

TRUECAST 55 PART A

1

PRODUCT AND COMPANY IDENTIFICATION

Supplier Details: Chemline Incorporated
5151 Natural Bridge Road
Saint Louis, MO 63115

Phone: 314-664-2230
Fax: 314-664-1355
Web: www.chemline.net
Emergency: CHEMTREC 800-424-9300 (24 HOUR SERVICE)

2

HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

GHS Classification in Accordance with 29 CFR 1910 (OSHA HCS):

Health, Skin corrosion/irritation, 2
Health, Respiratory or skin sensitization, 1 Skin
Health, Serious Eye Damage/Eye Irritation, 1
Health, Serious Eye Damage/Eye Irritation, 2 A
Health, Respiratory or skin sensitization, 1 Respiratory
Health, Specific target organ toxicity - Single exposure, 3
Health, Carcinogenicity, 2
Environmental, Hazards to the aquatic environment - Acute, 3
Environmental, Hazards to the aquatic environment - Chronic, 3

GHS Label Elements, Including Precautionary Statements

GHS Signal Word: **DANGER**

GHS Hazard Pictograms:



GHS Hazard Statements:

H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H318 - Causes serious eye damage
H319 - Causes serious eye irritation
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
H336 - May cause drowsiness or dizziness
H351 - Suspected of causing cancer
H402 - Harmful to aquatic life
H412 - Harmful to aquatic life with long lasting effects

GHS Precautionary Statements:

P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P260 - Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P264 - Wash skin thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.
P272 - Contaminated work clothing should not be allowed out of the workplace.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/ eye protection/ face protection.
P284 - Wear respiratory protection.
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.

P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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

P310 - Immediately call a POISON CENTER or doctor/ physician.

P320 - Specific treatment is urgent (see supplemental first aid instructions on this label).

P330 - Rinse mouth.

P333 + P313 - If skin irritation or rash occurs: Get medical advice/ attention.

P337 + P313 - If eye irritation persists: Get medical advice/ attention.

P362 - Take off contaminated clothing and wash before reuse.

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

P405 - Store locked up.

P501 - Dispose of contents/ container to an approved waste disposal plant.

3

COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Ingredients:		
CAS#	%	Chemical Name:
584-84-9	<3%	Toluene diisocyanates
91-08-7	<3%	2,4-Toluene diisocyanate

4

FIRST AID MEASURES

- Inhalation:** Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.
- Skin Contact:** Remove contaminated clothing. Gently wash with plenty of soap and water followed by rinsing with water for at least 15 minutes. Call a Poison Center or doctor/physician if you feel unwell. Wash contaminated clothing before reuse.
- Eye Contact:** Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.
- Ingestion:** Do not induce vomiting. Rinse mouth. Immediately call Poison Center or physician.

5

FIRE FIGHTING MEASURES

Flash Point: >400F

Use dry chemical, water spray, or other extinguishing media appropriate for surrounding fire.. Do not use heavy water stream. A heavy water stream may spread burning liquid. Not considered flammable, but may burn at high temperatures. Product is not explosive. Do not weld, burn, or cut empty containers.

Exercise caution when fighting any chemical fire. Fire fighters should wear self-contained breathing apparatus to protect against inhalation of cyanates vapors and other decomposition/combustion products. Do not release runoff from fire control methods to sewers or waterways. Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus with a full face piece operated in pressure-demand or positive-pressure mode.

6

ACCIDENTAL RELEASE MEASURES

Avoid all contact with skin, eyes, or clothing. Avoid breathing (dust, vapor, mist, gas). Use appropriate personal protection equipment. Evacuate unnecessary personnel. Equip cleanup crew with proper protection. Stop leak if safe to do so. Eliminate ignition sources. Ventilate area. Prevent entry into sewers and public waters. Notify authorities if liquid enters sewers or public waters. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Clear up spills immediately and dispose of waste safely. Spills should be contained with mechanical barriers. Transfer spilled material to a suitable container for disposal.

7

HANDLING AND STORAGE

Handling Precautions: Keep away from sources of ignition - no smoking. Keep away from heat and open flame. Avoid all eye and skin contact and do not breathe vapor or mist. Always wash hands after handling. Do not eat, drink or smoke when using this product. Ensure there is adequate ventilation. Wear recommended personal protective equipment. Take precautionary measures against static discharge. Use grounded electrical/mechanical equipment.

Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and when leaving work.

