MOMENTIVE™

MATERIAL SAFETY DATA SHEET

Version: 1.10
08/17/2012

Coatosil* 77
Siloxane Polyalkyleneoxide Copolymer

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Manufacturer Name:	**Sistersville Plant** **3500 South State Route 2** **FRIENDLY WV 26146**
Revised:	08/17/2012
Prepared by	Product Regulatory Compliance
CHEMTREC	1-800-424-9300
MSDS Contact Information	1-888-443-9466 4information@momentive.com
Chemical Family/Use:	Surfactant
Formula:	Polyalkyleneoxide Modified Heptamethyltrisiloxane

HMIS

Health:	2	Flammability:	1	Reactivity:	0

NFPA

Health:	2	Flammability:	1	Reactivity:	0

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING! Aerosol harmful if inhaled. Causes eye irritation. Repeated ingestion may cause damage to the liver, kidneys, thyroid, and blood-forming system. Repeated inhalation of aerosol of the neat liquid may cause damage to the eyes, blood-forming system, kidneys, thymus, respiratory tract, and nasal cavity.

Form: Liquid **Form:** Pale yellow **Odor:** Polyether

POTENTIAL HEALTH EFFECTS

INGESTION

Effects of repeated overexposure: Ingestion may cause: - injury to the liver - injury to the thyroid - injury to the kidney - injury to the bloodforming system

SKIN

None known. Effects of repeated overexposure: May cause the following effects: Skin irritation.

INHALATION

Harmful effects are not expected from static vapor at ambient temperature. Inhalation of an aerosol of the neat material within a confined space could result in respiratory distress and eye injury.
Effects of repeated overexposure: Aerosol may cause: - injury to the eyes - injury to the nasal cavity - injury to the bloodforming system

EYES

Liquid splashed into the eye may cause discomfort. May cause the following effects: Pain - excess blinking - tear production - excess redness of the conjunctivae - swelling of the conjunctivae - iridal inflammation These effects should resolve within two weeks. Prolonged exposure to vapor or aerosol may cause discomfort. May cause the following effects: - excess redness of the conjunctivae - possibly swelling of the conjunctivae - blurring of vision These effects will resolve within a few hours.

MEDICAL CONDITIONS AGGRAVATED

A knowledge of the available toxicology information and of the physical and chemical properties of the material suggests that overexposure is unlikely to aggravate existing medical conditions.

SUBCHRONIC (TARGET ORGAN)

Liver; Kidney

CHRONIC EFFECTS / CARCINOGENICITY

For additional information, please see Section 11, Toxicological Information.

ROUTES OF EXPOSURE

Eye; Ingestion

3. COMPOSITION/INFORMATION ON INGREDIENTS

PRODUCT COMPOSITION	CAS-No.	WGT. %
A. HAZARDOUS		
Polyalkyleneoxide modified Heptamethyltrisiloxane	27306-78-1	60 - 100 %
Polyalkyleneoxide Modified Heptamethyltrisiloxane	67674-67-3	5 - 10 %
B. NON-HAZARDOUS		
Polyalkyleneoxide	Trade secret	10 - 30 %

4. FIRST AID MEASURES

INGESTION

Do not induce vomiting. If conscious, drink plenty of water. Call a physician or poison control center immediately.

SKIN

Wash off promptly and flush contaminated skin with water. Promptly remove clothing if soaked through and flush skin with water. Get medical attention if symptoms persist.

INHALATION

After inhalation of aerosol/mist seek medical advice immediately. Move the exposed person to fresh air at once. If breathing is difficult, give oxygen. Call a physician or poison control center immediately.

EYES

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if symptoms persist.

NOTE TO PHYSICIAN

Treatment is symptomatic and supportive.

5. FIRE-FIGHTING MEASURES

FLASH POINT:	116 ℃; 241 ℉
METHOD	ASTM D 93
FLAMMABLE LIMITS LEL:	No data available.
FLAMMABLE LIMITS UEL:	No data available.

SENSITIVITY TO MECHANICAL IMPACT: No

SENSITIVITY TO STATIC DISCHARGE

Sensitivity to static discharge is not expected.

EXTINGUISHING MEDIA

All standard extinguishing agents are suitable.

SPECIAL FIRE FIGHTING PROCEDURES

Firefighters must wear NIOSH/MSHA approved positive pressure self-contained breathing apparatus with full face mask and full protective clothing.

6. ACCIDENTAL RELEASE MEASURES

ACTION TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED

Wipe, scrape or soak up in an inert material and put in a container for disposal. Wash walking surfaces with detergent and water to reduce slipping hazard. Wear proper protective equipment as specified in the protective equipment section.

7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Avoid contact with skin and eyes. Avoid breathing mists or vapors. Keep out of reach of children. Attention: Not for injection into humans.

