

SAFETY DATA SHEET

SECTION 1: IDENTIFICATION

Product Name: Sto TurboStick Mini

81586 Product Code: SDS Manufacturer Number: 81586 Synonyms: None. Product Use/Restriction: Not applicable. Manufacturer Name: Sto Corp.

6175 Riverside Drive, SW Atlanta, Georgia 30331 Address:

General Phone Number: (404) 346-3666 Emergency Phone Number: (800) 424-9300 SDS Creation Date: January 31, 2018 January 31, 2018 SDS Revision Date:



Chronic Health Effects

SECTION 2: HAZARD(S) IDENTIFICATION

GHS Pictograms:







Signal Word: DANGER.

GHS Class:

Acute Inhalation Toxicity. Category 4. Acute Dermal Toxicity. Category 4. Acute Oral Toxicity. Category 4. Carcinogenicity. Category 2 Flammable Aerosols. Category 1

Respiratory sensitisation. category 1.

Specific Target Organ Toxicity -STOT Repeated exposure RE. Category 2 (Inhalation, respiratory system)

Eye Irritation. Category 2. Skin Irritation. Category 2

Skin Sensitization. category 1. Specific Target Organ Toxicity - STOT, Single Exposure SE. Category 3.

Hazard Statements: Causes serious eye irritation

Causes skin irritation Extremely flammable aerosol Harmful if inhaled Harmful if swallowed Harmful in contact with skin

May cause allergy or asthma symptoms or breathing difficulties if inhaled

May cause an allergic skin reaction

May cause damage to organs through prolonged or repeated exposure (respiratory tract).

May cause respiratory irritation. Suspected of causing cancer.

Precautionary Statements: Call a poison center/doctor if you feel unwell. Get medical advice/attention if you feel unwell.

If experiencing respiratory symptoms: Call a poison center/doctor. If exposed or concerned: Get medical advice/attention.

If exposed or concerned: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.

If on skin: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.

If swallowed: Call a poison center/doctor if you feel unwell. Read label before use. If medical advice is needed, have product container or label at hand. Rinse

mouth.

Wash contaminated clothing before reuse. Avoid breathing dust/fume/gas/mist/ vapors/spray.

Contaminated work clothing must not be allowed out of the workplace. Do not eat, drink or smoke when using this product.

Do not handle until all safety precautions have been read and understood. Do not spray on an open flame or other ignition source.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Obtain special instructions before use.

Pressurized container: Do not pierce or burn, even after use. Use only outdoors or in a well-ventilated area. Wash thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection. Wear respiratory protection.

Protect from sunlight. Do not expose to temperatures exceeding 50C/122F. Store in a well-ventilated place. Keep container tightly closed.

Store locked up.
Dispose of contents/container to in accordance with local/regional/national /international regulations.

Route of Exposure: Eyes. Skin. Inhalation. Ingestion.

Potential Health Effects:

Skin:

Eye: Can cause moderate irritation, burning sensation, tearing, redness, and swelling. Overexposure may

cause lacrimation, conjunctivitis, corneal damage and permanent injury.

Can cause skin irritation; itching, redness, rashes, hives, burning, and swelling. Allergic reactions are Product Code: 81586

Sto TurboStick Mini Revision:: 01/31/2018 possible.

. May cause skin sensitization, an allergic reaction, which becomes evident on reexposure to this

material.

Inhalation: Respiratory tract irritant. High concentration may cause dizziness, headache, and anesthetic effects.

May cause respiratory sensitization with asthma-like symptoms in susceptible individuals

Ingestion:

Causes irritation, a burning sensation of the mouth, throat and gastrointestinal tract and abdominal

Chronic Health Effects: Prolonged skin contact may lead to burning associated with severe reddening, swelling, and possible tissue destruction.

Harmful if swallowed. Harmful in contact with skin. Harmful if inhaled. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. Delayed Signs/Symptoms:

May cause allergic or asthmatic symptoms or breathing difficulties if inhaled. May cause allergic skin reaction. Suspected of causing cancer. May cause damage to organs through prolonged or repeated

exposure: respiratory tract.

