



Safety Data Sheet

Material name: Smart Tires

Product ID: SS-S4000T

Version: 1

Date of print: 11/18/2019

1. Product and company identification

1.1 Identification of the substance or

preparation: Commercial product name:

Smart Tires

Use of substance / preparation

Industrial tire gloss for use in vehicle application

1.2 Company identification: Manufacturer/ distributor:

Smart Solutions Inc.

12 Corporate Plaza Dr. Ste. 150 Newport Beach, Ca 92660
USA

Customer information:

Tel (949) 722-4500

Hours of operation:

Monday - Friday, 9 am to 5 pm (pacific standard time)

Corporate website: www.smartsolutions.net

Emergency telephone no. (24h):

(800) 424-9300 (CHEMTREC, USA)

Transportation emergency:

(703) 527-3887 (CHEMTREC, international)

2. Hazards identification

2.1 Classification of the substance or mixture

Classification (GHS):

Not a hazardous substance or mixture.

2.2 Label elements

Labelling (GHS):

No labeling according to GHS required.

2.3 Other hazards

Inhalation of aerosol spray may damage health.

3. Composition/information on ingredients

3.1 Chemical characterization (preparation)

Chemical characteristics

Polydimethylsiloxane(emulsion in water)

3.2 Information on ingredients:

Type	CAS No.	Substance	Content [wt. %]		Note
			Lower	Upper	
INHA	84133-50-6	Secondary alcohols, C12-14, ethoxylated	1.0	5.0	

Type: HYD - by-product upon hydrolysis, INHA - ingredient, NEBE - by-product, MONO - residual monomer, VERU - impurity, VUL - by-product upon vulcanization. *** **Note:** C1 - IARC carcinogen, G2 - NTP carcinogen, C3 - OSHA carcinogen, NH - non-hazardous, R - reproductive toxin.



Safety Data Sheet

Material name: Smart Tires

Product ID: SS-S400T

Version: 1

Date of print: 11/18/2019

Substances listed in the Subsections "HAPS" and "California Proposition 65 Carcinogens / Reproductive Toxins" that are not listed in this section are only present at quantities below 0.1% for California Proposition 65 listed toxins or below 1% for non-carcinogenic HAPS or they are inextricably bound in the product. Specific chemical identities and/or exact percentage (concentration) of the composition may have been withheld as a trade secret.

This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57) in amounts above $\geq 0.1\%$.

4. First-aid measures

4.1 General information:

Get medical attention immediately. Remove contaminated clothing and shoes.

4.2 After inhalation

If inhaled remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult give oxygen.

4.3 After contact with the skin

For skin contact, immediately wipe away excess material. Wash with soap and water. Remove material with a waterless skin cleaner from skin.

4.4 After contact with the eyes

If contact with eyes, immediately hold eyelids apart and flush with plenty of water for at least 15 min.

4.5 After swallowing

For Ingestion, do not attempt to induce vomiting. If conscious, have them rinse their mouth with water but do not give anything to drink. Danger of aspiration.

5. Fire-fighting measures

5.1 Flammable properties:

Property:	Value:	Method:
Flash point.....	not applicable	
Boiling point / boiling range	ca. 100 °C (212 °F)	(Estimated Value)
Lower explosion limit (LEL)	not applicable	
Upper explosion limit (UEL).....	not applicable	
Ignition temperature	not applicable	

5.2 Fire and explosion hazards:

This material does not present any unusual fire or explosion hazards. Material does not burn.

5.3 Recommended extinguishing media:

Water - Use Fine Spray or Fog. Dry chemical. Carbon dioxide. Water may be used to cool tanks and structures adjacent to the fire.

5.4 Unsuitable extinguishing media:

None.

5.5 Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases

Hazardous combustion products: Various hydrocarbon fragments , carbon dioxide , formaldehyde , carbon monoxide , silicon dioxide .

5.6 Fire fighting procedures:

Full turn-out gear and Self Contained Breathing Apparatus (SCBA) should be worn when fighting large fires.

6. Accidental release measures

6.1 Precautions:

Secure the area. Wear personal protection equipment (see section 8). Keep unprotected persons away. Avoid contact with eyes and skin. Do not inhale gases/vapours/aerosols. If material is released indicate risk of slipping. Do not walk through spilled material.



Safety Data Sheet

Material name: Smart Tires

Product ID: SS-S400T

Version: 1

Date of print: 11/18/2019

HAZWOPER PPE Level: C

6.2 Containment:

Prevent material from entering surface waters, drains or sewers and soil. Close leak if possible without risk. Contain any fluid that runs out using suitable material (e.g. earth). Retain contaminated water/extinguishing water. Dispose of in prescribed marked containers. Inform authorities if substance leaks into surface waters, sewerage or ground.

