Material Safety Data Sheet

Section 1 – Product and Company Identification

MSDS Name
MAS® UA Control – Liquid Assayed Urinalysis Control

Catalog Number
UAB-115, UAB-160, UAB-215, UAB-260, UAB-MP, UAB-S15

Description
Liquid Assayed Urinalysis Control

Synonyms
UAB-115 MAS® UA Liquid Urinalysis Control Level 1 (6 x 15mL)
UAB-160 MAS® UA Liquid Urinalysis Control Level 1 (4 x 60mL)
UAB-215 MAS® UA Liquid Urinalysis Control Level 2 (6 x 15mL)
UAB-260 MAS® UA Liquid Urinalysis Control Level 2 (4 x 60mL)
UAB-MP MAS® UA Liquid Urinalysis Control multipack (6 x 15mL)
UAB-S15 MAS® UA Liquid Urinalysis Control sample pack (2x15 mL)

Company Identification
Microgenics Corporation

Office Address
46360 Fremont Blvd.

City, State, Zip Code
Fremont, CA 94538

Company Phone Number
(510) 979-5000

Emergency Phone Number
(510) 979-5000

CHEMTREC Phone Number, US
(800) 424-9300

CHEMTREC Phone Number, Europe
(202) 483-7616

Section 2 – Hazard Identification

Caution! This material contains substance of human origin. Even though tests are negative for infectious diseases, this product should be handled as a potentially infectious biological material. By normal use the product is not regarded as hazardous to health. The product is not classified as flammable or harmful to the environment; may cause eyes, skin, digestive track, and respiratory track irritation. The toxicological properties of this material have not been fully investigated. This product is not classified as dangerous in accordance with Directive 1999/45/EC or 67/548/EEC

Section 3 – Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Component Name</th>
<th>Content</th>
<th>EINECS/ELINCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>7632-00-0</td>
<td>Sodium nitrite</td>
<td>0.003– 0.006%</td>
<td>231-555-9</td>
</tr>
<tr>
<td>7732-18-5</td>
<td>Water</td>
<td>24.9 – 34.9%</td>
<td>231-791-2</td>
</tr>
<tr>
<td>N/A</td>
<td>Human urine</td>
<td>65– 75%</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Component comments
have no OSHA, Canadian, or EU hazardous ingredients above applicable threshold. The product contains protein materials, salts and stabilizer

Section 4 – First Aid Measures

Eyes
In case of contact immediately remove any contact lenses, hold the eyelids apart and flush eyes with plenty of water for at least 15 minutes. Consult physician if symptoms should occur

Skin
In case of contact remove contaminated clothing immediately, wash area with soap and flush with plenty of water. Get medical attention if irritation develops and persists

Ingestion
If swallowed, do not induce vomiting unless directed to do so by medical personnel. Drink plenty of water. Get medical attention

Inhalation
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Consult physician

Notes to Physician
Treat symptomatically

Section 5 – Fire Fighting Measures

Personal protective equipment
Combustion products may be health hazardous. In case of evacuation use OSHA/NIOSH (or equivalent) approved protection mask. See section 8

Flammable properties
Liquid product is not combustible; solid product may burn

Extinguishing Media
All common fire extinguishing agents may be used
Section 5 – Fire Fighting Measures- continued

Protection of Firefighters Minimum protection for all firefighters should include a self-containing breathing apparatus (SCBA) an full fire-fighting turn out gear. Upon decomposition this product may emit carbon dioxide, carbon monoxide and/or low molecular weight hydrocarbons

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

Section 6 – Accidental Release Measures

Personal precautions Use proper personal protective equipment as indicated in Section 8. Keep unnecessary personnel away

Environmental precautions Product is not water pollutant. Keep out of drains, sewers, ditches and open waterways.

