

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier

Product Name: Anti-Sag Product

Codes(s): Anti Sag

Synonyms: Amorphous fumed silica; Pyrogenic silica; Silicon dioxide-fumed

REACH Registration Number: No data available

1.2 Relevant identified uses of the substance or mixture and uses advised against

General Use: Rheology modifier

Uses advised against: No uses advised against

1.3 Details of the supplier and of the safety data sheet

Manufacturer/Distributor

Endurmo

12110 Ellington Ct.

Cincinnati, Ohio 45249

1-331-214-1655

1.4 Emergency telephone numbers: CHEMTREC +1-800-424-9300; +1-703-527-3887 Outside the USA

SECTION 2 - HAZARDS IDENTIFICATION

2.1 Classification of substance or mixture

Product definition: Substance

Classification (Regulation (EC) No 1272/2008)

None allocated

2.2 Label Elements

Labeling (Regulation (EC) No 1272/2008)

Hazard Symbols: None allocated

Signal Word: None allocated

Hazard Statement(s): None allocated

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

% by Weight	Ingredient	CAS Number	EC Number	Index Number	EC Classification
100	Amorphous Fumed Silica	112945-52-5	231-545-4	-----	

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to the health or the environment and hence require reporting in this section.

3.2 Mixtures

Not applicable

SECTION 4 - FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation: If product dust causes respiratory irritation or distress, move the exposed person to fresh air immediately. If breathing is difficult or irregular, administer oxygen; if respiratory arrest occurs, start artificial respiration by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. If symptoms persist, seek medical attention immediately.

Eyes: Immediately flush eyes with large amounts of water for 15 minutes. Remove contact lenses, if present and easy to do, after the first 5 minutes and continue rinsing, occasionally lifting the upper and lower eyelids. Obtain immediate medical attention, preferably from an ophthalmologist.

Skin: Flush skin with large amounts of water while removing contaminated clothing and continue rinsing for at least 15 minutes. Wash contaminated clothing and shoes thoroughly before reuse. If irritation occurs or persists, seek medical attention.

Ingestion: Rinse mouth with water. Remove dentures if any. Rinse mouth thoroughly with water if the victim is conscious. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Potential health symptoms and effects

Eyes: Dust may cause eye irritation. Symptoms may include redness, swelling, irritation and tearing. Particulates can cause mechanical irritation and abrasion of the cornea.

Skin: May cause skin irritation. Low hazard for normal industrial handling.

Inhalation: Inhalation of dust or particulates causes irritation of the nose, throat and respiratory system.

Ingestion: No hazard expected in normal industrial use.

Chronic: Persons with pre-existing skin disorders, eye problems or impaired respiratory function may be more susceptible to the effects of this substance.

SECTION 5 - FIRE FIGHTING MEASURES

5.1 Extinguishable media

Suitable methods of extinction: Use extinguishing media appropriate for surrounding fire.

Unsuitable methods of extinction: None known

5.2 Special hazards arising from the substance or mixture

Closed containers may explode due to the build-up of pressure when exposed to extreme heat. During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

Explosion hazards: High dust concentration may present an explosion hazard.

5.3 Advice for firefighters

Full protective equipment including self-contained breathing apparatus should be used. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat. Firefighters should control run-off water to prevent environmental contamination.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust generation and accumulation. Do not inhale dust. Keep upwind of spill. Ventilate the area. Evacuate non-essential personnel. Wear appropriate protective clothing designated in Section 8. Remove all sources of ignition.

6.2 Environmental precautions

Avoid dispersal of spilled material or run-off and prevent contact with soil and entry into drains, sewers or waterways.

6.3 Methods and materials for containment and cleaning up

Cover drains and contain spill. Sweep up, vacuum or shovel material and place into an approved container for proper disposal. Observe possible material restrictions (Sections 7.2 and 10.5). Dispose of waste via a licensed waste disposal contractor.

6.4 Reference to other sections

Refer to Section 13 for waste disposal considerations.

SECTION 7 - HANDLING AND STORAGE

7.1 Precautions for safe handling

Wear all appropriate personal protective equipment specified in Section 8. Do not get in eyes or on skin or clothing. Do not breathe dust. If normal use of material presents a respiratory hazard, use only adequate ventilation or wear an appropriate respirator. Wash contaminated clothing and shoes before reuse.