Spills of material which could reach surface waters must be reported to the United States Coast Guard National Response Center's toll free phone number (800) 424-8802.

6.3 Methods for cleaning up

Take up mechanically and dispose of according to local/state/federal regulations. Do not flush away with water. For small amounts: Absorb with a neutral (non-acidic / non-basic) liquid binding material such as diatomaceous earth and dispose of according to government regulations. For large amounts: Liquids may be recovered using suction devices or pumps. If flammable, only air driven or properly rated electrical equipment should be used. Clean any slippery coating that remains using a detergent / soap solution or another biodegradable cleaner. Silicone fluids are slippery; spills are a safety hazard. Apply sand or other inert granular material to improve traction.

7. Handling and storage

7.1 General information:

Always stir well before use. Avoid exposure by technical measures or personal protective equipment.

7.2 Handling

Precautions for safe handling:

Avoid formation of aerosols. In case of aerosol formation special protective measures are required (exhausting by suction, respiratory protection). Spilled substance increases risk of slipping. Observe information in section 8.

Precautions against fire and explosion:

Observe the general rules for fire prevention.

7.3 Storage

Conditions for storage rooms and vessels:

Observe local/state/federal regulations.

Advice for storage of incompatible materials:

Observe local/state/federal regulations.

Further information for storage:

Store in a dry and cool place. Protect against sun. Protect against frost.

Minimum temperature allowed during storage and transportation: 0 °C (32 °F)

Do not allow this material to freeze.

Maximum temperature allowed during storage and transportation: 32 °C (90 °F)

Temperature limit to maintain product quality.

8. Exposure controls and personal protection

8.1 Engineering controls

Ventilation:

Use with adequate ventilation.

Local exhaust:

If spraying or other aerosol generating operations are performed, local exhaust ventilation designed to capture mists and sprays, such as a paint spray booth, is recommended.

8.2 Associate substances with specific control parameters such as limit values

none known

8.3 Personal protection equipment (PPE)

Respiratory protection:

Respiratory protection is not normally required. If spraying or other operations which generate an aerosol mist are conducted,



Safety Data Sheet

Material name: SmartTires

Product ID: SS-S4000T

Version: 1

Date of print: 11/18/2019

respiratory protection for exposed personnel is recommended. A NIOSH approved air purifying respirator equipped with universal multi-contaminant, multi-gas/vapor cartridges and at least P-99 solid/aerosol particulate filters is recommended if overexposure to dusts, mists, or vapors could occur. If eye-irritating dusts or vapors are present, a full-face respirator should be worn.

Hand protection:

neoprene or nitrile rubber gloves

Eye protection:

Safety glasses with side shields. Additional eye and face protection, splash-proof goggles, hood, full-faced respirator, or face shield is recommended if splashing could occur.

Other protective clothing or equipment:

Additional skin protection, such as SARANEX coated Tyvek apron, over-sleeves, lab coat, coveralls, or protective suit should be worn if splashing could occur. Provide eye bath and safety shower.

8.4 General hygiene and protection measures:

Avoid contact with eyes, skin and clothing. Avoid breathing dust/vapor/mist/gas/aerosol. Do not eat, drink or smoke when handling. Wash thoroughly after handling.

9. Physical and chemical properties

9.1 Appearance

Physical state : liquid
Colour : white
Odour : slight, characteristic

9.2 Safety parameters

Property:	Value:	Method:
Melting point / melting range	ca. 0 °C (32 °F)	(-)
Boiling point / boiling range	ca. 100 °C (212 °F)	(Estimated Value)
Flash point.....	not applicable	
Ignition temperature	not applicable	
Lower explosion limit (LEL)	not applicable	
Upper explosion limit (UEL).....	not applicable	
Vapour pressure.....	not determined	
Density	8.26 lbs/ gal	
Water solubility / miscibility.....	completely miscible	
pH-Value	5 - 8	
Viscosity (dynamic)	< 5000 mPa.s	

9.3 Further information

Odour limit..... : no data available
Percent Volatiles 36 % | || VOC | < 30 g/l | (calculated value) |
| Corrosive to Steel or Aluminum..... | Not corrosive to steel or aluminum. | |

10. Stability and reactivity

10.1 General information:

If stored and handled in accordance with standard industrial practices no hazardous reactions are known.

10.2 Conditions to avoid

none known

10.3 Materials to avoid

none known

10.4 Hazardous decomposition products

If stored and handled properly: none known . The following applies for the silicone content of the substance: Measurements have shown the formation of small amounts of formaldehyde at temperatures above about 150 °C (302 °F) through oxidation.