Methods for containment If without risk prevent further spread of spilled material or leaking containers. Where possible dike the spilled material. Absorb spill with inert material e.g. vermiculite, sand or diatomaceous earth

Methods for clean-up Clean up spills immediately, observing precautions in the Exposure Controls/Personal Protection, Section 8. Place in suitable container and provide ventilation. Wash area with a 5% chlorine bleach solution or equivalent, then rinse with water

Other information For reporting requirements refer to Section 15

Section 7 – Handling and Storage

Handling Keep container tightly closed. Wash thoroughly after handling. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Use with adequate ventilation. Material produced in compliance to USDA and/or CPMP/BWP/1230/98 (or amendment as applicable) (Guidance on Minimizing the Risk of Transmitting Animal Spongiform Encephalopathy Agents via Medicinal Products). This is a CPMP/BWP/1230/98 Category IV material: It does not contain, nor is it derived from Specified Risk Materials as defined in Commission decision 97/534/EC (or successive amendments). This material is prepared from a human source base. Donors have been tested by FDA approved methods and found negative for antibodies to HIV-1 and HIV-2, non-reactive for HBsAg, and non-reactive for HCV. Handle as potentially infectious material. This material should be handled at the biosafety level 2 (BSL2) as required by OSHA Bloodborne Pathogen Rule (29 CFR 1910.1030.7) and consistent with the U.S. Department of Health and Human Services, the U.S. Public Health Service, Centers for Disease Control (CDC), and National Institute of Health (NIH) guidelines "Biosafety in Microbiological and Biomedical Laboratories" (May 1988, HHS Publication No. (NIH) 88-8395)

Storage Store in a tightly closed container. For shelf life, store between 2° to 8°C

Section 8 – Exposure Controls/ Personal Protection

<table>
<thead>
<tr>
<th>Chemical Name – Sodium Nitrite</th>
<th>OSHA PEL</th>
<th>ACGIHLTV</th>
<th>AIHA</th>
<th>NIOSH REL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ceiling Not listed</td>
<td>TWA Not listed</td>
<td>STEL Final Vacated</td>
<td>Ceiling TWA STEL WEEL OEL</td>
<td>Ceiling TWA STEL IDLH</td>
</tr>
<tr>
<td>TWA Not listed</td>
<td>TWA Not listed</td>
<td>TWA Not listed</td>
<td>TWA Not listed</td>
<td>TWA Not listed</td>
</tr>
<tr>
<td>STEL Not listed</td>
<td>STEL Not listed</td>
<td>STEL Not listed</td>
<td>STEL Not listed</td>
<td>STEL Not listed</td>
</tr>
<tr>
<td>Final Vacated</td>
<td>Vacated Not listed</td>
<td>Final Not listed</td>
<td>Vacated Not listed</td>
<td>Final Not listed</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name – Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSHA PEL</td>
</tr>
<tr>
<td>Ceiling Not listed</td>
</tr>
<tr>
<td>TWA Not listed</td>
</tr>
<tr>
<td>STEL Not listed</td>
</tr>
<tr>
<td>Final Vacated</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name – Human urine</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSHA PEL</td>
</tr>
<tr>
<td>Ceiling Not listed</td>
</tr>
<tr>
<td>TWA Not listed</td>
</tr>
<tr>
<td>STEL Not listed</td>
</tr>
<tr>
<td>Final Vacated</td>
</tr>
</tbody>
</table>

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Engineering Controls Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations below the permissible exposure limits. Ventilation fans and other electrical service must be non-sparking and have an explosion-proof design
Section 8 – Exposure Controls/ Personal Protection- continued

Personal Protective Equipment

Eye/Face protection  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 protection  Wear appropriate protective gloves to prevent skin exposure. No skin irritation expected

Respiratory protection  A respiratory protection program that meets OSHA’s 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator’s use

General Hygiene  Wear appropriate protective clothing to prevent skin exposure

Considerations

Section 9 – Physical and Chemical Properties

Appearance  Clear
Odor and odor threshold  No information
Physical State  Liquid
PH  5-8
Vapor density  No information
Boiling point  No information
Vapor pressure  No information
Melting Point/Freezing Point  No information

Section 10 – Stability and Reactivity

Chemical Stability  Stable at room temperature in closed containers under normal storage and handling conditions

Conditions to Avoid  Excess heat

Incompatible Materials  None reported

Hazardous Decomposition Products  None

Possibility of hazardous reactions  Has not been reported

Section 11 – Toxicological Information

Acute dose effect (LD50/LC50)

