

SAFETY DATA SHEET

C.D. PRODUCTS INC
918 N UNION ST
APPLETON, WI 54911
920-739-8685

1.IDENTIFICATION

PRODUCT #4100 ESD PART B HARDENED

CD PRODUCTS INC
918 N UNION ST
APPLETON, WI 54911
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2.HAZARDS IDENTIFICAION

· **Classification according to Regulation (EC) No 1272/2008**
GHS05 corrosion
Skin Corr. 1B; H314: Causes severe skin burns and eye damage.

GHS07

Acute Tox. 4; H302: Harmful if swallowed. Acute Tox. 4; H332: Harmful if inhaled.

Skin Sens. 1; H317: May cause an allergic skin reaction A

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

C; Corrosive

R34: Causes burns.

Xn; Harmful

R20/21/22: Harmful by inhalation, in contact with skin and if swallowed.

Xi; Sensitising

R43: May cause sensitisation by skin contact.

Information concerning particular hazards for human and environment:

(Contd. of page 1)

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

· **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

2.2 Label elements

· **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

· **Hazard pictograms**

GHS05 GHS07



· **Signal word** Danger

· **Hazard-determining components of labelling:**

3-aminomethyl-3,5,5-trimethylcyclohexylamine m-phenylenebis(methylamine)

Benzyl alcohol

· **Hazard statements**

H302+H332 Harmful if swallowed or if inhaled.

H314: Causes severe skin burns and eye damage.

H317: May cause an allergic skin reaction.

H412: Harmful to aquatic life with long lasting effects.

· **Precautionary statements**

P280: Wear protective gloves and eye protection.

P260: Do not breathe mist/vapours/spray.

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

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

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

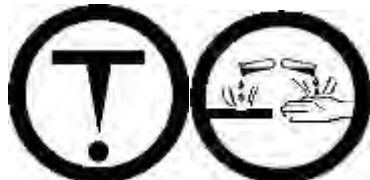
P301+P330+P331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

· **Hazard description:**

· **WHMIS-symbols:**

D2B - Toxic material causing other toxic effects

E - Corrosive material



NFPA ratings (scale 0 - 4)

(Contd. of page 2)

Health = 2

Fire = 1

0 Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

2 Health = 2

1 Fire = 1

REACTIVITY 0

Reactivity = 0

· **HMIS Long Term Health Hazard Substances**

None of the ingredients is listed.

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

3.COMPOSITION INFORMATION ON INGREDIENTS

· **3.2 Mixtures**

· **Description:** Mixture of substances listed below with nonhazardous additions. ·

Dangerous components:

CAS: 100-51-6 Benzyl alcohol 25-50%

EINECS: 202-859-9 Xn R20/22

Index number: 603-057-00-5

Acute Tox. 4, H302; Acute Tox. 4, H332

CAS: 1477-55-0 m-phenylenebis(methylamine) C 25-50%

EINECS: 216-032-5 R34; Xn R22

Skin Corr. 1B, H314

Acute Tox. 4, H302; Acute Tox. 4, H332

CAS: 2855-13-2 3-aminomethyl-3,5,5- 25-50%

EINECS: 220-666-8 trimethylcyclohexylamine

Index number: 612-067-00-9 C R34; Xn R21/22; Xi R43

R52/53

Skin Corr. 1B, H314
Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317
Aquatic Chronic 3, H412

4.FIRST AID MEASURES

· 4.1 Description of first aid measures

· General information:

In case of irregular breathing or respiratory arrest provide artificial respiration. Immediately remove any clothing soiled by the product.

Seek medical treatment.

In case of unconsciousness place patient stably in side position for transportation.

· After skin contact:

Immediately wash with water and soap and rinse thoroughly. Immediately remove any clothing soiled by the product.

Do not pull solidified product off the skin.

If skin irritation continues, consult a doctor.

· After eye contact:

Protect unharmed eye.

Remove contact lenses if worn, if possible.

