



**Fisher
Scientific**

**ACROS
ORGANICS**

MSDS

**IMPORTANT SAFETY INFORMATION -- DO NOT DISCARD.
PLEASE ROUTE TO COMPANY SAFETY OFFICER.**

SCHOOLCRAFT COLLEGE

HPS MEMBER
18600 HAGGERTY RD.

LIVONIA MI 48152-2696

**IF NAME AND/OR ADDRESS HAVE CHANGED, CONTACT YOUR
SALES REPRESENTATIVE OR LOCAL BRANCH.**

FOR EACH CHEMICAL, A MSDS SHEET WILL BE SENT ONLY ON THE FIRST SHIPMENT UNLESS A SUBSTANTIAL REVISION OCCURS.

REQUIRED MATERIAL SAFETY DATA SHEETS (MSDS) NOT INCLUDED IN THIS MAILING WILL FOLLOW UNDER SEPARATE COVER.

THIS PACKET MAY CONTAIN MSDS FOR PRODUCTS MANUFACTURED BY OTHERS AND DISTRIBUTED BY FISHER SCIENTIFIC COMPANY OR ACROS ORGANICS. THESE MSDS WERE PREPARED BY THE MANUFACTURER AND FISHER/ACROS DISCLAIMS ALL LIABILITY FOR THE CONTENT.

**NEW!!! FISHER SCIENTIFIC AND ACROS ORGANICS MSDS ARE NOW
AVAILABLE ELECTRONICALLY THROUGH CHEMEXPRESS®.
CHEMEXPRESS IS OBTAINABLE ON CD OR DISKETTES; WINDOWS OR
MACINTOSH; SINGLE USER OR NETWORK. FOR PRICING AND
ORDERING INFORMATION, PLEASE CALL 1-800-766-7000.**

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

Ecotoxicity:
Not available.
Environmental Fate:
Not available.
Physical/Chemical:
Not available.
Other:
Not available.

**** SECTION 13 - DISPOSAL CONSIDERATIONS ****
Dispose of in a manner consistent with federal, state, and local regulations.
RCRA P-Series: None listed.
RCRA U-Series: CAS# 50-00-0: waste number U122.

**** SECTION 14 - TRANSPORT INFORMATION ****

US DOT
IMO No information available
IATA No information available.
RID/ADR No information available.
No information available.
Canadian TDG
No information available.

**** SECTION 15 - REGULATORY INFORMATION ****

US FEDERAL

TSCA
CAS# 50-00-0 is listed on the TSCA inventory.
CAS# 57-55-6 is listed on the TSCA inventory.
Health & Safety Reporting List
None of the chemicals are on the Health & Safety Reporting List.
Chemical Test Rules
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.
Section 12c
None of the chemicals are listed under TSCA Section 12c.
TSCA Significant New Use Rule
None of the chemicals in this material have a SNUR under TSCA.

SARA
Section 302 (RQ)
CAS# 50-00-0: final RQ = 100 pounds (45.4 kg)
Section 302 (TPQ)
CAS# 50-00-0: TPQ = 500 pounds (does not meet toxicity criteria but because of high production volume and recognized toxicity is considered a chemical of concern)
SARA Codes
CAS # 50-00-0: acute, chronic.
Section 313
This material contains Formaldehyde (CAS# 50-00-0, 0.305%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

Clean Air Act:
CAS# 50-00-0 is listed as a hazardous air pollutant (HAP).
This material does not contain any Class 1 Ozone depleters.
Clean Water Act:
CAS# 50-00-0 is listed as a Hazardous Substance 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:
CAS# 50-00-0 is considered highly hazardous by OSHA.

STATE
Formaldehyde can be found on the following state right to know lists:
California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.
propylene glycol can be found on the following state right to know lists: Pennsylvania, Minnesota.
The following statement(s) is(are) made in order to comply with the California Safe Drinking Water Act:
WARNING: This product contains Formaldehyde, a chemical known to the State of California to cause cancer.
This material contains 0.305% Formaldehyde.
CAS# 50-00-0: no significant risk level = 40 ug/day
European/international Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols: Not available.
Risk Phrases:
Safety Phrases:
WGK (Water Danger/Protection)
CAS# 50-00-0: 2
CAS# 57-55-6: 0
Canada

Formaldehyde:
3 ppm TWA (unless specified in 1910.1048)
propylene glycol:
No OSHA Vacated PELs are listed for this chemical.

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: Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

**** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ****

Physical State: Solid
Appearance: not available
Odor: mild odor
pH: Not available.
Vapor Pressure: Not available.
Evaporation Rate: Not available.
Viscosity: Not available.
Boiling Point: Not available.
Freezing/Melting Point: Not available.
Decomposition Temperature: Not available.
Solubility: Not available.
Solid/Liquid Gravity/Density: Not available.
Molecular Formula: Mixture
Molecular Weight: Not available

**** SECTION 10 - STABILITY AND REACTIVITY ****

Chemical Stability:
Stable under normal temperatures and pressures.
Conditions to Avoid:
High temperatures.
Incompatibilities with Other Materials:
None reported.
Hazardous Decomposition Products:
Irritating and toxic gases.
Hazardous Polymerization: Has not been reported.