CAS# 7632-00-0  Oral, rat: LD50 = 157.9 mg/kg  Oral, mouse: LD50 = 175 mg/kg
  Oral, rabbit: LD50= 186 mg/kg  Oral, Chicken: LD50= 28.944 mg/kg
  Inhalation, rat: LC50= 4 h - 5.5 mg/m3  Subcutaneous, rat: LD50= 96.6 mg/kg
  Intravenous, rat: LD50= 85 mg/kg  Subcutaneous, rabbit: LDM= 60 mg/kg
  Subcutaneous, mouse: LDM=150 mg/kg  Intravenous, rabbit: LDM=80 mg/kg

CAS# 7732-18-5  Oral, rat: LD50 =998.21 mg/cm²@20°C

Repeated dose effect (NOAEL, LOEL)

CAS# 7632-00-0  Oral, rat: TDLo=180 mg/kg/8D (intermittent)
  Inhalation, rat: TCLo=300 ug/m³/4H/30D (intermittent)
  Intraperitoneal, rat: TDLo=960 mg/kg/30D (intermittent)
  Oral, mouse: TDLo=700 mg/kg/1W (continuous)
  Subcutaneous, mouse: TDLo=150 mg/kg
  Intravenous, rabbit: TDLo=80 mg/kg

CAS# 7632-00-0  Oral, rat: TDLo=700 mg/kg female 1-22 day(s) after conception
  Intraperitoneal, rat: TDLo=400 mg/kg female 10-19 day(s) after conception
  Oral, mouse: TDLo=280 mg/kg female 1-14 day(s) after conception
  Subcutaneous, pig: TDLo=1890 mg/kg female 15-105 day(s) after conception

Irritation  prolonged exposure may cause irritation
Corrosivity  No information found
Sensitization (inhalation, dermal, ocular)  prolonged exposure may cause dermal irritation

CAS# 7632-00-0  Eyes - rabbit - Mild eye irritation - 24 h

Genotoxicity  Genotoxic properties are not known

CAS# 7632-00-0  Oncorhynchus mykiss (rainbow trout): LC50 = 0.092 mg/l - 96 h mortality
  Oncorhynchus mykiss (rainbow trout): NOEC = 0.54 mg/l - 96 h
  Daphnia magna (Water flea): EC = 5012.5 mg/l - 48 h

Teratogenicity  Teratogenic properties are not known

Reproductive system effect

CAS# 7632-00-0  Oral, rat: TDLo=660 mg/kg female 1-22 day(s) after conception
  Intraperitoneal, rat: TDLo=400 mg/kg female 10-19 day(s) after conception
  Oral, mouse: TDLo=280 mg/kg female 1-14 day(s) after conception
  Subcutaneous, pig: TDLo=1890 mg/kg female 15-105 day(s) after conception

Thermo Scientific  Microgenics Corporation  Fremont, CA USA  510-979-5000  www.thermo.com/Diagnostics
46360 Fremont Blvd  94538  510-979-5002 fax Toll Free: 800-232-3342

Doc: 92771MSDS – 2  Page 3 of 8  Revision Date: 12/21/09
Section 11 – Toxicological Information - continued

Carcinogenicity (IARC, NTP, OSHA (NIOSH & ACGIH)) or CA Prop 65
None of the components present in this material at concentrations equal to or greater than 0.1% are listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA
CAS# 7632-00-0 Not listed as a carcinogen by ACGIH, NIOSH, NTP, OSHA, or CA Prop 65, IARC: 2A - Group 2A: Probably carcinogenic to humans (Sodium nitrite),
CAS# 7732-18-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65
Neurotoxicity Neurotoxic properties are not known
Mutagenicity mutagenic properties are not known
CAS# 7632-00-0 Salmonella typhimurium, Mutation in microorganisms=250 ug/plate
Escherichia coli, Mutation in microorganisms=50 mmol/L
Escherichia coli, DNA repair=625 ug/well
Target organ effect Ingestion of significant amount may cause nausea and vomiting
Epidemiology No information found
NOES Hazard Codes (NOHS, NOES) RTECS
CAS# 7632-00-0 69230 RA1225000
CAS# 7732-18-5 M1000 ZC0110000

Section 12 – Ecological Information

Ecotoxicity Not regarded as dangerous for the environment LC/EC/IC50 > 100 mg/l
Persistence/Degradability No information found
Bioaccumulation/Accumulation No information found
Mobility in Environmental media Soluble in water
Environmental Not classified as harmful to the environment
Other Adverse Effects No information found

