<<Methyl>> <<Sulfoxide>>-D6, Packaged in 0.75 ml Ampules, 100.0 Atom % D 90925

**** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ****

MSDS Name: <<Methyl>> <<Sulfoxide>>-D6, Packaged in 0.75 ml Ampules, 100.0 Atom % D

Catalog Numbers:

AC320760075

Synonyms:

<<Methyl>> <<sulfoxide>>, DMSO, sulfinylbis(methane)

Company Identification: Acros Organics N.V.
One Reagent Lane
Fairlawn, NJ 07410

For information in North America, call: 800-ACROS-01

For emergencies in the US, call CHEMTREC: 800-424-9300

**** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ****

CAS#	Chemical Name	%	EINECS#
2206-27-1	<<Methyl>> <<Sulfoxide>>-D6	100	218-617

Hazard Symbols: XI

Risk Phrases: 36/37/38

**** SECTION 3 - HAZARDS IDENTIFICATION ****

EMERGENCY OVERVIEW

Appearance: Clear colourless liquid. Flash Point: 92 deg C.
Caution! Combustible liquid. Hygroscopic. Aspiration hazard. May be absorbed through the skin. May cause respiratory and digestive tract irritation. Causes eye and skin irritation. May cause reproductive and fetal effects.

Target Organs: None known.

Potential Health Effects

Eye:

Produces irritation, characterized by a burning sensation, redness, tearing, inflammation, and possible corneal injury.

Skin:

Causes skin irritation. May cause irritation with burning pain, itching and redness. Substance is rapidly absorbed through the skin.

Ingestion:

May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause liver damage. May cause garlic smell on the breath and body.

Inhalation:

Causes respiratory tract irritation. May cause asthma and shortness of breath.

Chronic:

Prolonged or repeated skin contact may cause dermatitis.

**** SECTION 4 - FIRST AID MEASURES ****

Eyes:

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Get medical aid.

Skin:

Get medical aid. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion:

Do NOT induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

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

**** SECTION 5 - FIRE FIGHTING MEASURES ****

General Information:
As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form an explosive mixture with air. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Combustible Liquid. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Containers may explode if exposed to fire.
Extinguishing Media:
In case of fire use water spray, dry chemical, carbon dioxide, or chemical foam. Cool containers with flooding quantities of water until well after fire is out.
Autoignition Temperature: 215 deg C (419.00 deg F)
Flash Point: 92 deg C (197.60 deg F)
NFPA Rating: Not published.
Explosion Limits, Lower: 3.50 vol %
Upper: 42.00 vol %

**** SECTION 6 - ACCIDENTAL RELEASE MEASURES ****

General Information: Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks:
Absorb spill with inert material, (e.g., dry sand or earth), then place into a chemical waste container. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation.

**** SECTION 7 - HANDLING and STORAGE ****

Handling:
Wash thoroughly after handling. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Avoid contact with heat, sparks and flame. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.
Storage:
Keep away from heat, sparks, and flame. Keep away from sources of ignition. Keep from contact with oxidizing materials. Store in a cool, dry, well-ventilated area away from incompatible substances.

**** SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION ****

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 low.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
<<Methyl>> <<Sulfoxide>>-D6	none listed	none listed	none listed

OSHA Vacated PELs:
<<Methyl>> <<Sulfoxide>>-D6:

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 protective 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:	Liquid
Appearance:	Clear colourless liquid
Odor:	Odorless.
pH:	Not available.
Vapor Pressure:	0.42 mm Hg @20C
Vapor Density:	2.7 (air=1)
Evaporation Rate:	Not available.
Viscosity:	Not available.
Boiling Point:	190 deg C @ 190.00mm Hg
Freezing/Melting Point:	20 deg C
Decomposition Temperature:	Not available.
Solubility:	Not available.
Specific Gravity/Density:	1.1900g/cm3
Molecular Formula:	C2D6OS
Molecular Weight:	84.18

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

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials, strong oxidants, exposure to moist air or water.

