



## Safety Data Sheet

According to Canadian Hazardous Products Regulations and WHMIS 2015

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Activator

### SECTION 1: Identification

#### Product identifier

Product name: Activator  
Product code: 968F/15CC, 968F/30CC and 968F/60CC  
Additional information: Rev 2

#### Recommended use of the product and restriction on use

Relevant identified uses: Not determined or not applicable.  
Uses advised against: Not determined or not applicable.  
Reasons why uses advised against: Not determined or not applicable.

#### Manufacturer or supplier details

|                            |                            |                                       |
|----------------------------|----------------------------|---------------------------------------|
| Manufacturer:              | Supplier:                  | Supplier:                             |
| North America              | North America              | Australia                             |
| Tech International         | Tech International         | Chemvulc Industrial Australia Pty Ltd |
| 200 E. Coshocton St.       | 200 East Coshocton Street  | Unit 3/11 Precision Place             |
| Johnstown, Ohio 43031      | Johnstown, OH 43031        | Mulgrave, NSW 2756                    |
| 740-967-9015               | 1-740-967-9015             | +61 2 4587 9888                       |
| www.tech-international.com | www.tech-international.com | www.chemvulcind.com.au                |

#### Emergency telephone number:

North America  
CHEMTREC  
Within USA and Canada: 1-800-424-9300  
Outside USA and Canada: +1-703-527-3887

#### Emergency telephone number:

Australia  
Within Australia: 1-800-127406

### SECTION 2: Hazard identification

#### GHS classification:

Flammable liquids, category 2  
Eye irritation, category 2A  
Respiratory sensitization, category 1  
Specific target organ toxicity - single exposure, category 3, central nervous system

#### Label elements

##### Hazard pictograms:



Signal word: Danger

#### Hazard statements:

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H225 Highly flammable liquid and vapor.

H319 Causes serious eye irritation.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H336 May cause drowsiness or dizziness.

### Precautionary statements:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

P240 Ground and bond container and receiving equipment.

P241 Use explosion-proof [electrical/ventilating/lighting] equipment.

P242 Use non-sparking tools.

P243 Take action to prevent static discharges.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

P264 Wash hands thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P284 In case of inadequate ventilation wear respiratory protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

P370+P378 In case of fire: Use agents recommended in Section 5 to extinguish.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists get medical advice/attention

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P304+P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor/physician.

P312 Call a POISON CENTER/doctor/physician if you feel unwell.

P403+P235 Store in a well ventilated place. Keep cool.

P405 Store locked up.

P403+P233 Store in a well ventilated place. Keep container tightly closed.

P501 Dispose of contents/container in accordance with Section 13.

**Hazards not otherwise classified:** None

## SECTION 3: Composition/information on ingredients

| Identification           | Name                                  | Weight % |
|--------------------------|---------------------------------------|----------|
| CAS number:<br>141-78-6  | Ethyl acetate                         | 65-75    |
| CAS number:<br>4151-51-3 | Tris(4-Isocyanatophenyl)Thiophosphate | 20-30    |
| CAS number:<br>108-90-7  | Chlorobenzene                         | 1-2      |

**Additional Information:** None

## SECTION 4: First-aid measures

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### Description of first-aid measures

#### General notes:

Show this Safety Data Sheet to the doctor in attendance

#### After inhalation:

If inhaled, remove person to fresh air and place in a position comfortable for breathing. Keep person at rest. If breathing is difficult, administer oxygen. If breathing has stopped, provide artificial respiration. If exposed, seek medical advice/attention

#### After skin contact:

Remove contaminated clothing and shoes. Rinse skin with copious amounts of water [shower] for several minutes. Launder contaminated clothing before reuse. If symptoms develop or persist, seek medical advice/attention

#### After eye contact:

Rinse eyes with plenty of gently flowing lukewarm water for 15 minutes. Remove contact lenses if present and easy to do so. Protect unexposed eye. If symptoms develop or persist, seek medical advice/attention

#### After ingestion:

If swallowed, DO NOT induce vomiting unless told to do so by a physician or poison control center. Rinse mouth with water. Never give anything by mouth to an unconscious person. If spontaneous vomiting occurs, place on the left side with head down to prevent aspiration of liquid into the lungs. If symptoms develop or persist, seek medical advice/attention

### Most important symptoms and effects, both acute and delayed

#### Acute symptoms and effects:

Product is highly flammable. Exposure to sources of ignition may cause physical injury  
Eye contact may result in irritation, redness, pain, inflammation, itching, burning and tearing  
Inhalation exposure may cause allergy, asthma symptoms or breathing difficulties. Symptoms may include cough, chronic phlegm, shortness of breath, wheezing and chest tightness. Symptoms may be delayed  
Inhalation may have adverse effects on the central nervous system. Symptoms may include drowsiness, dizziness, headache, nausea and lowering of consciousness. Acute overexposure via inhalation may result in respiratory distress, confusion and unconsciousness