OTHER PRECAUTIONS

Consult the manufacturer before using an aerosol of the neat liquid.

STORAGE

Keep container closed. Store in original container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS

Provide eyewash station and safety shower.; General (mechanical) room ventilation is expected to be satisfactory if handled at low temperatures or in covered equipment.

RESPIRATORY PROTECTION

If exposure limits are exceeded or respiratory irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Supplied air respirators may be required for non-routine or emergency situations. Respiratory protection must be provided in accordance with OSHA regulations (see 29CFR 1910.134).

PROTECTIVE GLOVES

Chemical resistant gloves

EYE AND FACE PROTECTION

Safety glasses with side shields

OTHER PROTECTIVE EQUIPMENT

Wear suitable protective clothing and eye/face protection.

Exposure Guidelines

Component	CAS-No.	Source	Value

Absence of values indicates none found

PEL - OSHA Permissible Exposure Limit; TLV - ACGIH Threshold Limit Value; TWA - Time Weighted Average; INTL REL - Internal Recommended Exposure Limit

OSHA revoked the Final Rule Limits of January 19, 1989 in response to the 11th Circuit Court of Appeals decision (AFL-CIO v. OSHA) effective June 30, 1993. See 29 CFR 1910.1000 (58 FR 35338).

9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT (°C):	> 150 ℃; > 302 ℉; Copolymer
VAPOR PRESSURE (20 C) (MM HG):	< 1
VAPOR DENSITY (AIR=1):	> 1
FREEZING POINT:	-1 ℃; 30 ℉
PHYSICAL STATE:	Liquid
ODOR:	Polyether
Color:	Pale yellow
EVAPORATION RATE (BUTYL ACETATE=1):	< 1
DENSITY:	1.0070 g/cm3
pH:	No data available.
SOLUBILITY IN WATER (20 C):	Dispersible
VOC EXCL. H2O & EXEMPTS (G/L):	29.8 g/l

10. STABILITY AND REACTIVITY

STABILITY

Stable

HAZARDOUS POLYMERIZATION.

Hazardous polymerisation does not occur.

HAZARDOUS THERMAL DECOMPOSITION / COMBUSTION PRODUCTS

In case of fire, gives off (emits):; Carbon oxides; Oxides of silicon.; Formaldehyde.; Carbon monoxide is highly toxic if inhaled; carbon dioxide in sufficient concentrations can act as an asphyxiant.; Acute overexposure to the products of combustion may result in irritation of the respiratory tract.; This product contains methylpolysiloxanes which can generate formaldehyde at approximately 300 degrees Fahrenheit (150'C) and above, in atmospheres which contain oxygen. Formaldehyde is a skin and respiratory sensitizer, eye and throat irritant, acute toxicant, and potential cancer hazard. A MSDS for formaldehyde is available from Momentive.

INCOMPATIBLE MATERIALS

None known.

CONDITIONS TO AVOID
None known.

11. TOXICOLOGICAL INFORMATION

ACUTE ORAL
LD50; Species: Rat; > 2,000 mg/kg; Remarks: slightly toxic

REPEATED DOSE TOXICITY
Species: Rat; Exposure time: 28 d
NOAEL - No Observable Adverse Effect Level: 450 mg/kg.

ACUTE DERMAL
LD50; Species: Rat; > 2,000 mg/kg; Remarks: slightly toxic

ACUTE INHALATION
LC50; Species: Rat; 2 mg/l; Remarks: Aerosol.

LC50; Species: Rat; > 11.78 mg/l; Remarks: Aerosol., 5% Diluted aqueous solution

OTHER
This material was not mutagenic in an Ames bacterial assay or in three mammalian test systems including the Chinese hamster ovary (CHO)/HGPRT gene mutation assay, a micronucleus cytogenetic assay in mice, and an in vitro mammalian cytogenetic test.
,In a repeated skin application study with rats, this material caused moderate skin irritation which resolved during a post-application recovery period. There was no evidence for percutaneous cumulative or specific organ toxicity, and no effect on male or female reproductive systems.
,Findings from a 14-day dietary feeding study with rats show that high dosage repeated ingestion of this material causes reversible adverse effects on the male and female reproductive tracts. Additional effects seen include increased liver weight, altered blood cytology/chemistry, and thyroid enlargement (primarily hypertrophy, with some hyperplasia). Evidence of partial or complete recovery was found over a 28-day recovery period.
,Findings from a repeat 9-day aerosol inhalation toxicity study with rats show a no-observable-effect-level (NOEL) of less than 0.025 mg/l. Symptoms of toxicity included rales, gasping, ocular opacity, prostration, hypothermia, reduced body weight gain and food consumption, changes in clinical pathology, decreased thymus weight, and microscopic lesions in the nasal cavity. There was no effect on the male or female reproductive systems. It is not anticipated that the use of aqueous dilutions of this product would result in this type of aerosol exposure.