Incompatibilities with Other Materials:

Acyl, aryl and non-metal halides, oxalyl chloride, acid anhydrides, acids, bases, boron compounds, 4(4'-Bromobenzoyl) acetanilide, bromomethane, carbonyl diisothiocyanate, copper + trichloroacetic acid, dichloromethane + perchloric acid, dinitrogen tetraoxide, hexachlorocyclotriphosphazine, iodine pentafluoride, magnesium perchlorate, metal alkoxides, metal oxosalts, nitric acid, non-metal halides, perchloric acid, periodic acid, phosphorus (III) oxide, potassium, potassium permanganate, silver difluoride, sodium hydride, silver trioxide, trifluoroacetic anhydride, <<methyl>> bromide, sulfur dichloride, disulfur dichloride, sulfuryl chloride.

Hazardous Decomposition Products:

Carbon monoxide, oxides of sulfur, irritating and toxic fumes and gases, carbon dioxide.

Hazardous Polymerization: Will not occur.

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

RTECS#:

CAS# 2206-27-1 unlisted.

LD50/LC50:

Not available.

Carcinogenicity:
<<Methyl>> <<Sulfoxide>>-D6 -
Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
Epidemiology:
No information available.
Teratogenicity:
An experimental teratogen
Reproductive Effects:
Experimental reproductive effects have been observed in laboratory animals.
Neurotoxicity:
No information available.
Mutagenicity:
No information available.
Other Studies:
No data available.

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

Ecotoxicity:
Not available.
Environmental Fate:
partition from the water column to organic matter contained in sediments and suspended solids or bioconcentrate in aquatic organisms.
Physical/Chemical:
Not available.
Other:
Not available.

**** SECTION 13 - DISPOSAL CONSIDERATIONS ****

Dispose of in a manner consistent with federal, state, and local regulations.
RCRA D-Series Maximum Concentration of Contaminants:
None listed.
RCRA D-Series Chronic Toxicity Reference Levels: None listed.
RCRA F-Series: None listed.
RCRA P-Series: None listed.
RCRA U-Series: None listed.
Not listed as a material banned from land disposal according to RCRA.

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

US DOT
No information available
IMO
No information available.
IATA
No information available.
RID/ADR
No information available.
Canadian TDG
Shipping Name: CHLOROTOLUENES
Hazard Class: 3
UN Number: UN2238
Other Information: FLASHPOINT 47 C

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

US FEDERAL
TSCA
CAS# 2206-27-1 is not listed on the TSCA inventory.
It is for research and development use only.
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.
TSCA Significant New Use Rule
None of the chemicals in this material have a SNUR under TSCA.
SARA
Section 302 (RQ)
None of the chemicals in this material have an RQ.
Section 302 (TPQ)
None of the chemicals in this product have a TPQ.
Section 313
No chemicals are reportable under Section 313.
Clean Air Act:
This material does not contain any hazardous air pollutants.
This material does not contain any Class 1 Ozone depletors.
This material does not contain any Class 2 Ozone depletors.
Clean Water Act:
None of the chemicals in this product are listed as Hazardous Substances 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:
None of the chemicals in this product are considered highly hazardous by OSHA.

STATE
<<Methyl>> <<Sulfoxide>>-D6 is not present on state lists from CA, PA, MN, MA, FL, or NJ.
California No Significant Risk Level:
None of the chemicals in this product are listed.

European/International Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols: XI
Risk Phrases:
R 36/37/38 Irritating to eyes, respiratory system and skin.
Safety Phrases:
S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 37/39 Wear suitable gloves and eye/face protection.

WGK (Water Danger/Protection)
CAS# 2206-27-1: No information available.

Canada
CAS# 2206-27-1 is listed on Canada's DSL/NDSL List.
This product has a WHMIS classification of B3, D2B.
CAS# 2206-27-1 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits

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

MSDS Creation Date: 7/20/1998 Revision #1 Date: 7/20/1998

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 Fisher 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 Fisher has been advised of

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