#### Delayed symptoms and effects:

Effects are dependent on exposure (dose, concentration, contact time)

### Immediate medical attention and special treatment

#### Specific treatment:

Skin/eye burns require immediate treatment  
Overexposure via inhalation requires urgent medical treatment

#### Notes for the doctor:

Notes to physician: Stain eyes for evidence of corneal injury. If cornea is burned, instill antibiotic/steroid preparation as needed. Workplace vapors could produce reversible corneal epithelial edema impairing vision. Skin: This compound is a skin sensitizer. Treat symptomatically as for contact dermatitis or thermal burn. Ingestion: Treat symptomatically. There is no specific antidote. Inducing vomiting is contraindicated because of the irritating nature of the compound. Inhalation: Treatment is essentially symptomatic. An individual having a dermal or pulmonary sensitization reaction to this material should be removed from further exposure to any diisocyanate

## SECTION 5: Fire-fighting measures

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### Extinguishing media

#### Suitable extinguishing media:

Use Water (fog only), dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam

#### Unsuitable extinguishing media:

Do not use a water stream as an extinguisher

### Specific hazards during fire-fighting:

Highly flammable liquid. Will be easily ignitable by heat, sparks or flames. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapor explosion hazard indoors, outdoors or in sewers. Runoff to sewer may create fire or explosion hazard. Containers may explode when heated. Inhalation or contact with material may irritate or burn skin and eyes. Fire may produce irritating, corrosive and/or toxic gases. Vapors may cause dizziness or suffocation

### Special protective equipment for firefighters:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full-face piece operated in positive pressure mode

### Special precautions:

Evacuate non-essential personnel. Ventilate closed spaces before entering. Consider initial evacuation for 300 meters in all directions. If tank/rail car is involved in the fire, ISOLATE for 800 meters in all directions. Fight fire from a maximum distance. Move containers from fire area if you can do it without risk. Use water spray/fog for cooling fire exposed containers. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. Always stay away from tanks engulfed in fire. For massive fire, use unmanned hose holders or monitor nozzles. If this is impossible, withdraw from area and let fire burn. Stand by, at a safe distance, with extinguisher ready for possible re-ignition. A vapor-suppressing foam may be used to reduce vapors. Avoid unnecessary run-off of extinguishing media which may cause pollution. Do not handle damaged containers unless specialized to do so

## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures:

Evacuate unnecessary personnel. Ventilate area. Extinguish any sources of ignition. All equipment used when handling the product must be grounded. Wear recommended personal protective equipment (see Section 8). Avoid contact with skin, eyes and clothing. Avoid breathing mist, vapor, dust, fume and spray. Do not walk through spilled material. Wash thoroughly after handling

### Environmental precautions:

Prevent further leakage or spillage if safe to do so. Prevent from reaching drains, sewers and waterways. Discharge into the environment must be avoided

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

Do not touch damaged containers or spilled material unless wearing appropriate personal protective clothing. Stop leak if you can do it without risk. A vapor-suppressing foam may be used to reduce vapors. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers for future disposal. Dispose of in accordance with all applicable regulations (see Section 13)

### Reference to other sections:

For personal protective equipment see Section 8. For disposal see Section 13

## SECTION 7: Handling and storage

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### Precautions for safe handling:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating and lighting equipment. Take action to prevent static discharges. Handle containers with caution. Use appropriate personal protective equipment (see Section 8). Use only with adequate ventilation. Avoid breathing mist/vapor/spray/dust. Do not eat, drink, smoke, or use personal products when handling chemical substances. Avoid contact with skin, eyes and clothing. Wash affected areas thoroughly after handling. Keep away from incompatible materials (See Section 10). Keep containers tightly closed when not in use.

### Conditions for safe storage, including any incompatibilities:

Store in cool, dry, well-ventilated location out of direct sunlight. Keep away from food and beverages. Protect from freezing and physical damage. Store away from heat, open flames and other sources of ignition. Keep container tightly sealed. Store away from incompatible materials (See Section 10).

## SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

### Occupational Exposure limit values:

| Country (Legal Basis) | Substance     | Identifier | Permissible concentration                            |
|-----------------------|---------------|------------|--|
| Canada                | Ethyl acetate | 141-78-6   | Alberta 8-hour TWA: 1400 mg/m <sup>3</sup> (400 ppm) |
|                       | Ethyl acetate | 141-78-6   | British Columbia 8-hour TWA: 150 ppm                 |
|                       | Ethyl acetate | 141-78-6   | Manitoba 8-hour TWA: 400 ppm                         |
|                       | Ethyl acetate | 141-78-6   | Ontario 8-hour TWA: 400 ppm                          |
|                       | Ethyl acetate | 141-78-6   | Saskatchewan 8-hour TWA: 400 ppm                     |
|                       | Ethyl acetate | 141-78-6   | Saskatchewan 15-minute STEL: 500 ppm                 |
|                       | Chlorobenzene | 108-90-7   | Alberta 8-hour TWA: 46 mg/m <sup>3</sup> (10 ppm)    |
|                       | Chlorobenzene | 108-90-7   | British Columbia 8-hour TWA: 10 ppm                  |
|                       | Chlorobenzene | 108-90-7   | Manitoba 8-hour TWA: 10 ppm                          |
|                       | Chlorobenzene | 108-90-7   | Ontario 8-hour TWA: 10 ppm                           |
|                       | Ethyl acetate | 141-78-6   | Quebec 8-hour TWA: 1400 mg/m <sup>3</sup> (400 ppm)  |
|                       | Chlorobenzene | 108-90-7   | Quebec 8-hour TWA: 230 mg/m <sup>3</sup> (50 ppm)    |
|                       | Chlorobenzene | 108-90-7   | Saskatchewan 8-Hour Contamination Limit: 10 ppm      |
|                       | Chlorobenzene | 108-90-7   | Saskatchewan 15-Minute Contamination Limit: 15 ppm   |

### Biological limit values:

No biological exposure limits noted for the ingredient(s).

### Information on monitoring procedures:

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace

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may be required to confirm compliance with an OEL and adequacy of exposure controls.  
Biological monitoring may also be appropriate for some substances.

### Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.  
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.  
Use explosion-proof ventilation equipment.

### Personal protection equipment

#### Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

#### Skin and body protection:

Select glove material impermeable and resistant to the substance.  
Wear appropriate clothing to prevent any possibility of skin contact.  
For continuous contact we recommend nitrile gloves with breakthrough time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified.

#### Respiratory protection:

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.  
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.

### General hygienic measures:

Avoid contact with skin, eyes and clothing.  
Wash hands before breaks and at the end of work.  
Wash contaminated clothing before reuse.

## SECTION 9: Physical and chemical properties

### Information on basic physical and chemical properties

|  |                                     |
|--|-------------------------------------|
| <b>Appearance (physical state, color):</b> | Yellow to brown liquid              |
| <b>Odor:</b>                               | Ester-like                          |
| <b>Odor threshold:</b>                     | Not determined or not available.    |
| <b>pH-value:</b>                           | Not determined or not available.    |
| <b>Melting/Freezing point:</b>             | Not determined or not available.    |
| <b>Boiling point/range:</b>                | 77° C (170.6° F) @ 1,013 hPa        |
| <b>Flash point:</b>                        | -4 °C (24.8 °F)                     |
| <b>Evaporation rate:</b>                   | Not determined or not available.    |
| <b>Flammability (solid, gaseous):</b>      | Not determined or not available.    |
| <b>Explosion limit upper:</b>              | Not determined or not available.    |
| <b>Explosion limit lower:</b>              | Not determined or not available.    |
| <b>Vapor pressure:</b>                     | Approximately 97 hPa at 20°C (68°F) |
| <b>Vapor density:</b>                      | Not determined or not available.    |

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|   |  |
|---|--|
| <b>Density:</b>                                 | 1 g/cm <sup>3</sup> at 20°C (68°F)                                   |
| <b>Relative density:</b>                        | Not determined or not available.                                     |
| <b>Solubilities:</b>                            | Insoluble - Reacts slowly with water to liberate CO <sub>2</sub> gas |
| <b>Partition coefficient (n-octanol/water):</b> | Not determined or not available.                                     |
| <b>Auto/Self-ignition temperature:</b>          | 460° C (860° F)  |
| <b>Decomposition temperature:</b>               | No decomposition below initial boiling point.                        |
| <b>Dynamic viscosity:</b>                       | 3 mPas at 20°C (68°F)  |
| <b>Kinematic viscosity:</b>                     | Not determined or not available.                                     |
| <b>Explosive properties</b>                     | Not determined or not available.                                     |
| <b>Oxidizing properties</b>                     | Not determined or not available.                                     |

## Other information

### SECTION 10: Stability and reactivity

#### Reactivity:

Non-reactive under normal conditions of use.

#### Chemical stability:

Stable under normal conditions of use and storage

#### Possibility of hazardous reactions:

Contact with moisture, other materials that react with isocyanates, or temperatures above 350°F (177 C), may cause polymerization

#### Conditions to avoid:

Heat, flames and sparks.