Target Organs: Eyes. Skin. Respiratory system. Digestive system.

Aggravation of Pre-Existing

Individuals with pre-existing skin disorders, asthma, allergies or known sensitization may be more susceptible to the effects of this product.

Isocyanate exposure levels must be monitored. Medical supervision of all employees who handle or come in contact with isocyanates is recommended (i.e. FEV, FVC). This should include pre-employment

and periodic medical examinations.

Persons with asthmatic-type conditions, chronic bronchitis, other chronic respiratory diseases, recurrent skin eczema or sensitization should be excluded from working with this product. Once sensitized no

further exposure can be permitted.

Other Hazards

Contains isocyanates. See information supplied by the manufacturer. Allergic sensitization may be possible with isocyanates. Persons already sensitized to diisocyanates may develop allergic reactions when using this product

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Ingredient Percent	EC Num.
Tung oil	8001-20-5	10 - 15 by weight	
Propane	74-98-6	1 - 5 by weight	
Copolymer	Proprietary	1 - 5 by weight	
Trichlorylpropylene Phophate	13674-84-5	25 - 30 by weight	
Isobutane	75-28-5	<10 by weight	
Diphenylmethane Diisocyanate, isomers and homologues	9016-87-9	25 - 35 by weight	
Dimethyl ether	115-10-6	10 - 15 by weight	
N,N'-Dimorpholinodiethylether	6425-39-4	< 1 by weight	229-194-7

SECTION 4: FIRST AID MEASURES

Eve Contact: Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of

the eyes by separating the eyelids with fingers. Get immediate medical attention.

Skin Contact: Immediately wash skin with plenty of soap and water for 15 to 20 minutes, while removing

contaminated clothing and shoes. Get medical attention if irritation develops or persists.

An MDI skin decontamination study demonstrated that cleaning very soon after exposure is important, and that a polyglycol-based skin cleanser or corn oil may be more effective than soap and water.

Discard items which cannot be decontaminated, including leather articles such as shoes, belts and

watchbands. Suitable emergency safety shower facility should be available in work area

If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention. Inhalation:

If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Ingestion:

Note to Physicians: Asthmatic type symptoms may develop, which may be immediate or delayed for several hours.

Excessive exposure may aggravate preexisting asthma and other respiratory disorders (e.g. emphysema, bronchitis, reactive airways dysfunction syndrome). Maintain adequate ventilation and oxygenation of the patient. May cause respiratory sensitization or asthma-like symptoms. Bronchodilators, expectorants and antitussives may be of help. Treat bronchospasm with inhaled beta2 agonist and oral or parenteral corticosteroids. Exposure may increase "myocardial irritability". Do not administer sympathomimetic drugs such as epinephrine unless absolutely necessary. Respiratory symptoms, including pulmonary edema, may be delayed. Persons receiving significant exposure should be observed 24-48 hours for signs of respiratory distress. If you are sensitized to diisocyanates, consult your physician regarding working with other respiratory irritants or sensitizers. Treatment of

exposure should be directed at the control of symptoms and the clinical condition of the patient.

Other First Aid: Additional important symptoms and effects are described in Section 2 and 11.

SECTION 5: FIRE FIGHTING MEASURES

Flash Point: Not determined. Auto Ignition Temperature: Lower Flammable/Explosive Limit: Not determined.

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Upper Flammable/Explosive Limit: Not determined.

Fire Fighting Instructions: Evacuate area of unprotected personnel. Use cold water spray to cool fire exposed containers to

minimize risk of rupture. Do not enter confined fire space without full protective gear. If possible,

contain fire run-off water.

Keep away from heat, sparks, open flame, and hot surfaces - No smoking. Do not spray on an open flame or other ignition sources. Do not pierce or burn, even after use.

Extinguishing Media: Use carbon dioxide (CO2) or dry chemical when fighting fires involving this material.

Unsuitable Media: No information

Protective Equipment: As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent)

and full protective gear.

