

## Safety Data Sheet

Printing date 04/22/2020

Version Number 1.0

Reviewed on 04/22/2020

### 1 Identification

#### Product identifier

Trade name: ***TYTRO® SI 550 B***

SDS ID Number: 2482

**Relevant identified uses of the substance or mixture, and uses advised against:**  
Specialty construction product. Not intended for other uses.

#### Details of the supplier of the safety data sheet

##### Manufacturer/Supplier:

GCP Applied Technologies  
62 Whittemore Avenue  
Cambridge, MA 02140 USA

GCP Canada, Inc.  
294 Clements Road W.  
Ajax, Ontario L1S 3C6 Canada

##### Information department:

Environmental Health & Safety  
USA: +1-617-876-1400 (24 hours)  
+1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts  
CAN: 1-905-683-8561 (24 hours)  
Email address: msds.gcp@gcpat.com

**Transport Emergency:** Chemtrec +1-800-424-9300 (24 hours)

### 2 Hazard(s) identification

#### Classification of the substance or mixture

Harmful if inhaled.  
Causes skin irritation.  
Causes serious eye irritation.  
May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
May cause an allergic skin reaction.  
Suspected of causing cancer.  
Suspected of damaging fertility or the unborn child.  
May cause respiratory irritation.  
May cause damage to organs through prolonged or repeated exposure.

#### Label elements:

##### Hazard pictograms



Danger

##### Hazard statements

Harmful if inhaled.  
Causes skin irritation.

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Causes serious eye irritation.  
 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
 May cause an allergic skin reaction.  
 Suspected of causing cancer.  
 Suspected of damaging fertility or the unborn child.  
 May cause respiratory irritation.  
 May cause damage to organs through prolonged or repeated exposure.

**Precautionary statements**

Avoid breathing dust/fume/gas/mist/vapors/spray

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

[In case of inadequate ventilation] wear respiratory protection.

If on skin: Wash with plenty of water.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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

IF exposed or concerned: Get medical advice/attention.

Call a poison center/doctor if you feel unwell.

If skin irritation or rash occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

**NFPA ratings (scale 0 - 4)**

Health = 2

Fire = 1

Reactivity = 0

**HMIS-ratings (scale 0 - 4)**

Health = \*2

Flammability = 1

Reactivity = 0

**Other hazards****Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**3 Composition/information on ingredients****Chemical characterization: Mixture****Description:** Mixture of the hazardous substance(s) listed below with additional nonhazardous ingredients.**Hazardous components:**

9016-87-9	Diphenylmethanediisocyanate, isomers and homologues	30-50%
101-68-8	Diphenylmethane-4,4'-di-isocyanate	25-30%

**Additional information:** Non-hazardous ingredients may be listed in Section 15; Right-To-Know disclosure.**4 First-aid measures****Description of first aid measures****General information:** Get medical advice/attention if you feel unwell.**After inhalation:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

**After skin contact:**

Immediately wash contaminated skin with soap or mild detergent and water. If this chemical soaks clothing, immediately remove clothing and wash skin.

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**After eye contact:** Rinse cautiously with water for several minutes.

**After swallowing:**

Rinse mouth.

Do NOT induce vomiting.

**Information for doctor:**

**Most important symptoms and effects, both acute and delayed** Irritating to eyes.

**Indication of any immediate medical attention and special treatment needed** No further relevant information available.

## 5 Fire-fighting measures

**Special hazards arising from the substance or mixture** No further relevant information available.

**Additional information** Collect contaminated fire fighting water separately. It must not enter the sewage system.

## 6 Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

**Methods and material for containment and cleaning up:**

Contain and/or absorb spill with inert material (i.e. sand, vermiculite) then place in a suitable container.

Sweep up spilled product into receptacles.

Dispose contaminated material as waste according to section 13 of the SDS.

**Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## 7 Handling and storage

**Handling:**

**Precautions for safe handling**

Avoid contact with skin.

Prevent formation of aerosols.

Avoid contact with eyes.

**Information about protection against explosions and fires:** No special measures required.

**Conditions for safe storage, including any incompatibilities**

**Storage:**

**Information about storage in one common storage facility:** No special measures required.

**Further information about storage conditions:** Keep receptacle tightly sealed.

**Specific end use(s)** No further relevant information available.

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## 8 Exposure controls/personal protection

**Additional information about design of technical systems:** No further data; see item 7.

### Control parameters

**Components with limit values that require monitoring at the workplace:**

#### 101-68-8 Diphenylmethane-4,4'-di-isocyanate

PEL (USA)	Ceiling limit value: 0.2 mg/m <sup>3</sup> , 0.02 ppm
REL (USA)	Long-term value: 0.05 mg/m <sup>3</sup> , 0.005 ppm Ceiling limit value: 0.2* mg/m <sup>3</sup> , 0.02* ppm *10-min
TLV (USA)	Long-term value: 0.051 mg/m <sup>3</sup> , 0.005 ppm

**Additional information:** The lists that were valid during the creation were used as basis.

### Exposure controls

#### Personal protective equipment:

**General protective and hygienic measures:** The usual precautionary measures for handling chemicals should be followed.

