

## TRUECAST XL-8500 PART A

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## 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)

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## HAZARDS IDENTIFICATION

## Classification of the Substance or Mixture

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

Health, Acute toxicity, 5 Oral  
Health, Skin corrosion/irritation, 2  
Health, Respiratory or skin sensitization, 1 Skin  
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

## GHS Label Elements, Including Precautionary Statements

GHS Signal Word: **DANGER**

## GHS Hazard Pictograms:



## GHS Hazard Statements:

H303 - May be harmful if swallowed  
H315 - Causes skin irritation  
H317 - May cause an allergic skin reaction  
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

## GHS Precautionary Statements:

P260 - Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.  
P280 - Wear protective gloves.  
P284 - Wear respiratory protection.  
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.

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## COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Ingredients:		
CAS#	%	Chemical Name:
101-68-8	40-60%	4,4'-Methylenediphenyl diisocyanate
5873-54-1	5-25%	Benzene, 1-isocyanato-2-[(4-isocyanatophenyl)methyl]-
150449-03-9	0-7%	1,3-Butanediol, polymer with 1,1'-methylenebis[isocyanatobenzene], [(1-methyl-1,2-ethanediyl)bis(oxy)]bis[propanol] and 1,2-propanediol

<b>4</b>	<b>FIRST AID MEASURES</b>
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**Inhalation:** When symptoms occur: go into open air and ventilate suspected area. 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 several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Obtain medical attention.

**Ingestion:** Rinse mouth. Do not induce vomiting. Immediately call a Poison Center or physician.

<b>5</b>	<b>FIRE FIGHTING MEASURES</b>
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**Flammability:** Not flammable but will support combustion.

**Flash Point:** 390F (198.89C)

Suitable Extinguishing Media: Water spray, fog, alcohol-resistant foam, carbon dioxide, dry chemical powder.

Unsuitable Extinguishing Media: Do not use a heavy water stream. A heavy water stream may spread burning liquid.

Not flammable, but will support combustion. Product is not explosive.

Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion. Do not enter fire area without proper protective equipment, including respiratory protection. Do not allow run-off from fire fighting to enter drains or water courses. Do not allow product to be released into the environment.

<b>6</b>	<b>ACCIDENTAL RELEASE MEASURES</b>
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Avoid all contact with skin, eyes, or clothing. Avoid breathing (vapor, mist, spray). Use appropriate protection equipment. Evacuate unnecessary personnel. Equip cleanup crews with proper protection. Stop leak if safe to do so. Eliminate ignition sources. Ventilate area. Prevent entry to 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. Contact competent authorities after a spill.

<b>7</b>	<b>HANDLING AND STORAGE</b>
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**Handling Precautions:** Any proposed use of this product in elevated-temperature processes should be thoroughly evaluated to assure that safe operating conditions are established and maintained. Avoid contact with skin and eyes. 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:** Comply with applicable regulations. 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. Incompatible products: water, amines, strong bases, and alcohols will cause some corrosion to copper alloys and aluminum. Incompatible materials: sources of ignition. Direct sunlight. Heat sources. Storage temperature is 18C-30C.

<b>8</b>	<b>EXPOSURE CONTROLS/PERSONAL PROTECTION</b>
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**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:** 4,4'-Methylenediphenyl diisocyanate cas#:(101-68-8) [40-60%]  
 Personal protective equipment

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) 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.

Eye 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 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.

4,4'-Methylenediphenyl diisocyanate cas#:(101-68-8) [40-60%]

Components with workplace control parameters

TWA	0.0050 ppm	USA. ACGIH Threshold Limit Values (TLV)
Respiratory sensitization		
C	0.02 ppm 0.2 mg/m3	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
C	0.02 ppm 0.2 mg/m3	USA. Occupational Exposure Limits (OSHA) - Table Z- 1 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 0.05 mg/m3	USA. NIOSH Recommended Exposure Limits
10 minute ceiling value		
C	0.2 ppm 0.2 mg/m3	USA. NIOSH Recommended Exposure Limits
10 minute ceiling value		

<b>9</b>	<b>PHYSICAL AND CHEMICAL PROPERTIES</b>
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<b>Appearance:</b>	Clear amber			
<b>Physical State:</b>	Liquid	<b>Odor:</b>	Slightly musty odor	
<b>Boiling Point:</b>	406F @ 5mmHg for MDI	<b>Flash Point:</b>	390F	