Unusual Fire Hazards:

Danger of explosion. Keep unnecessary people away, isolate hazard area and deny entry. Cool containers with water from unmanned hose holder or monitor nozzles until well after fire is out. Do not allow to enter into surface water or drains.

Hazardous Combustion Combustion products may include and are not limited to: Oxides of carbon, Phosphorus oxides,

Byproducts: hydrogen cyanide, hydrogen chloride. May polymerize when heated.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Evacuate area and keep unnecessary and unprotected personnel from entering the spill area. Wear appropriate personal protective equipment recommended in Section 8 of the SDS. Do not smoke

when using this product or handle near an open flame or sparks. Use explosion-proof

electrical/ventilating/lighting equipment.

Environmental Precautions: Avoid runoff into storm sewers, ditches, and waterways.

Absorb spill with inert material (e,g., dry sand or earth), then place in a chemical waste container. Provide ventilation. Clean up spills immediately observing precautions in the protective equipment Methods for containment:

section.

Do not pierce or burn, even after use.

Methods for cleanup:

Neutralize residue with appropriate neutralizer. Suitable decontaminant/neutralizing solution include: sodium carbonate 5 - 10%; liquid detergent 0.2 - 2%; water to make up to 100%, OR concentrated ammonia solution 3 - 8%; liquid detergent 0.2 - 2%; water to make up to 100%. If ammonia is used, use good ventilation to prevent vapor exposure. Do not attempt to neutralize large quantities of

material unless measures to control reactivity and heat generation have been taken. After removal, flush spill area with soap and water to remove trace residue.

Avoid prolonged or repeated contact with skin. Avoid personal contact and breathing vapors or mists. Ventilate area. Use proper personal protective equipment as listed in Section 8.

A blanket of protein foam may be placed over spill for temporary control of isocyanate vapor.

SECTION 7: HANDLING and STORAGE

Keep away from heat, sparks, open flame, and hot surfaces - No smoking. Do not spray on an open flame or other ignition sources. Use explosion-proof electrical/ventilating/lighting equipment. Handling:

Use with adequate ventilation. Avoid breathing vapor, aerosol or mist. Avoid contact with eyes, skin, and clothing Avoid prolonged or repeated contact with skin. Keep container tightly closed. Contents under pressure. Do not puncture or incinerate container. Do not enter confined spaces unless

adequately ventilated. See Section 8, Personal Protection.

Storage:

Store in a cool, dry, well ventilated area away from sources of heat and incompatible materials. Store locked up. Keep container tightly closed when not in use. Do not reseal container If moisture or water contamination is suspected. Water contaminated material in a sealed container may rupture due to pressure buildup. Keep container tightly closed. Contents under pressure. Do not puncture or incinerate container. Do not enter confined spaces unless adequately ventilated. Store at 25 °C (77 °F). Avoid temperatures above 50°C (122°F)

Shelf life 12 months

Spills of these organic materials on hot fibrous insulations may lead to lowering of the autoignition Special Handling Procedures:

temperatures possibly resulting in spontaneous combustion.

Hygiene Practices: Wash thoroughly after handling. Take off contaminated clothing and wash before re-use. Contaminated work clothing should not be allowed out of the workplace.

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Good general **Engineering Controls:**

ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.

Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166. Eye/Face Protection:

> Wear appropriate protective gloves and other protective apparel to prevent skin contact. Consult manufacturer's data for permeability data.

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Hand Protection Description:

Recommended glove barrier materials include: Chlorinated polyethylene. Neoprene. Polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Polyvinyl chloride ("PVC" or "vinyl"). Viton Acceptable glove barrier materials include: Butyl rubber. Nitrile/butadiene rubber ("nitrile" or "NBR").

A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

Other Protective: Facilities storing or utilizing this material should be equipped with an evewash and a deluge shower

safety station.

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Skin Protection Description:

Respiratory Protection:

EXPOSURE GUIDELINES

Guideline ACGIH: TLV-TWA: 1,000 ppm

TLV-TWA: 1,000 ppm; 1,800 mg/m3 Guideline OSHA: Guideline NIOSH: TLV-TWA: 1,000 ppm; 1,800 mg/m3

<u>Isobutane</u>:

Guideline ACGIH: TLV-TWA: 1,000 ppm

Guideline NIOSH: TLV-TWA: 800 ppm; 1,900 mg/m3

Dimethyl ether:

USA: WEEL-TWA: 1,000 ppm

Notes: Only established PEL and TLV values for the ingredients are listed.