SENSITIZATION
Species: Guinea Pig; Result: Did not cause sensitization on laboratory animals.

SKIN IRRITATION.
Species: Rabbit; Result: No skin irritation

EYE IRRITATION
Species: Rabbit ; Result: Strongly irritating.

OTHER EFFECTS OF OVEREXPOSURE
No adverse effects anticipated from available information.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGY
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment., May cause long-term adverse effects in the aquatic environment.

CHEMICAL FATE
Aqueous abiotic hydrolysis expected to contribute to degradation. OECD 111

ECOTOXICITY EFFECTS

Toxicity to fish
LC50
Species: Zebra Fish
Result: 2.75 mg/l
Exposure time: 96 h

Toxicity to fish
NOEC
Species: Zebra Fish
Result: 0.56 mg/l
Exposure time: 96 h

Toxicity to fish
LC50
Species: Lepomis macrochirus
Result: 6 mg/l
Exposure time: 96 h

Toxicity to other organisms
EC50
Species: Daphnia similis
Result: 22.61 mg/l
Exposure time: 48 h

Toxicity to other organisms
NOEC
Species: Daphnia similis
Result: 10 mg/l

Exposure time: 48 h

Toxicity to other organisms
EC50
Species: Daphnia magna
Result: 37 mg/l
Exposure time: 48 h

Toxicity to other organisms
NOEC
Species: Daphnia magna
Result: 25 mg/l
Exposure time: 48 h

Toxicity to algae
EC50
Species: Selenastrum capricornutum
Result: 5.5 mg/l
Exposure time: 96 h

Toxicity to algae
NOEC
Species: Selenastrum capricornutum
Result: 1 mg/l
Exposure time: 96 h

Toxicity to microorganisms
MEC90
Species: Spirillum volutans
Result: > 0.201 mg/l
Exposure time: 120 min
(highest concentration tested)
Uncoordinated mobility in 90% of the population

Elimination information (persistence and degradability)

Biodegradation
The product is not readily biodegradable.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHODS

Disposal should be made in accordance with federal, state and local regulations.

14. TRANSPORT INFORMATION

DOT SHIPPING NAME:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(Polyalkyleneoxide Modified Heptamethyltrisiloxane)
DOT HAZARD CLASS:	9
DOT LABEL (S):	9
UN/NA NUMBER:	UN3082
PACKING GROUP:	III
IMDG SHIPPING NAME:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(Polyalkyleneoxide Modified Heptamethyltrisiloxane)
CLASS:	9
IMDG-Labels:	9
UN NUMBER:	UN3082
PACKING GROUP:	III
EmS No.:	F-A; S-F
IATA:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(Polyalkyleneoxide Modified Heptamethyltrisiloxane)
CLASS:	9
ICAO-Labels:	9MI
UN NUMBER:	UN3082
PACKING GROUP:	III
Further Information:	This substance/preparation meets the criteria of a Marine Pollutant (see IMDG paragraph 2.9.3.3) but is not identified in the IMDG Code (Marpol list). As such, substance/preparation shall be transported as a marine pollutant in accordance with the IMDG code.

15. REGULATORY INFORMATION

Inventories

Australia Inventory of Chemical Substances (AICS)	y (positive listing)
EU list of existing chemical substances	y (positive listing)
Japan Inventory of Existing & New Chemical Substances (ENCS)	y (positive listing)

China Inventory of Existing Chemical Substances	y (positive listing)
Korea Existing Chemicals Inventory (KECI)	y (positive listing)
Canada DSL Inventory	y (positive listing)
Canada NDSL Inventory	n (Negative listing)
New Zealand Inventory of Chemicals	y (positive listing)
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	y (positive listing)
TSCA list	y (positive listing)
New Zealand Inventory of Chemicals	y (positive listing)
Japan Industrial Safety & Health Law (ISHL) Listing	n (Negative listing)

For inventories that are marked as quantity restricted or special cases, please contact Momentive.

US Regulatory Information

SARA (311,312) HAZARD CLASS

Acute Health Hazard

CALIFORNIA PROPOSITION 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Canadian Regulatory Information

WHMIS CLASSIFICATION

D2B - Toxic Material Causing Other Toxic Effects

16. OTHER INFORMATION

OTHER

These data are offered in good faith as typical values and not as product specifications. No warranty, either expressed or implied, is made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.

,C = ceiling limit
EST = estimated
NA = not applicable
NE = none established
ND = none determined
NEGL = negligible
NF = none found
UNKN = unknown
REC = recommended
V = recommended by vendor

SKN = skin TS = trade secret
R = recommended MST = mist
NT = not tested STEL = short term exposure limit
ppm = parts per million ppb = parts per billion
By-product= reaction by-product, TSCA inventory status not required under 40 CFR part 720.30(h-2).