Section 13 – Disposal Considerations

Waste from Residue/Unused Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements. Consult US EPA guidelines for the classification and determination (RCRA 40CFR Parts 261). Chemical waste generators must determine whether discarded chemical is classified as hazardous waste. Ensure complete and accurate classification
Contaminated packaging Clean container with water
RCRA P Series Wastes None of the components are on this list
RCRA U Series Wastes None of the components are on this list
EWC waste code 18 01 05 discard as chemicals and medicines
Other Information According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the a application for which the product was used

Section 14 – Transport Information

Not regulated as hazardous material under US DOT, TDG, UNECE, ADR, ADN, IATA, ICAO, RID, IMDG/IMO, OTIF, Mexico

Section 15 – Regulatory Information

US Federal
CAA -HAPs, CAA - Class 1, Class 2 Ozone Depletons, OSHA, OSHA - Highly Hazardous, SDWA, USDA, 21 CFR-IVD – No information found
Section 15 – Regulatory Information - continued

<table>
<thead>
<tr>
<th>CAS# 7632-00-0</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSCA 8(b)</td>
</tr>
<tr>
<td>yes</td>
</tr>
<tr>
<td>CWA</td>
</tr>
<tr>
<td>100 lb RQ</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS#7732-18-5</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSCA 8(b)</td>
</tr>
<tr>
<td>yes</td>
</tr>
</tbody>
</table>

US State
State Right to Know
CAS# 7632-00-0 can be found on the following state Right-to-Know lists – California, Delaware, Louisiana, Massachusetts, Michigan, New Jersey, Pennsylvania, Texas

California
Prop 65, Title 8 CCR, Title 22 CCR, ATHS, Occupational Exposure Limits, Ozone Depleting Compounds, Precursor Chemicals, SCAQMD, California -No Significant Risk Level - No information found
None of the chemicals are on Prop 65 lists
California Prop 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth, or any other Reproductive defects

Africa/Asia-Pacific/Europe Non-EU /EU Member Countries/Latin America and Caribbean/ Middle East/Government Inventory Lists
CAS# 7632-00-0

<table>
<thead>
<tr>
<th>AICS</th>
<th>New Zealand-GHS</th>
<th>Russia</th>
<th>ENCS</th>
<th>Switzerland</th>
<th>Belgium</th>
<th>PICCS</th>
<th>Malaysia</th>
<th>Singapore</th>
<th>EINECS</th>
<th>Luxembourg</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>0.2 % MAC HSNO Approval: HSR001286</td>
<td>0.1 mg/m3 MAC</td>
<td>(1)-463</td>
<td>no</td>
<td>no</td>
<td>yes</td>
<td>5.0 %</td>
<td>&lt;5%,</td>
<td>231-555-9</td>
<td>no</td>
</tr>
<tr>
<td>India</td>
<td>Africa</td>
<td>Australia</td>
<td>Czech Republic</td>
<td>Indonesia</td>
<td>Japan</td>
<td>China</td>
<td>Taiwan</td>
<td>Thailand</td>
<td>Austria</td>
<td>Italy</td>
</tr>
<tr>
<td>no</td>
<td>0.2 % MAC (Rust inhibitor) &gt;1%&lt;5% : Xn; R22; C+&gt;5%: T; R25</td>
<td>no</td>
<td>no</td>
<td>YES</td>
<td>UN1500 0.2 % MAI</td>
<td>yes</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td></td>
</tr>
<tr>
<td>Malta</td>
<td>Netherlands</td>
<td>UK</td>
<td>Philippines</td>
<td>KE CL</td>
<td>Bermuda</td>
<td>Latvia</td>
<td>Estonia</td>
<td>Lithuania</td>
<td>Hungary</td>
<td>EC</td>
</tr>
<tr>
<td>0.2 % MAC</td>
<td>no</td>
<td>1Z</td>
<td>no</td>
<td>KE-31546</td>
<td>no</td>
<td>no</td>
<td>yes</td>
<td>0.1 mg/m3 NRV</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>Chile</td>
<td>ASEAN</td>
<td>Hong Kong</td>
<td>Korea</td>
<td>Denmark</td>
<td>Gibraltar</td>
<td>France</td>
<td>Check</td>
<td>Germany</td>
<td>VwVws</td>
<td></td>
</tr>
<tr>
<td>yes</td>
<td>0.2 % MAC</td>
<td>R-8, R-25 S-16/17, S-38</td>
<td>&gt;=1.0 % (by weight)</td>
<td>yes</td>
<td>E250</td>
<td>no</td>
<td>no</td>
<td>Number 161, hazard class 2 - hazard to waters</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS#7732-18-5</th>
</tr>
</thead>
<tbody>
<tr>
<td>AICS</td>
</tr>
<tr>
<td>yes</td>
</tr>
</tbody>
</table>
Section 15 – Regulatory Information - continued