SECTION 9: PHYSICAL and CHEMICAL PROPERTIES

Physical State Appearance: Aerosol. Color:

Odor: Characteristic

Odor Threshold: No test data available **Boiling Point:** No test data available Melting Point: No test data available

Density: 7.928 lbs/gal

0.95 at 25 °C (77 °F) / 25 °C Calculated Specific Gravity:

Solubility: Soluble in most organic solvents.

No test data available Vapor Density:

Vapor Pressure: No Data

Evaporation Rate: No test data available

pH: Not applicable.

Viscosity: No test data available Coefficient of Water/Oil No test data available

Distribution:

Flash Point: Not determined. Auto Ignition Temperature: Not determined. Explosive Properties: Not explosive.

Oxidizing Properties: No.

The physical data presented above are typical values and should not be construed as a specification. Note:

SECTION 10: STABILITY and REACTIVITY

Chemical Stability: Stable under normal temperatures and pressures.

Reactivity: Avoid temperatures above 50°C (122°F) Elevated temperatures can cause container to vent and/or

rupture.

Hazardous Polymerization: Elevated temperatures can cause hazardous polymerization

Conditions to Avoid:

Extreme heat, sparks, and open flame. Incompatible materials, oxidizers and oxidizing conditions. Avoid temperatures above 50° C (122° F) Elevated temperatures can cause container to vent and/or

rupture. Exposure to elevated temperatures can cause product to decompose.

Incompatible Materials: Alcohols, amines, strong bases (alkali, ammonia), acids, metal compounds, moisture or water. Resin

reacts with water to give off carbon dioxide. Products based on diisocyanates like TDI and MDI react with many materials to release heat. The reaction rate increases with temperature as well as with increased contact; these reactions can become violent. Contact is increased by stirring or if the other material acts as a solvent. Products based on diisocyanates such as TDI and MDI are not soluble in water and will sink to the bottom, but react slowly at the interface. The reaction forms carbon dioxide gas and a layer of solid polyurea. Reaction with water will generate carbon dioxide and heat.

Special Decomposition Products: Decomposition products depend upon temperature, air supply and the presence of other materials.

Toxic gases are released during decomposition.

SECTION 11: TOXICOLOGICAL INFORMATION

Carcinogenicity:

Lung tumors have been observed in laboratory animals exposed to respirable aerosol droplets of MDI/Polymeric MDI (6 mg/m3) for their lifetime. Tumors occurred concurrently with respiratory irritation and lung injury. Current exposure guidelines are expected to protect against these effects reported for

Mutagenicity:

In vitro genetic toxicity studies were negative for component(s) tested. Genetic toxicity data on MDI are inconclusive. MDI was weakly positive in some in vitro studies; other in vitro studies were negative. Animal mutagenicity studies were predominantly negative. For the component(s) tested: 1,1,1,2-tetrafluoroethane Animal genetic toxicity studies were negative.

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Teratogenicity: In laboratory animals, MDI/polymeric MDI did not cause birth defects; other fetal effects occurred only

at high doses which were toxic to the mother

Trichlory|propylene Phophate:

Sto TurboStick Mini Revision:: 01/31/2018 Skin: Dermal - Rat LD50 - >2.000 mg/kg Inhalation- Rat LC50 - 4h - > 7mg/l Inhalation:

Oral - Rat LD50 - 1,101 mg/kg Ingestion:

Isobutane:

Inhalation Inhalation - Rat LC50 - Lethal concentration, 50 percent kill: 1500 gm/m3/4H [Details of toxic effects

not reported other than lethal dose value] (RTECS)

<u>Diphenylmethane Diisocyanate, isomers and homologues</u>:

Eve: Administration into the eye - Rabbit Standard Draize test: 100 mg [Mild] (RTECS)

