

SAFETY DATA SHEET

1. Identification

Product identifier	CIM 1000TG Cartridge Activator	
Other means of identification	None.	
Recommended use	Activator for CIM Urethanes	
Recommended restrictions	None known.	
Manufacturer/Importer/Supplier/Distributor information		
Manufacturer		
Company name	CIM INDUSTRIES INC	
Address	6900 NELMS STREET HOUSTON, TX 77061 United States	
Telephone	General Assistance	800 543-3458
E-mail	info@chasecorp.com	
Emergency phone number	Chemtrec (US - 24 hrs)	800 424-9300
	Chemtrec (INTL - 24 hrs)	703-527-3887
Supplier	Not available.	

2. Hazard(s) identification

Physical hazards	Not classified.	
Health hazards	Acute toxicity, inhalation	Category 1
	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2A
	Sensitization, respiratory	Category 1
	Sensitization, skin	Category 1
	Carcinogenicity	Category 2
	Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation
	Specific target organ toxicity, repeated exposure	Category 2
Environmental hazards	Not classified.	

Label elements



Signal word Danger

Hazard statement Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Fatal if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. Suspected of causing cancer. Causes damage to organs () through prolonged or repeated exposure.

Precautionary statement

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. Wear respiratory protection.

Response

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. Immediately call a POISON CENTER/doctor. Specific treatment is urgent (see this label). If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

Storage

Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards

None known.

Supplemental information

None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
DIPHENYLMETHANE DIISOCYANATE [ISOMERS AND HOMOLOGUES]		9016-87-9	90 - 100

Isomer

Chemical name	Common name and synonyms	CAS number	%
4,4'-Methylenediphenyl diisocyanate		101-68-8	55 - 65

All concentrations are in percent by weight (kg) unless ingredient is a gas. Gas concentrations are in percent by volume (l).

Composition comments

Note: CAS 101-68-8 is an MDI isomer that is part of CAS 9016-87-9

4. First-aid measures

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician or poison control center immediately.

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion

Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Coughing. Difficulty in breathing. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash. Prolonged exposure may cause chronic effects.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information

IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media

Powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media

Water. Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe vapors or spray mist. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe vapors or spray mist. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Should be handled in closed systems, if possible. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store locked up. Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value
DIPHENYLMETHANE DIISOCYANATE [ISOMERS AND HOMOLOGUES] (CAS 9016-87-9)	TWA	0.005 ppm
Isomer	Type	Value
4,4'-Methylenediphenyl diisocyanate (CAS 101-68-8)	TWA	0.005 ppm

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value
DIPHENYLMETHANE DIISOCYANATE [ISOMERS AND HOMOLOGUES] (CAS 9016-87-9)	TWA	0.07 mg/m ³
Isomer	Type	Value
4,4'-Methylenediphenyl diisocyanate (CAS 101-68-8)	TWA	0.05 mg/m ³
		0.005 ppm

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Isomer	Type	Value
4,4'-Methylenediphenyl diisocyanate (CAS 101-68-8)	Ceiling	0.01 ppm
	TWA	0.005 ppm

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

Components	Type	Value
DIPHENYLMETHANE DIISOCYANATE [ISOMERS AND HOMOLOGUES] (CAS 9016-87-9)	TWA	0.005 ppm

Isomer	Type	Value
4,4'-Methylenediphenyl diisocyanate (CAS 101-68-8)	TWA	0.005 ppm

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components	Type	Value
DIPHENYLMETHANE DIISOCYANATE [ISOMERS AND HOMOLOGUES] (CAS 9016-87-9)	Ceiling	0.02 ppm

Isomer	Type	Value
4,4'-Methylenediphenyl diisocyanate (CAS 101-68-8)	TWA	0.005 ppm
	Ceiling	0.02 ppm

4,4'-Methylenediphenyl diisocyanate (CAS 101-68-8)	TWA	0.005 ppm
	Ceiling	0.02 ppm

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

Components	Type	Value
DIPHENYLMETHANE DIISOCYANATE [ISOMERS AND HOMOLOGUES] (CAS 9016-87-9)	TWA	0.051 mg/m3

Isomer	Type	Value
4,4'-Methylenediphenyl diisocyanate (CAS 101-68-8)	TWA	0.005 ppm
	TWA	0.051 mg/m3

4,4'-Methylenediphenyl diisocyanate (CAS 101-68-8)	TWA	0.005 ppm
	TWA	0.051 mg/m3

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
DIPHENYLMETHANE DIISOCYANATE [ISOMERS AND HOMOLOGUES] (CAS 9016-87-9)	Ceiling	0.2 mg/m3

Isomer	Type	Value
4,4'-Methylenediphenyl diisocyanate (CAS 101-68-8)	Ceiling	0.02 ppm
	Ceiling	0.2 mg/m3

4,4'-Methylenediphenyl diisocyanate (CAS 101-68-8)	Ceiling	0.02 ppm
	Ceiling	0.2 mg/m3

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

Exposure guidelines

Canada - British Columbia OELs: Skin designation

4,4'-Methylenediphenyl diisocyanate (CAS 101-68-8) Can be absorbed through the skin.