Advice on protection against fire and explosion

High dust concentrations may present an explosion hazard.

7.2 Conditions for safe storage, including any incompatibilities

Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10.5), food and drink. Transfer only to approved containers having correct labeling. Keep container tightly closed. Protect container against physical damage. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Containers of this material may be hazardous when empty since they retain product residues (dust, solids). Use appropriate containment to avoid environmental contamination. Ventilate closed areas. Do not take internally. Keep out of reach of children.

7.3 Specific end uses

Apart from the uses mentioned in Section 1.2, no other specific uses are stipulated.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

CAS Number	Ingredient	OSHA TWA	ACGIH TWA	NIOSH TWA
112945-52-5	Amorphous Fumed Silica	10 mg/m ³ (total dust); 5 mg/m ³ (respirable dust)	10 mg/m ³ (total dust)	10 mg/m ³ (total dust); 5 mg/m ³ (respirable dust)

8.2 Exposure controls

Engineering Measures: Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. Use adequate ventilation. Local exhaust is preferable. Refer to Section 7.1.

Individual protection measures: Wear protective clothing to prevent repeated or prolonged contact with product. Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the representative supplier.

Hygiene measures: Facilities storing or using this material should be equipped with an eyewash station and safety shower. Change contaminated clothing. Preventive skin protection is recommended. Wash hands thoroughly after use, before eating, drinking or using the lavatory.

Eye/face protection: Wear protective goggles or safety glasses with unperforated side shields during use. Refer to 29 CFR 1910.133, ANSI Z87.1 or European Standard EN 166.

Hand Protection: Wear gloves recommended by glove supplier for protection against materials in Section 3. Gloves should be impermeable to chemicals and oil. Breakthrough time of selected gloves must be greater than the intended use period.

Other protective equipment: Protective clothing. Protective boots, if the situation requires.

Respiratory Protection: Wear an approved filter type dust respirator when handling this product. Where risk assessment shows air-purifying respirators are appropriate use a full-faced respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Follow OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149.

Environmental exposure controls: Do not empty into drains.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	White powder
Odor	Odorless
Odor Threshold	No data available
Molecular Weight	Not applicable
Chemical Formula	SiO ₂
pH	3.7 - 4.7 (40 g/l @ 20 °C)
Freezing/Melting Point, Range	1,700 °C (3,092 °F)
Initial Boiling Point	No data available
Evaporation Rate	Not applicable
Flammability (solid, gas)	Not applicable
Flash Point	No data available
Autoignition Temperature	No data available
Decomposition Temperature	>2,000 °C
Lower Explosive Limit (LEL)	No data available
Upper Explosive Limit (UEL)	No data available
Vapor Pressure	No data available
Vapor Density	No data available
Specific Gravity	2.2
Viscosity	Not applicable
Solubility in Water	Insoluble
Partition Coefficient: n-octanol/water	No data available
Volatiles by Volume @ 70 °F	0%

9.2 Other data

No data available

SECTION 10 - STABILITY AND REACTIVITY

10.1 Reactivity

No special reactivity has been reported under normal use.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

None known

10.4 Conditions to avoid

Avoid dust generation.

10.5 Incompatible materials

None known

10.6 Hazardous decomposition products

None known

SECTION 11 - TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Oral Toxicity

Non-toxic

Acute inhalation toxicity

LD50, rat: 0.139 mg/l, 4h (no deaths occurred)

Acute dermal toxicity

Non-toxic

Skin irritation

May cause mild skin irritation

Eye irritation

Causes eye irritation. Particulates can cause corneal abrasion.

Sensitization

No data available

Genotoxicity

No data available

Specific organ toxicity - single exposure

No data available

Specific organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

11.2 Further information

This material is not listed as a carcinogen by IARC, ACGIH, NTP or OSHA. No data is available regarding the mutagenicity and/or teratogenicity of this material, nor is there available data that indicates that it causes adverse developmental and/or fertility effects in humans.

Handle in accordance with good industrial hygiene and safety practice.

SECTION 12 - ECOLOGICAL INFORMATION**12.1 Toxicity**

This product is non-toxic to aquatic life.

Acute and prolonged toxicity to fish: LC50 - Brachydanio rerio (Zebra fish), 96 h: >10,000 mg/l

Acute toxicity to aquatic invertebrates: EC50 - Daphnia magna (Water flea), 24 h: 1,000 mg/l

12.2 Persistence and degradability

Biologically not degradable.