Safety Data Sheet

Material name: SmartTires

Product ID: SS-S4000T

Version: 1

Date of print: 11/18/2019

10.5 Further information:

Hazardous polymerization cannot occur.

11. Toxicological information

11.1 Information on toxicological effects

11.1.1 Acute toxicity

Product details:

Route of exposure	Result/Effect	Species/Test system	Source
Oral	LD50: > 2000 mg/kg	Rat	Conclusion by analogy
dermal	LD50: > 2000 mg/kg	Rat	Conclusion by analogy

11.1.2 Skin corrosion/irritation

Product details:

Result/Effect	Species/Test system	Source
not irritating	Rabbit	Conclusion by analogy

11.1.3 Serious eye damage / eye irritation

Product details:

Result/Effect	Species/Test system	Source
not irritating	Rabbit	Conclusion by analogy

11.1.4 Respiratory or skin sensitization

Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.1.5 Germ cell mutagenicity

Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.1.6 Carcinogenicity

Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.1.7 Reproductive toxicity

Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.1.8 Specific target organ toxicity (single exposure)

Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.1.9 Specific target organ toxicity (repeated exposure)

Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.1.10 Aspiration hazard

Assessment:

For this endpoint no toxicological test data is available for the whole product.



Safety Data Sheet

Material name: Smart Tires

Product ID: SS-S4000T

Version: 1

Date of print: 11/18/2019

11.1.11 Further toxicological information

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Other information: Contains < 0.1% of a substance for which studies indicate a low sensitization threshold in humans.

12. Ecological information

12.1 Toxicity

Assessment:

No expected damaging effects to aquatic organisms. According to current knowledge adverse effects on water purification plants are not expected.

Product details:

Result/Effect	Species/Test system	Source
LC50: > 100 mg/l	dynamic zebra fish (Danio rerio) (96 h)	Conclusion by analogy
EC50: > 100 mg/l	static Daphnia magna (48 h)	Conclusion by analogy
EC50: > 1000 mg/l	sludge (3 h)	Conclusion by analogy

12.2 Persistence and degradability

Assessment:

Silicone content: biologically not degradable. Elimination by adsorption to activated sludge. Emulsifier: readily biologically degradable.

12.3 Bioaccumulative potential

Assessment:

Polymer component: Bioaccumulation is not expected to occur.

12.4 Mobility in soil

Assessment:

No adverse effects expected. Separation by sedimentation.

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Other adverse effects

none known

13. Disposal considerations

13.1 Product disposal

Recommendation:

Material that cannot be used, reprocessed or recycled should be disposed of in accordance with Federal, State, and local regulations at an approved facility. Depending on the regulations, waste treatment methods may include, e.g., landfill or incineration.

13.2 Packaging disposal

Recommendation:

Completely discharge containers (no tear drops, no powder rest, scraped carefully). Containers may be recycled or re-used. Observe local/state/federal regulations. Uncleaned packaging should be treated with the same precautions as the material.



Safety Data Sheet

Material name: SmartTires

Product ID: SS-S4000T

Version: 1

Date of print: 11/18/2019

14. Transport information

14.1 US DOT & CANADA TDG SURFACE

Valuation..... Not regulated for transport
Other Information.....: Protect from freezing, when exposed to cold temperatures approaching 0 °C (32 °F) or below.
Temperature Sensitive Material.

14.2 Transport by sea IMDG-Code

Valuation.....: Not regulated for transport

14.3 Air transport ICAO-TI/IATA-DGR

Valuation.....: Not regulated for transport

15. Regulatory information

15.1 U.S. Federal regulations

TSCA inventory status and TSCA information:

This material or its components are listed on or are in compliance with the requirements of the TSCA Chemical Substance Inventory.

TSCA 12(b) Export Notification:

This material does not contain reportable amounts of any TSCA 12(b) listed chemicals.

CERCLA Regulated Chemicals:

This material does not contain any CERCLA regulated chemicals.

SARA 302 EHS Chemicals:

This material does not contain any SARA extremely hazardous substances.

SARA 311/312 Hazard Class:

Immediate (acute) health hazard.

SARA 313 Chemicals:

This material does not contain any SARA 313 chemicals above de minimus levels.

HAPS (Hazardous Air Pollutants):

This material does not contain any hazardous air pollutants.

15.2 U.S. State regulations

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986):

This material does not contain any chemicals known to the State of California to cause cancer.

This material does not contain any chemicals known to the State of California to cause reproductive effects.

Massachusetts Substance List:

This material contains no listed components.