DIPHENYLMETHANE DIISOCYANATE [ISOMERS AND HOMOLOGUES] (CAS 9016-87-9) Can be absorbed through the skin.

Appropriate engineering controls	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. General ventilation normally adequate. Eye wash facilities and emergency shower must be available when handling this product.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Chemical respirator with organic vapor cartridge and full facepiece.
Skin protection	
Hand protection	Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.
Other	Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.
Respiratory protection	Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Chemical respirator with organic vapor cartridge and full facepiece.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Observe any medical surveillance requirements. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance

Physical state	Liquid.
Form	Liquid.
Color	Brown.
Odor	Musty.
Odor threshold	0.4 ppm
pH	Not available.
Melting point/freezing point	Forms crystals below 10°C
Initial boiling point and boiling range	> 572 °F (> 300 °C)
Flash point	> 392.0 °F (> 200.0 °C)
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	No Test Data Available
Flammability limit - upper (%)	No Test Data Available
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	0.000007 hPa estimated
Vapor density	8.5
Relative density	Not available.
Solubility(ies)	
Solubility (water)	6.8 mg/l
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	> 1112 °F (> 600 °C)
Decomposition temperature	Not available.
Viscosity	40 - 60 cP
Viscosity temperature	77 °F (25 °C)

Other information

Density	1.18 - 1.24 g/cm ³
Explosive properties	Not explosive.
Explosivity	Not Explosive
Oxidizing properties	Not oxidizing. No oxidizing properties.
Specific gravity	1.2 estimated

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Acids. Alcohols.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Fatal if inhaled. May cause damage to organs through prolonged or repeated exposure by inhalation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin contact	Causes skin irritation. May cause an allergic skin reaction.
Eye contact	Causes serious eye irritation.
Ingestion	Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Coughing. Difficulty in breathing. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

Information on toxicological effects

Acute toxicity Fatal if inhaled. May cause respiratory irritation. May cause an allergic skin reaction.

Product	Species	Test Results
CIM 1000TG Cartridge Activator		

Acute

Inhalation

LC50	Rat	0.369 mg/l, 4 Hours estimated
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Components	Species	Test Results
DIPHENYLMETHANE DIISOCYANATE [ISOMERS AND HOMOLOGUES] (CAS 9016-87-9)		

Acute

Inhalation

LC50	Rat	0.369 mg/l, 4 Hours
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Isomer	Species	Test Results
4,4'-Methylenediphenyl diisocyanate (CAS 101-68-8)		

Acute

Inhalation

LC50	Rat	0.369 mg/l, 4 Hours
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* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye irritation Causes serious eye irritation.

Respiratory or skin sensitization

Canada - British Columbia OELs: Respiratory or skin sensitizer

4,4'-Methylenediphenyl diisocyanate (CAS 101-68-8)	Capable of causing respiratory, dermal or conjunctival sensitization.
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DIPHENYLMETHANE DIISOCYANATE [ISOMERS AND HOMOLOGUES] (CAS 9016-87-9) Capable of causing respiratory, dermal or conjunctival sensitization.

Canada - Quebec OELs: Sensitizer

4,4'-Methylenediphenyl diisocyanate (CAS 101-68-8) Sensitizer.

DIPHENYLMETHANE DIISOCYANATE [ISOMERS AND HOMOLOGUES] (CAS 9016-87-9) Sensitizer.

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

Skin sensitization May cause an allergic skin reaction.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity Suspected of causing cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

4,4'-Methylenediphenyl diisocyanate (CAS 101-68-8) 3 Not classifiable as to carcinogenicity to humans.

DIPHENYLMETHANE DIISOCYANATE [ISOMERS AND HOMOLOGUES] (CAS 9016-87-9) 3 Not classifiable as to carcinogenicity to humans.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure May cause respiratory irritation.

Specific target organ toxicity - repeated exposure May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard Not an aspiration hazard.

Chronic effects May cause damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

TDG

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

15. Regulatory information

Canadian regulations

Controlled Drugs and Substances Act

Not regulated.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

International regulations

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto protocol

Not applicable.

Montreal Protocol

Not applicable.

Basel Convention

Not applicable.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other Information

Issue date 05-10-2017

Revision date 05-11-2017

Version # 02

Disclaimer

CIM INDUSTRIES INC cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information offered in this data sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication, however, no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process. This material is intended for industrial use only. No warranty, expressed or implied is made.

Revision information

Composition/information on ingredients: Component information
Exposure controls/personal protection: General hygiene considerations
Exposure controls/personal protection: Eye/face protection
Regulatory information: International regulations
Other Information: Further information