Administration onto the skin - Rabbit LD50 - Lethal dose, 50 percent kill: >9400 mg/kg [Details of Skin:

toxic effects not reported other than lethal dose value] (RTECS)

Inhalation: Inhalation - Rat LC50 - Lethal concentration, 50 percent kill: 490 mg/m3/4H [Sense Organs and Special Senses (Eye) - effect, not otherwise specified Lungs, Thorax, or Respiration - Respiratory

depression Blood - Hemorrhage] (RTECS)

Oral - Rat LD50 - Lethal dose, 50 percent kill: 49 gm/kg [Behavioral - Somnolence (general depressed activity) Gastrointestinal - Hypermotility, diarrhea Nutritional and Gross Metabolic - Body temperature Inaestion:

decrease] (RTECS)

Dimethyl ether:

Administration into the eye - Rabbit Standard Draize test: 100 mg [Moderate] (RTECS) Eye:

Inhalation - Rat LC50 - Lethal concentration, 50 percent kill: 178 mg/m3 [Details of toxic effects not Inhalation:

reported other than lethal dose value] (RTECS)

Oral - Rat LD50 - Lethal dose, 50 percent kill: 9200 mg/kg [Behavioral - Somnolence (general depressed activity) Behavioral - Ataxia Nutritional and Gross Metabolic - Body temperature decrease] Ingestion:

(RTECS)

SECTION 12: ECOLOGICAL INFORMATION

The measured ecotoxicity is that of the hydrolyzed product, generally under conditions maximizing Ecotoxicity:

production of soluble species. Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested). Based on information for a

similar material.

Biodegradation: Material is expected to biodegrade very slowly in the environment

Mobility In Environmental Media: In the atmospheric environment, material is expected to have a short tropospheric half-life, based on

calculations and by analogy with related diisocyanates.

Effect of Material On Aquatic Life: In the aquatic and terrestrial environment, material reacts with water forming predominantly insoluble

polyureas which appear to be stable.

SECTION 13: DISPOSAL CONSIDERATIONS

Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous Waste Disposal:

waste prior to disposal. Furthermore, consult with your state and local waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or state and local

guidelines.

RCRA Number: Not determined.

SECTION 14: TRANSPORT INFORMATION

DOT Shipping Name: Aerosols DOT UN Number: UN1950

DOT Hazard Class: 2.2

IATA Shipping Name: Aerosols IATA UN Number: UN1950 IATA Hazard Class: 2.2

IMDG UN Number: UN1950 IMDG Shipping Name: Aerosols IMDG Hazard Class :

SECTION 15: REGULATORY INFORMATION

<u>Trichlorylpropylene Phophate</u>:

TSCA Inventory Status: Listed Canada DSL: Listed

Isobutane:

TSCA Inventory Status: Listed Canada DSL:

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Diphenylmethane Diisocyanate, isomers and homologues:

TSCA Inventory Status: Listed

Section 313: EPCRA - 40 CFR Part 372 - (SARA Title III) Section 313 Listed Chemical.

California PROP 65: IARC: Group 3: Unclassifiable as to carcinogenicity to humans.

Canada DSL: Listed

Dimethyl ether:

TSCA Inventory Status: Listed

Section 313: EPCRA - 40 CFR Part 372 - (SARA Title III) Section 313 Listed Chemical.

California PROP 65: IARC: Group 3: Unclassifiable as to carcinogenicity to humans.

Canada DSL: Listed

N,N'-Dimorpholinodiethylether:

TSCA Inventory Status: Listed Canada DSL: Listed EC Number: 229-194-7

Canadian Regulations.

WHMIS Hazard Class(es): D2A; D2B All components of this product are on the Canadian Domestic Substances List.

SECTION 16: ADDITIONAL INFORMATION

HMIS Ratings:

3* HMIS Health Hazard: HMIS Fire Hazard: 0 HMIS Reactivity: 1 HMIS Personal Protection: Х

SDS Creation Date: January 31, 2018 SDS Revision Date: January 31, 2018 SDS Author: Actio Corporation

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