New Jersey Right-to-Know Hazardous Substance List:

This material contains no listed components.

Pennsylvania Right-to-Know Hazardous Substance List:

57-55-6 Propylene glycol

15.3 Details of international registration status

Relevant information about individual substance inventories, where available, is given below.

Japan.....: **ENCS** (Handbook of Existing and New Chemical Substances):
This product is listed in, or complies with, the substance inventory.
Australia.....: **AICS** (Australian Inventory of Chemical Substances):
This product is listed in, or complies with, the substance inventory.
China.....: **IECSC** (Inventory of Existing Chemical Substances in China):
This product is listed in, or complies with, the substance inventory.



Safety Data Sheet

Material name: SmartTires

Product ID: SS-S4000T

Version: 1

Date of print: 11/18/2019

Canada	DSL (Domestic Substance List): This product is listed in, or complies with, the substance inventory.
Philippines.....	PICCS (Philippine Inventory of Chemicals and Chemical Substances): This product is listed in, or complies with, the substance inventory.
United States of America (USA).....	TSCA (Toxic Substance Control Act Chemical Substance Inventory): All components of this product are listed as active or are in compliance with the substance inventory.
Taiwan	TCSI (Taiwan Chemical Substance Inventory): This product is listed in, or complies with, the substance inventory. General note: The Taiwanese chemicals regulation requires a phase 1 registration for TCSI-listed or TCSI-compliant substances if imports to Taiwan or manufacturing in Taiwan exceed the trigger quantity of 100 kg/a (for mixtures to be calculated per each ingredient). It is the duty of the importing/manufacturing legal entity to take care of this obligation.
European Economic Area (EEA).....	REACH (Regulation (EC) No 1907/2006): General note: the registration obligations for substances imported into the EEA or manufactured within the EEA by the supplier mentioned in section 1 are fulfilled by the said supplier. The registration obligations for substances imported into the EEA by customers or other downstream users must be fulfilled by the latter.
South Korea (Republic of Korea)	AREC (Act on Registration and Evaluation of Chemicals; "K-REACH"): General note: in case of registration obligations for substances or polymers imported into Korea or manufactured within Korea these are fulfilled by the supplier mentioned in section 1. The registration obligations for substances or polymers imported into Korea by customers or other downstream users must be fulfilled by the latter.

16. Other information

16.1 Additional information and disclaimer:

This Safety Data Sheet (SDS) meets the requirements of the Federal OSHA Hazard Communication Standard (29 CFR 1910.1200). This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief accurate and reliable as of the date compiled. However, no representation, warranty or guarantee expressed or implied, is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information. Nothing herein shall be construed as a recommendation for uses which infringe valid patents or as extending a license under valid patents. This SDS provides selected regulatory information on this product, including its components. This is not intended to include all regulations. It is the responsibility of the user to know and comply with all applicable rules, regulations and laws relating to the product being used.

While Smart Solutions believes the information contained herein to be accurate, Smart Solutions makes no representation or warranty, express or implied, regarding, and assumes no liability for, the accuracy or completeness of the information. The Buyer assumes all responsibility for handling, using and/or reselling the Product in accordance with applicable federal, state, and local law. This SDS shall not in any way limit or preclude the operation and effect of any of the provisions of Smart Solutions terms and conditions of sale.

16.2 Glossary of Terms:

ACGIH - American Conference of Governmental Industrial Hygienists	ppm - Parts per Million
DOT - Department of Transportation	SARA - Superfund Amendments and Reauthorization Act
hPa - Hectopascals	STEL - Short Term Exposure Limit
mPa*s - Milli Pascal-Seconds	TSCA - Toxic Substances Control Act
OSHA - Occupational Safety and Health Administration	TWA - Time Weighted Average
PEL - Permissible Exposure Limit	WHMIS - Canadian Workplace Hazardous Materials Identification System

Flash point determination methods	Common name
ASTM D56.....	Tagliabue (Tag) closed cup
ASTM D92, DIN 51376, ISO 2592	Cleveland open cup
ASTM D93, DIN 51758, ISO 2719	Pensky-Martens closed cup
ASTM D3278, DIN 55680, ISO 3679	Setaflash or Rapid closed cup
DIN 51755	Abel-Pensky closed cup



Safety Data Sheet

Material name: SmartTires

Product ID: SS-S4000T

Version: 1

Date of print: 11/18/2019

16.3 Conversion table:

Pressure:..... 1 hPa * 0.75 = 1 mm Hg = 1 torr; 1 bar = 1000 hPa
Viscosity:.....: 1 mPa*s = 1 centipoise (cP)