Advisory Agencies
CAS# 7632-00-0

<table>
<thead>
<tr>
<th>Agency</th>
<th>CAS# 7632-00-0</th>
<th>OECD</th>
<th>OSPAR</th>
<th>Australia Group</th>
<th>ICCA</th>
<th>IPCS</th>
<th>CICAD</th>
<th>WHO</th>
<th>GASL</th>
<th>UNEP</th>
<th>WGK</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 2007</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>0.1 % Threshold Limit</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>NIOSH</td>
<td>NTP</td>
<td>yes</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>yes</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
</tr>
</tbody>
</table>

Group III pesticide yes

CAS# 7732-18-5

<table>
<thead>
<tr>
<th>Agency</th>
<th>CAS# 7732-18-5</th>
<th>OECD</th>
<th>OSPAR</th>
<th>Australia Group</th>
<th>ICCA</th>
<th>IPCS</th>
<th>CICAD</th>
<th>WHO</th>
<th>UNEP</th>
<th>WGK</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>yes</td>
<td>no</td>
<td>no</td>
<td>no</td>
</tr>
</tbody>
</table>

Exposure Limits – none listed

European Union Directives

CAS# 7632-00-0

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>REPEALED</td>
<td>November 30, 2010</td>
<td>High Production Volume Chemical</td>
<td>T; R: 25: 5%&lt;=C Xn; R: 22: 1%&lt;=C&lt;5%</td>
<td>0.2 % MAC</td>
<td>0.2 % by weight</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Additives (1333/2008/EC) - Annex III - Specific Purity


CAS#7732-18-5

<table>
<thead>
<tr>
<th>CAS#</th>
<th>793/93/EEC</th>
<th>1907/2006 – REACH</th>
<th>0.6 mg/kg SML</th>
<th>yes</th>
<th>0.2 % by weight</th>
</tr>
</thead>
</table>


United Nations List
CAS# 50-06-6 INCB - Schedule IV Substances UN, UN/FAO, UNEP - No information found

Canada Federal/Provincial Government

CAS# 7632-00-0 on the list of Health Canada, Saskatchewan - Dangerous Goods

<table>
<thead>
<tr>
<th>CEPA</th>
<th>NPRI</th>
<th>DSL</th>
<th>NDSL</th>
<th>DWQ</th>
<th>Council of Ministers of the Environment</th>
<th>Controlled Drugs and Substances</th>
<th>WHMIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>no</td>
<td>no</td>
<td>yes</td>
<td>no</td>
<td>1 %</td>
</tr>
</tbody>
</table>

CAS#7732-18-5

<table>
<thead>
<tr>
<th>CEPA</th>
<th>NPRI</th>
<th>DSL</th>
<th>NDSL</th>
<th>DWQ</th>
<th>Council of Ministers of the Environment</th>
<th>Controlled Drugs and Substances</th>
<th>WHMIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>no</td>
<td>no</td>
<td>yes</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
</tr>
</tbody>
</table>
Section 15 – Regulatory Information - continued

WHMIS:
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

Other:
This MSDS has been prepared in accordance with the ANSI Z400.1 format. Every effort has been made to adhere to the hazard criteria and content requirements of the US OSHA Hazard Communication Standard, European Communities Safety Data Sheets Directive, Canadian Controlled Products Regulations, UK Chemical Hazard Information and Packaging Regulations, and UN Globally Harmonized System of Classification and Labeling of Chemicals.