#### Breathing equipment:

Control exposure to ingredients with workplace control parameters if mentioned above. If no ingredients are listed, respiratory protection is generally not required.

If exposure limits are listed and may be exceeded, use approved respiratory protective equipment and filter type appropriate for the listed ingredients. (NIOSH, CEN, etc.).

Due to the presence of isocyanate, supplied air respirators must be worn whenever the product is applied in poorly ventilated areas unless local exhaust will maintain exposures below acceptable limits. A chemical cartridge respirator with organic vapor cartridge is required when local exhaust is unavailable or inadequate to control exposures below required limits. When supplied-air respirators are not available or use is not practical, an air-purifying respirator may be an acceptable alternative if the recommendations below are followed:

Use of fans to improve air circulation and general ventilation or exhaust ventilation to remove isocyanate vapors when working in confined spaces.

The use of an air-purifying respirator fitted with organic vapor cartridge and a well managed cartridge change schedule. Due to the low exposure limits and poor odor warning properties, cartridges should be replaced on a daily basis at a minimum.

To complement the above, a viable isocyanate measurement system should be used to monitor workplace levels.

**Protection of hands:** Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

**Material of gloves** Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

#### Eye protection:



Safety glasses with side shield protection.

Safety glasses with side shields should be worn to prevent contact due to splashing. Under high vapor mist concentrations, tightly sealed goggles should be worn.



A face shield should also be worn if there is potential exposure to splash or spray.

#### Body protection:

Use personal protective equipment as required.

Take off contaminated clothing.

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**9 Physical and chemical properties****Information on basic physical and chemical properties****General Information****Appearance:**

<b>Form:</b>	Liquid
<b>Color:</b>	Light yellow
<b>Odor:</b>	Characteristic
<b>Odor threshold:</b>	Not determined.

**pH-value (~):** Not determined.

**Change in condition**

<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	> 150 °C (> 302 °F)
<b>Flash point:</b>	Not applicable.

**Flammability (solid, gaseous):** Not applicable.

**Ignition temperature:** 290 °C (554 °F)

<b>Decomposition temperature:</b>	Not determined.
<b>Auto igniting:</b>	Product is not self-igniting.
<b>Danger of explosion:</b>	Product does not present an explosion hazard.

**Explosion limits:**

<b>Lower:</b>	0.4 Vol %
<b>Upper:</b>	Not determined.

<b>Vapor pressure:</b>	Not determined.
<b>Density: (~) at 20 °C (68 °F)</b>	1.2 g/cm <sup>3</sup> (10 lbs/gal)
<b>Relative density</b>	Not determined.
<b>Vapor density</b>	Not determined.
<b>Evaporation rate</b>	Not determined.

**Solubility in / Miscibility with Water:** Not miscible or difficult to mix.

**Partition coefficient (n-octanol/water):** Not determined.

**Viscosity:**

<b>Dynamic at 20 °C (68 °F):</b>	200 mPas
<b>Kinematic:</b>	Not determined.
<b>Molecular weight</b>	Not applicable.

**Other information** No further relevant information available.

**10 Stability and reactivity**

**Reactivity** Stable under normal conditions.

**Chemical stability**

**Thermal decomposition:** No decomposition if used according to specifications.

**Possibility of hazardous reactions**

No dangerous reactions known.  
No further relevant information available.

**Conditions to avoid** No further relevant information available.

**Incompatible materials:** No further relevant information available.

**Hazardous decomposition products:** Carbon monoxide and carbon dioxide

**Additional information:** See section 7 for information on handling, storage and conditions to be avoided.

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**11 Toxicological information****Delayed and immediate effects and chronic effects from short or long term exposure**

Suspected of damaging fertility or the unborn child.

**Information on toxicological effects****Acute toxicity:****LD/LC50 values relevant for classification:****9016-87-9 Diphenylmethanediisocyanate, isomers and homologues**

Oral	LD50	10,000 mg/kg (rat)
Dermal	LD50	9,000 mg/kg (rat)
Inhalation	LC50, 4h	11 mg/l (rat)

**101-68-8 Diphenylmethane-4,4'-di-isocyanate**

Oral	LD50	>10,000 mg/kg (rat)
Dermal	LD50	>9,400 mg/kg (rabbit)
Inhalation	LC50, 4h	0.368 mg/l (rat)
	LC50, 1h	>2.24 mg/l (rat)

**Primary irritant effect:****on the skin:** Causes skin irritation.**on the eye:** Causes serious eye irritation.**inhalation:**

Harmful if inhaled.