Storage Requirements:

Store in a dry, cool and well ventilated place. Keep container closed when not in use. Keep/store away from direct sunlight, extremely high or low temperatures, and incompatible materials

8

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:

Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

Personal Protective Equipment:

Toluene diisocyanates cas#:(584-84-9) [<3%]

Personal protective equipment

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Full contact Material: butyl-rubber Minimum layer thickness: 0.3 mm Break through time: > 480 min Material tested:Butoject (Aldrich Z677647, Size M)

Splash protection: Material: Nitrile rubber Minimum layer thickness: 0.4 mm Break through time: > 30 min Material tested:Camatril (Aldrich Z677442, Size M) data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an Industrial Hygienist familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Eye protection: Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection: Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures: Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

2,4-Toluene diisocyanate cas#:(91-08-7) [<3%]

Personal protective equipment

Eye/face protection: Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact: Material: butyl-rubber Minimum layer thickness: 0.3 mm Break through time: 480 min Material tested:Butoject (KCL 897 / Aldrich Z677647, Size M)

Splash contact: Material: Nitrile rubber Minimum layer thickness: 0.4 mm Break through time: 240 min Material tested:Camatril (KCL 730 / Aldrich Z677442, Size M) data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection: Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi- purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Toluene diisocyanates cas#:(584-84-9) [<3%]

Components with workplace control parameters
Potential Occupational Carcinogen See Appendix A

TWA 0.0050 ppm USA. ACGIH Threshold Limit Values (TLV)
Eye irritation Asthma Respiratory sensitization Adopted values or notations enclosed are those for which changes are proposed in the NIC See Notice of Intended Changes (NIC) Not classifiable as a human carcinogen Sensitizer

STEL 0.02 ppm USA. ACGIH Threshold Limit Values (TLV)
Eye irritation Asthma Respiratory sensitization Adopted values or notations enclosed are those for which changes are proposed in the NIC See Notice of Intended Changes (NIC) Not classifiable as a human carcinogen Sensitizer

C 0.02 ppm USA. Occupational Exposure Limits (OSHA) - Table Z- 1
0.14 mg/m3 Limits for Air Contaminants
The value in mg/m3 is approximate. Ceiling limit is to be determined from breathing-zone air samples.

TWA 0.0050 ppm USA. OSHA - TABLE Z-1 Limits for Air Contaminants -
0.04 mg/m3 1910.1000

STEL 0.02 ppm USA. OSHA - TABLE Z-1 Limits for Air Contaminants -
0.15 mg/m3 1910.1000

2,4-Toluene diisocyanate cas#:(91-08-7) [<3%]

Components with workplace control parameters

TWA 0.0050 ppm USA. ACGIH Threshold Limit Values
(TLV)

Eye irritation
Asthma
Respiratory sensitization
Adopted values or notations enclosed are those for which changes are proposed in the NIC
See Notice of Intended Changes (NIC)
Not classifiable as a human carcinogen
Sensitizer

STEL 0.02 ppm USA. ACGIH Threshold Limit Values
(TLV)

Eye irritation
Asthma
Respiratory sensitization
Adopted values or notations enclosed are those for which changes
are proposed in the NIC
See Notice of Intended Changes (NIC)
Not classifiable as a human carcinogen
Sensitizer

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear	Odor:	Slight
Physical State:	Liquid	Flash Point:	>400F
Boiling Point:	>350F		

10 STABILITY AND REACTIVITY

Reactivity: Hazardous reactions will not occur under normal conditions.
Chemical Stability: Stable under recommended handling and storage conditions.
Conditions to Avoid: Direct sunlight. Extremely high or low temperatures. Ignition sources. Incompatible materials.
Materials to Avoid: Isocyanates react slowly with water, alcohols, amines, acids, and bases.
Hazardous Decomposition: High temperatures will release cyanates and hydrocarbons. Oxides of carbon, nitrogen, and small amount of HCN under burning conditions.
Hazardous Polymerization: Will not occur

11 TOXICOLOGICAL INFORMATION

Toluene diisocyanates cas#:(584-84-9) [<3%]

Information on toxicological effects

Acute toxicity:

Oral LD50 LD50 Oral - rat - male - 5,110 mg/kg

Inhalation LC50 LC50 Inhalation - rat - male and female - 1 h - 0.48 mg/l

Dermal LD50 LD50 Dermal - rabbit - male and female - > 9,400 mg/kg

Other information on acute toxicity no data available

Skin corrosion/irritation: Skin - rabbit - Skin irritation - 24 h

Serious eye damage/eye irritation: Eyes - rabbit - Severe eye irritation

Respiratory or skin sensitization: no data available

May cause allergic respiratory and skin reactions

Germ cell mutagenicity: Genotoxicity in vitro - mouse - lymphocyte

Genotoxicity in vitro - Hamster - ovary Sister chromatid exchange

Genotoxicity in vitro - Ames test - S. typhimurium - with or without metabolic activation - positive

Carcinogenicity:

This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.

Limited evidence of carcinogenicity in animal studies

IARC: 2B - Group 2B: Possibly carcinogenic to humans (Toluene-2,4-di-isocyanate)

NTP: 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.

OSHA: 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.

Reproductive toxicity: no data available

Teratogenicity: no data available

Specific target organ toxicity - single exposure (Globally Harmonized System):

May cause respiratory irritation.

