 7732-18-5 is listed on Canada's DSL List

Canadian WHMIS Classifications: D2A

and the MSDS contains all of the information required by those regulations. This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations

CAS# 50-00-0 is listed on Canada's Ingredient Disclosure List

CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List. CAS# 57-55-6 is listed on Canada's Ingredient Disclosure List

US Federal

TSCA

CAS# 50-00-0 is listed on the TSCA

inventory. CAS# 57-55-6 is listed on the TSCA Inventory.

CAS# 7732-18-5 is listed on the TSCA

Inventory.

Section 16 - Other Information

MSDS Creation Date: 9/02/1997 Revision #7 Date 7/20/2009

company has been advised of the possibility of such damages. or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the event shall the company be liable for any claims, losses, or damages of any third party or for lost profits their own investigations to determine the suitability of the information for their particular purposes. In no to us. However, we make no warranty of merchantibility or any other warranty, express or implied, The information above is believed to be accurate and represents the best information currently available with respect to such information, and we assume no liability resulting from its use. Users should make