May cause respiratory irritation.

Causes damage to organs.

**Ingestion:** May cause damage to organs through prolonged or repeated exposure.**Sensitization:**

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

**Additional toxicological information:**

Suspected of damaging fertility or the unborn child.

Suspected of causing cancer.

**Carcinogenic categories****IARC (International Agency for Research on Cancer) Human Carcinogenicity:****Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable**

9016-87-9	Diphenylmethanediisocyanate, isomers and homologues	3
101-68-8	Diphenylmethane-4,4'-di-isocyanate	3

**NTP (National Toxicology Program)****K–Known to be carcinogenic, R–May reasonably be anticipated to be carcinogenic**

None of the ingredients are listed.

**OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients are listed.

**12 Ecological information****Toxicity****Aquatic toxicity:** No further relevant information available.**Persistence and degradability** No further relevant information available.**Behavior in environmental systems:****Bioaccumulative potential** No further relevant information available.

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**Mobility in soil** No further relevant information available.**Additional ecological information:****General notes:** Not known to be hazardous to water.**Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**Other adverse effects** No further relevant information available.**13 Disposal considerations****Disposal methods:**

Consult all regulations (federal, state, provincial, local) or a qualified waste disposal firm when characterizing product for disposal. Dispose of waste in accordance with all applicable regulations.

**Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

**Uncleaned packagings:****Recommendation:** Dispose of contents/container in accordance with local/regional/national/international regulations.**14 Transport information****UN-Number**  
DOT, IMDG, IATA Not applicable.**UN proper shipping name**  
DOT, IMDG, IATA Not applicable.**Transport hazard class(es)**  
DOT, IMDG, IATA  
Class Not applicable.**Packing group**  
DOT, IMDG, IATA Not applicable.**Environmental hazards:**  
Marine pollutant: No**Special precautions for user** Not applicable.**UN "Model Regulation":** Not applicable.**15 Regulatory information****SARA (Superfund Amendments and Reauthorization Act)****Section 302/304 (extremely hazardous substances):**

None of the ingredients is listed.

**Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):**

9016-87-9 | Diphenylmethanediisocyanate, isomers and homologues

47.8%

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101-68-8	Diphenylmethane-4,4'-di-isocyanate	25.7%
124-17-4	2-(2-butoxyethoxy)ethyl acetate	9.8%

**SARA Section 312/Tier I & II Hazard Categories:**

Health Hazard - Carcinogenicity  
 Health Hazard - Acute toxicity (any route of exposure)  
 Health Hazard - Reproductive toxicity  
 Health Hazard - Skin Corrosion or Irritation  
 Health Hazard - Respiratory or Skin Sensitization  
 Health Hazard - Serious eye damage or eye irritation  
 Health Hazard - Specific target organ toxicity (single or repeated exposure)

**North America Chemical Inventory Status****TSCA (Toxic Substances Control Act - United States):**

All ingredients are listed or exempt from listing unless otherwise noted below.

**CEPA (Canadian DSL):**

All ingredients are listed or exempt from listing unless otherwise noted below.

**Right to Know Ingredient Disclosure:**

6846-50-0	1-isopropyl-2,2-dimethyltrimethylene diisobutyrate
124-17-4	2-(2-butoxyethoxy)ethyl acetate
	Polyetherpolyol

**California Proposition 65: (Substances <0.1% unless noted in Section 3)****Chemicals known to cause cancer:**

None of the ingredients is listed.

**Chemicals known to cause reproductive toxicity for females:**

None of the ingredients are listed.

**Chemicals known to cause reproductive toxicity for males:**

None of the ingredients are listed.

**Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

**Carcinogenicity Categories****TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists)**

**Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable**

None of the ingredients are listed.

**NIOSH-Cancer (National Institute for Occupational Safety and Health)**

None of the ingredients are listed.

**Volatile Organic Compounds (VOC) reported per the Emission Standards.**

If no g/L value is provided this product is not subject to above standard.

**16 Other information**

The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection.

**Department issuing SDS:**

GCP Applied Technologies  
 62 Whittemore Avenue  
 Cambridge, MA 02140 USA  
 USA: +1-617-876-1400 (24 hours)  
 +1-800-354-5414

**The first date of preparation** 05/18/2015

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