**** SECTION 11 - TOXICOLOGICAL INFORMATION ****

RTECS#:
CAS# 50-00-0: L98925000
CAS# 57-55-6: T12000000
LD50/CL50:
CAS# 50-00-0: Inhalation, mouse: LC50 = 400 mg/m³/2H; Inhalation, rat: LC50 = 203 mg/m³; Oral, mouse: LD50 = 42 mg/kg; Oral, rat: LD50 = 100 mg/kg; Skin, rabbit: LD50 = 270 mg/kg.
CAS# 57-55-6: Oral, mouse: LD50 = 22 gm/kg; Oral, rabbit: LD50 = 18500 mg/kg; Oral, rat: LD50 = 20 gm/kg; Skin, rabbit: LD50 = 20800 mg/kg.

Carcinogenicity:
Formaldehyde -
ACGIH: A2-suspected human carcinogen
California: carcinogen - Initial date 1/1/78
NIOSH: occupational carcinogen
NTP: Suspect carcinogen
OSHA: Possible Select carcinogen
IARC: Group 2A carcinogen
propylene glycol
Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
Epidemiology:
No data available.
Teratology:
No data available.
Reproductive Effects:
Propylene glycol can cause teratogenic effects in animal studies.
No data available.
Neurotoxicity:
No data available.
Mutagenicity:
No data available.
Other Studies:
No data available.

**** SECTION 12 - ECOLOGICAL INFORMATION ****

DATE: 11/05/99 ACCT: 463282001 PO NBR: 816982
 INDEX: D93088677 CAT NO: S92245

CAS# 50-00-0 is listed on Canada's DSL/NDSL List.
 CAS# 57-55-6 is listed on Canada's DSL/NDSL List.
 This product has a WHMIS classification of D2A.
 CAS# 50-00-0 is not listed on Canada's Ingredient Disclosure List.
 CAS# 57-55-6 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits
 CAS# 50-00-0: OEL-ARAB Republic of Egypt: TWA 2 ppm (3 mg/m³)
 OEL-AUSTRIA: TWA 1 ppm (1.5 mg/m³); STEL 2 ppm (3 mg/m³)
 OEL-BELGIUM: TWA 1 ppm (1.5 mg/m³); STEL 2 ppm (3 mg/m³)
 OEL-BELGIUM: TWA 1 ppm (1.5 mg/m³); STEL 2 ppm (3 mg/m³)
 OEL-CZECHOSLOVAKIA: TWA 0.5 mg/m³; STEL 1 mg/m³
 OEL-DENMARK: STEL 0.3 ppm (0.4 mg/m³); Carcinogen
 OEL-FINLAND: STEL 1 ppm (1.3 mg/m³); Skin
 OEL-FRANCE: STEL 2 ppm (3 mg/m³)
 OEL-GERMANY: TWA 0.5 ppm (0.6 mg/m³); Carcinogen
 OEL-HUNGARY: STEL 0.6 mg/m³; Carcinogen
 OEL-JAPAN: TWA 0.5 ppm (0.61 mg/m³); Carcinogen
 OEL-THE NETHERLANDS: TWA 1 ppm (1.5 mg/m³); STEL 2 ppm (3 mg/m³)
 OEL-THE PHILIPPINES: TWA 5 ppm (6 mg/m³)
 OEL-POLAND: TWA 2 mg/m³
 OEL-RUSSIA: TWA 0.5 ppm; STEL 0.5 mg/m³; Skin
 OEL-SWEDEN: TWA 0.5 ppm (0.6 mg/m³); STEL 1 ppm (1.2 mg/m³)
 OEL-SWITZERLAND: TWA 0.5 ppm (0.6 mg/m³); STEL 1 ppm (1.2 mg/m³)
 OEL-THAILAND: TWA 3 ppm; STEL 5 ppm
 OEL-TURKEY: TWA 5 ppm (6 mg/m³)
 OEL-TURKEY: TWA 5 ppm (6 mg/m³)
 OEL-UNITED KINGDOM: TWA 2 ppm (2.5 mg/m³); STEL 2 ppm (2.5 mg/m³)
 OEL-UNITED STATES: TWA 2 ppm (2.5 mg/m³); STEL 2 ppm (2.5 mg/m³)
 OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA, CZECH, AUSTRIA, TLV
 OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

**** SECTION 16 - ADDITIONAL INFORMATION ****

MSDS Creation Date: 9/07/1995 Revision #5 Date: 9/02/1997

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