Section 16 – Other Information

Color information has been updated
Revision: 2
Date prepared: 12/21/09

Acronym keys:

- 1277/2005 – Narcotics
- 1907/2006 – REACH - Registration, Evaluation and Authorization of Chemicals
- 2000/479/EC (EPER) - European Pollutant Emission Register
- 2002/59/EC (RoHS) - Hazardous Substances Restricted or Prohibited in Electrical Equipment
- 2002/96/EC (WEEE) - Waste Electrical and Electronic Equipment
- 2006/11/EC - Water Pollution Directive
- 2006/15/EC, 98/24/EC - Occupational Exposure Directives
- 2037/2000/EC - 2006/11/EC - Protection Products
- 273/2004 - Export Requirements and Drug Precursors
- 304/2003 - Export and Import Restrictions
- 394/2002 - European Agreement concerning the International Carriage of Dangerous Goods by Road
- 479/1992 – Dangers to Health and Safety, Environmental Protection and Consumers
- 508/2003 – Code of Federal Regulations - Food and Drug Administration
- 76/769/EEC - Marketing Restrictions Directive
- 793/93/EEC - Existing Substance Regulation
- ACGIH – American Conference of Governmental Industrial Hygienists
- ADN - European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways
- ADR - The European Agreement concerning the International Carriage of Dangerous Goods by Road
- AICS (Australia Inventory of Chemical Substances)
- AIHA – American Industrial Hygiene Association
- ATSHS - Air Toxics Hot Spots Act
- Australia Group – Export Control List - European Commission for Chemical Weapons Precursors
- CAA - Clean Air Act of 1990
- CCR - California Code of Regulations
- CEPA - Canadian Environmental Protection Act, 1999,
- CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act of 1980
- CICADs - International Chemical Safety Documents
- CWA - Clean Water Act
- CWCA - Chemical Weapons Convention
- DEA - Drug Enforcement Administration
- Department of Homeland Security - Chemical Facility Anti-Terrorism Standards
- Directive 96/59/EC - Disposal of Polychlorinated Biphenyls and Polychlorinated Terphenyls
- Directive 98/83/EC - Water Quality - Water Intended for Human Consumption
- DSL - Domestic Substances List
- DWQ - Drinking Water Quality
- EAR – Export Administration Regulations
- ENCS - Japan Existing and New Chemical Substances
- EPICRA - Emergency Planning and Community Right-to-Know Act
- FDA – Food and Drug Administration
- FIFRA - Federal Insecticide, Fungicide and Rodenticide Act
- HAPs - Hazardous Air Pollutants (CAA)
- IARC - International Agency for Research on Cancer
- IATA - International Air Transport Association
- ICAO - International Civil Aviation Organization
- ICCA - International Council of Chemical Associations
- IMDG - International Maritime Dangerous Goods Code
- IMO - International Maritime Organization
- INCB - International Narcotics Control Board
- IPCS - International Program on Chemical Safety
- ITAR - International Traffic in Arms Regulations
- KECL - Korea - Existing and Evaluated Chemical Substances
- NDSL - Non-Domestic Substances List
- NIOSH – national institute for occupational safety and health
- NPRI - National Pollutant Release Inventory
- NTP – National Toxicology Program
- OECD - The Organisation for Economic Co-Operation and Development
- OEL – Occupational Exposure Level
- OSHA – occupational safety and health
- OSPAR – Oslo/Paris Convention of September 22, 1992 - List of Chemicals for Priority Action
- OTIF - Intergovernmental Organization for International Carriage by Rail
- PICCS (Philippines Inventory of Chemicals and Chemical Substances)
- POP - Persistent Organic Pollutants
- RCRA - Resource Conservation & Recovery Act
- REL – recommended exposure limits
- RID - The Intergovernmental Organization for International Carriage by Rail
- SARA - Superfund Amendments and Reauthorization Act of 1986
- SCAQMD – Toxic Air Contaminants List
- Schedule I, IV - Controlled Substances
This MSDS is intended for review and guidance in the receipt, storage, handling, use and disposal of product purchased from Thermo Fisher Scientific, and for no other purpose. Use this product only as directed and in accordance with applicable instructions and warnings provided with the product. Please consult your institution's policies regarding use of this product. If you have obtained this MSDS other than in connection with the supply of this product from Thermo Fisher Scientific, this MSDS should be consulted for general information only, and should not be relied upon for any purpose. As with the use of all hazardous materials, you should in all instances follow the guidance of the MSDS provided or available with the specific product purchased.

End of MSDS