<b>10</b>	<b>STABILITY AND REACTIVITY</b>
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<b>Reactivity:</b>	Hazardous reactions will not occur under normal conditions
<b>Chemical Stability:</b>	Stable under recommended handling and storage conditions
<b>Conditions to Avoid:</b>	Direct sunlight, extremely high or low temperatures, incompatible materials
<b>Materials to Avoid:</b>	Water, amines, strong bases, and alcohols will cause some corrosion of copper alloys and aluminum

**Hazardous Decomposition:** Upon thermal decomposition: carbon monoxide, oxides of nitrogen, traces of HCN, MDI vapors, or aerosols

**Hazardous Polymerization:** May occur, contact with moisture and other materials, which react with isocyanates, or temperatures above 204F, may cause some polymerization

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## TOXICOLOGICAL INFORMATION

4,4'-Methylenediphenyl diisocyanate cas#:(101-68-8) [40-60%]

Information on toxicological effects

Acute toxicity:

Oral LD50 LD50 Oral - rat - 4,700 mg/kg

Inhalation LC50 Dermal LD50 no data available

Other information on acute toxicity

Skin corrosion/irritation: Serious eye damage/eye irritation:

Eyes - rabbit - Moderate eye irritation

Respiratory or skin sensitization: no data available

May cause allergic respiratory and skin reactions

Germ cell mutagenicity: Laboratory experiments have shown mutagenic effects.

Genotoxicity in vitro - Human - lymphocyte Sister chromatid exchange

Genotoxicity in vivo - rat - Inhalation DNA damage

Carcinogenicity:

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

Limited evidence of carcinogenicity in animal studies

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Diphenylmethane-4,4'- diisocyanate)

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

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: Reproductive toxicity - rat - Inhalation:

Maternal Effects: Other effects. Specific Developmental Abnormalities: Musculoskeletal system.

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.

Signs and Symptoms of Exposure: Cough, Shortness of breath, Headache, Nausea, Vomiting, Pulmonary edema. Effects may be delayed.

Synergistic effects: no data available

Additional Information:

RTECS: NQ9350000

4,4'-Methylenediphenyl diisocyanate cas#:(101-68-8) [40-60%]

Information on ecological effects

Toxicity:

Toxicity to daphnia EC50 - Daphnia magna (Water flea) - 0.35 mg/l - 24 h.  
and other aquatic invertebrates

Persistence and degradability: no data available

Bioaccumulative potential: no data available

Mobility in soil: no data available

PBT and vPvB assessment: no data available

Other adverse effects: Do not empty into drains.

no data available

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

Non DOT/RCRA regulated

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

[40-60%] RQ(5000LBS), 4,4'-Methylenediphenyl diisocyanate (101-68-8) CERCLA, HAP, IARC, MASS, NJHS, OSHAWAC, PA, SARA313, TSCA, TXAIR

[5-25%] Benzene, 1-isocyanato-2-[(4-isocyanatophenyl)methyl]- (5873-54-1) TSCA

[0-7%] 1,3-Butanediol, polymer with 1,1'-methylenebis[isocyanatobenzene], [(1-methyl-1,2-ethanediyl)bis(oxy)]bis[propanol] and 1,2-propanediol (150449-03-9) TSCA

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

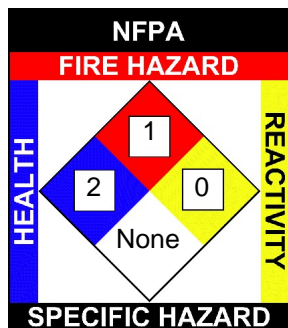
Regulatory Code Legend

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RQ = Reportable Quantity  
CERCLA = Superfund clean up substance  
HAP = Hazardous Air Pollutants  
IARC = IARC Carcinogen Risks  
MASS = MA Massachusetts Hazardous Substances List  
NJHS = NJ Right-to-Know Hazardous Substances  
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

**NFPA:** Health = 2, Fire = 1, Reactivity = 0, Specific Hazard = None

**HMIS III:** Health = 2, Fire = 1, Physical Hazard = 0

**HMIS PPE:** X - Consult your supervisor for special instructions



HMIS	
HEALTH	<input type="checkbox"/> 2
FLAMMABILITY	1
PHYSICAL HAZARD	0
PERSONAL PROTECTION	X

Revision Date: 2/12/2021