#### Incompatible materials:

Water, Amines, Strong bases, Alcohols, Copper alloys, Aluminium

#### Hazardous decomposition products:

By Fire and High Heat: Carbon dioxide (CO<sub>2</sub>), carbon monoxide (CO), oxides of nitrogen (NO<sub>x</sub>), dense black smoke., Hydrogen cyanide, Isocyanate, Isocyanic Acid, Other undetermined compounds

### SECTION 11: Toxicological information

#### Acute toxicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

#### Substance data:

| Name          | Route      | Result                           |
|---------------|------------|----------------------------------|
| Chlorobenzene | oral       | LD50 - Rat - 1,110 mg/kg         |
|               | dermal     | LD50 Rabbit: >2200 mg/kg         |
|               | inhalation | LC50 Rat: 2965 ppmV (4 hr - gas) |

#### Skin corrosion/irritation

**Assessment:** Based on available data, the classification criteria are not met.

#### Product data:

No data available.

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### Substance data:

| Name          | Result                  |
|---------------|-------------------------|
| Chlorobenzene | Causes skin irritation. |

### Serious eye damage/irritation

#### Assessment:

Causes serious eye irritation

#### Product data:

No data available.

#### Substance data:

| Name          | Result                         |
|---------------|--------------------------------|
| Ethyl acetate | Causes serious eye irritation. |

### Respiratory or skin sensitization

#### Assessment:

May cause allergy or asthma symptoms or breathing difficulties if inhaled

#### Product data:

No data available.

#### Substance data:

| Name                                  | Result   |
|---------------------------------------|--|
| Tris(4-Isocyanatophenyl)Thiophosphate | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |

### Carcinogenicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

**International Agency for Research on Cancer (IARC):** None of the ingredients are listed.

**National Toxicology Program (NTP):** None of the ingredients are listed.

### Germ cell mutagenicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:**

No data available.

**Substance data:** No data available.

### Reproductive toxicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:**

No data available.

**Substance data:** No data available.

### Specific target organ toxicity (single exposure)

#### Assessment:

May cause drowsiness or dizziness

**Product data:**

No data available.

**Substance data:**



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| Name          | Result                             |
|---------------|------------------------------------|
| Ethyl acetate | May cause drowsiness or dizziness. |

### Specific target organ toxicity (repeated exposure)

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:**

No data available.

**Substance data:** No data available.

### Aspiration toxicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:**

No data available.

**Substance data:** No data available.

### Information on likely routes of exposure:

Skin Contact, Inhalation, Eye Contact.

### Symptoms related to the physical, chemical and toxicological characteristics:

Refer to Section 4 of this SDS.

### Other information:

No data available.

## SECTION 12: Ecological information

### Acute (short-term) toxicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

### Chronic (long-term) toxicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:**

| Name          | Result   |
|---------------|--|
| Chlorobenzene | NOEC Danio rerio: 4.8 mg/L (28 d)              |
|               | NOEC Daphnia magna: 0.32 mg/L (16 d)           |
|               | NOEC Desmodesmus subspicatus: 3.3 mg/L (72 hr) |

### Persistence and degradability

**Product data:** No data available.

**Substance data:** No data available.

### Bioaccumulative potential

**Product data:** No data available.

**Substance data:** No data available.

### Mobility in soil

**Product data:** No data available.

**Substance data:** No data available.

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**Other adverse effects:** No data available.


## SECTION 13: Disposal considerations

### Disposal methods:


Dispose in accordance with all applicable regulations. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities

## SECTION 14: Transport information


### Canadian Transportation of Dangerous Goods (TDG)

|                               |   |
|-------------------------------|---|
| UN number                     | 1173  |
| UN proper shipping name       | Ethyl acetate solution  |
| UN transport hazard class(es) | 3  |
| Packing group                 | II  |
| Environmental hazards         | None  |
| Special precautions for user  | None  |

### International Maritime Dangerous Goods (IMDG)

|                               |   |
|-------------------------------|---|
| UN number                     | 1173  |
| UN proper shipping name       | Ethyl acetate solution  |
| UN transport hazard class(es) | 3  |
| Packing group                 | II  |
| Environmental hazards         | None  |
| Special precautions for user  | None  |
| Limited quantity              | 1L  |

### International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

|                               |   |
|-------------------------------|---|
| UN number                     | 1173  |
| UN proper shipping name       | Ethyl acetate solution  |
| UN transport hazard class(es) | 3  |
| Packing group                 | II  |
| Environmental hazards         | None  |
| Special precautions for user  | None  |
| Limited quantity              | 1L  |

## SECTION 15: Regulatory information

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#### Canada regulations

**Domestic substances list (DSL):** All ingredients are listed or exempt.

**Non-domestic substances list (NDSL):** None of the ingredients are listed.

### SECTION 16: Other information

**Abbreviations and Acronyms:** None

#### Disclaimer:

This product has been classified in accordance with the Canadian Hazardous Products Regulations and WHMIS 2015. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

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**End of Safety Data Sheet**