Specific target organ toxicity - repeated exposure (Globally Harmonized System):
no data available

Aspiration hazard: no data available

Potential health effects: Inhalation May be fatal if inhaled. Causes respiratory tract irritation. Ingestion May be harmful if swallowed. Skin May be harmful if absorbed through skin. Causes skin irritation. Eyes Causes eye irritation. Aggravated Acts as a mild acetyl cholinesterase inhibitor. , Medical Condition

Signs and Symptoms of Exposure: Cough, Shortness of breath, Headache, Nausea, Vomiting

Synergistic effects: no data available

Additional Information:

RTECS: CZ6300000

2,4-Toluene diisocyanate cas#:(91-08-7) [<3%]

Information on toxicological effects

Acute toxicity:

LD50 Oral - Bird (wild) - 100 mg/kg

Inhalation: Irritating to respiratory system.

Dermal: no data available

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available

Respiratory or skin sensitisation: Germ cell mutagenicity:

Hamster ovary Cytogenetic analysis

Sister chromatid exchange

Carcinogenicity:

This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.

Limited evidence of carcinogenicity in animal studies

IARC: 2B - Group 2B: Possibly carcinogenic to humans (Toluene-2,4-di-isocyanate)

NTP: 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.

OSHA: 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.

Reproductive toxicity: no data available

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

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

Additional Information:

RTECS: CZ6310000

Cough, Shortness of breath, Headache, Nausea, Vomiting

Stomach - Irregularities - Based on Human Evidence

12

ECOLOGICAL INFORMATION

Toluene diisocyanates cas#:(584-84-9) [<3%]

Information on ecological effects

Toxicity:

Toxicity to fish static test LC50 - Oncorhynchus mykiss (rainbow trout) - 133 mg/l - 96 h.
Method: OECD Test Guideline 203
Toxicity to daphnia static test EC50 - Daphnia magna (Water flea) - mg/l - 48 h.
and other aquatic Method: OECD Test Guideline 202 invertebrates
Toxicity to algae EC50 - Chlorella vulgaris (Fresh water algae) - 4,300 mg/l - 96 h.
Method: OECD Test Guideline 201
Toxicity to bacteria EC50 - Sludge Treatment - > 100 mg/l - 3 h.

Persistence and degradability: Biodegradability aerobic Biochemical oxygen demand Result: 0 % - Not biodegradable Remarks: no data available

Bioaccumulative potential: no data available

Mobility in soil: no data available

PBT and vPvB assessment: no data available

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Harmful to aquatic life.

2,4-Toluene diisocyanate cas#:(91-08-7) [<3%]

Information on ecological effects

Toxicity: no data available

Persistence and degradability: no data available

Bioaccumulative potential: no data available

Mobility in soil: no data available

Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life.

13	DISPOSAL CONSIDERATIONS
----	--------------------------------

Dispose of waste material in accordance with all local, regional, national, and international regulations. Do not dispose of waste in sewer.

14	TRANSPORT INFORMATION
----	------------------------------

Non DOT/RCRA regulated

15	REGULATORY INFORMATION
----	-------------------------------

[%] RQ (CAS#) Substance - Reg Codes

[<3%] RQ(10LBS), Toluene diisocyanates (584-84-9) CERCLA, EHS302, HAP, MASS, NJEHS, NJHS, NRC, OSHAWAC, PA, SARA313, TSCA, TXAIR

[<3%] RQ(10LBS), 2,4-Toluene diisocyanate (91-08-7) CERCLA, EHS302, MASS, NJHS, PA, SARA313, TSCA, TXAIR

This product does not contain chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

Regulatory Code Legend

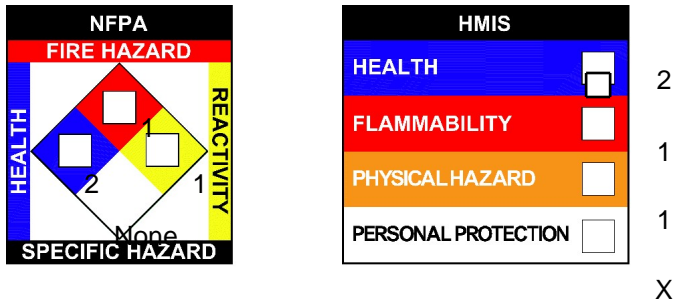
RQ = Reportable Quantity
CERCLA = Superfund clean up substance
EHS302 = Extremely Hazardous Substance
HAP = Hazardous Air Pollutants
MASS = MA Massachusetts Hazardous Substances List
NJEHS = NJ Extraordinarily Hazardous Substances
NJHS = NJ Right-to-Know Hazardous Substances
NRC = Nationally Recognized Carcinogens
OSHAWAC = OSHA Workplace Air Contaminants

PA = PA Right-To-Know List of Hazardous Substances
SARA313 = SARA 313 Title III Toxic Chemicals
TSCA = Toxic Substances Control Act
TXAIR = TX Air Contaminants with Health Effects Screening Level

16

OTHER INFORMATION

NFPA: Health = 2, Fire = 1, Reactivity = 1, Specific Hazard = None
HMIS III: Health = 2, Fire = 1, Physical Hazard = 1
HMIS PPE: X - Consult your supervisor for special instructions



Revision Date: 1/21/2021