12.3 Bioaccumulation potential

Not expected to bioconcentrate

12.4 Mobility in soil

Insoluble in water

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects**Additional ecological information**

Do not allow material to run into surface waters, wastewater or soil.

SECTION 13 - DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods**

Methods of disposal: The generation of waste should be avoided or minimized whenever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Hazardous waste: The classification of this product may meet the criteria for a hazardous waste.

SECTION 14 - TRANSPORT INFORMATION

Note: Transportation information provided is for reference only. Customer is urged to consult 49 CFR 100 - 177, IMDG, IATA, EC, United Nations TDG and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

NOT REGULATED FOR TRANSPORT

Not a marine pollutant

SECTION 15 - REGULATORY INFORMATION**15.1 Safety, health and environmental regulations/legislation specific for substance or mixture****U. S. Federal Regulations**

OSHA Hazard Communication Standard: This material is classified as hazardous in accordance with OSHA 29 CFR 1910.1200.

TSCA Status: All components of this product are listed on the Toxic Substance Control Act (TSCA) Inventory.

Superfund Amendments and Reauthorization Act (SARA)

SARA Section 311/312 Hazard Categories: None

SARA 313 Information: None of the chemicals in this product are subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to Know Act of 1986.

SARA 302/304 Extremely Hazardous Substance: No components of the product are subject to the reporting requirements of these sections of Title III of SARA.

SARA 302/304 Emergency Planning & Notification: No components of the product are subject to the reporting requirements of these sections of Title III of SARA.

Comprehensive Response Compensation and Liability Act (CERCLA): This product contains no CERCLA reportable substances.

Clean Air Act (CAA)

This product does not contain any substances that listed as Hazardous Air Pollutants (HAPs) designated in CAA Section 112 (b).

This product does not contain any Class 1 Ozone depleters.

This product does not contain any Class 2 Ozone depleters.

Clean Water Act (CWA)

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.

U.S. State Regulations

California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986:

This product contains no chemical(s) known to the state of California to cause cancer or other reproductive harm.

Other U.S. State Inventories:

Amorphous Fumed Silica (CAS #112945-52-5) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists: MA, NJ, PA.

Canada

WHMIS Hazard Symbol and Classification: Not a controlled substance

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

Canadian National Pollutant Release Inventory (NPRI): Amorphous Fumed Silica (CAS #112945-52-5) is not listed on the NPRI.

Canadian Ingredient Disclosure List (IDL): Amorphous Fumed Silica (CAS #112945-52-5) is not listed on the IDL.

European Economic Community

Labeling (67/548/EEC to 1999/45/EC): Not regulated

Risk Phrases: None allocated

Safety Phrases: None allocated

WGK, Germany (Water danger/protection):nwg

Global Chemical Inventory Lists

Country	Inventory Name	Inventory Listing*
Canada:	Domestic Substance List (DSL).	Yes
Canada:	Non-Domestic Substance List (NDSL).	No
Europe:	Inventory of New and Existing Chemicals (EINECS)	Yes
United States:	Toxic Substance Control Act (TSCA)	Yes
Australia:	Australian Inventory of Chemical Substances (AICS)	Yes
New Zealand:	New Zealand Inventory of Chemicals (NZIoC)	Yes
China:	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Japan:	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea:	Existing Chemicals List (ECL)	Yes
Philippines:	Philippines Inventory of Chemicals and Chemical Substances (PICCS)	Yes

**Yes* indicates that all components of this product are in compliance with the inventory requirements administered by the governing country.

**No* indicates that one or more components of this product are not on the inventory and are not exempt from listing.

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out.

SECTION 16 - OTHER INFORMATION

Hazardous Material Information System (HMIS)

Health	1
Flammability	0
Physical Hazard	0
Personal Protection	F

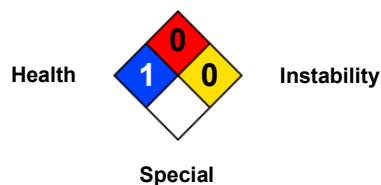
HMIS & NFPA Hazard Rating Legend

* = Chronic Health Hazard 2 = MODERATE
0 = INSIGNIFICANT 3 = HIGH
1 = SLIGHT 4 = EXTREME



National Fire Protection Association (NFPA)

Flammability



The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

Revision:

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