Rinse opened eye for several minutes under running water. Then consult a doctor.

· After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

· 4.2 Most important symptoms and effects, both acute and delayed

Allergic reactions Breathing difficulty Coughing Dizziness Headache

Gastric or intestinal disorders

· Hazards

Danger of impaired breathing. Danger of pulmonary oedema. Danger of gastric perforation. Danger of convulsion.

Condition may deteriorate with alcohol consumption.

· 4.3 Indication of any immediate medical attention and special treatment needed

If swallowed, gastric irrigation with added, activated carbon.

Treat skin and mucous membrane with antihistamine and corticoid preparations. If necessary oxygen respiration treatment.

Monitor circulation, possible shock treatment.

Later observation for pneumonia and pulmonary oedema. Medical supervision for at least 48 h

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

- Suitable extinguishing agents:

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- For safety reasons unsuitable extinguishing agents: None.

- 5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released: Nitrogen oxides (NO_x)

Carbon monoxide (CO)

Under certain fire conditions, traces of other toxic gases cannot be excluded.

- 5.3 Advice for firefighters

- Protective equipment:

Wear self-contained respiratory protective device. Wear fully protective suit.

- Additional information Cool endangered receptacles with water spray.

6. ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions, protective equipment and emergency procedures

Mount respiratory protective device. Remove persons from danger area. Ensure adequate ventilation

Wear protective equipment. Keep unprotected persons away.

- 6.2 Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system. Do not allow to enter sewers/ surface or ground water.

- 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13.

- 6.4 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

7.1 Precautions for safe handling

Keep receptacles tightly sealed.

Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols.

- Information about fire - and explosion protection: Keep respiratory protective device available.

- 7.2 Conditions for safe storage, including any incompatibilities

- Storage:

- Requirements to be met by storerooms and receptacles:

Store in a cool location.

Provide ventilation for receptacles.

- Information about storage in one common storage facility:

Store away from foodstuffs.

Do not store together with oxidizing and acidic materials.

- Further information about storage conditions: Keep container tightly sealed.

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

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

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

- 8.1 Control parameters

- Ingredients with limit values that require monitoring at the workplace:

100-51-6 Benzyl alcohol

WEEL (USA)

10 ppm

1477-55-0 m-phenylenebis(methylamine)

REL (USA) TLV (USA) EL (Canada)

EV (Canada)

Short-term value: C 0,1 mg/m³

Skin

Short-term value: C 0,1 mg/m³

Skin

Short-term value: C 0,1 mg/m³

Skin

Skin

· DNELs No further relevant information available.

· PNECs No further relevant information available.

· Additional information: The lists valid during the making were used as basis.

· 8.2 Exposure controls

· Personal protective equipment:

· General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin. Do not inhale gases / fumes / aerosols.

· Respiratory protection:

Use suitable respiratory protective device in case of insufficient ventilation. Use suitable respiratory protective device when aerosol or mist is formed.

· Protection of hands:

Protective gloves



The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

(Contd. of page 6)

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**

Contact lenses should not be worn.

Safety glasses



Goggles recommended during refilling

- **Body protection:** Protective work clothing
- **Limitation and supervision of exposure into the environment**

No further relevant information available.

- **Risk management measures**

See Section 7 for additional information. No further relevant information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Liquid

Colour: Clear to straw color.

· Odour: Amine-like

· **Odour threshold:** Not determined.

· pH-value: Not determined.

· Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 401 °F / 205 °C

· **Flash point:** 214 °F / 101 °C

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

· **Ignition temperature:** 815 °F / 435 °C

· **Decomposition temperature:** Not determined.

· Self-igniting: Product is not self-igniting.

· Danger of explosion: Product does not present an explosion hazard.

· Explosion limits:

Lower: 1,3 Vol %

Upper: 13,0 Vol %

· **Vapour pressure at 20 °C:** 0,1 hPa

· Density at 20 °C: 1,04 g/cm³

Relative density Not determined.

· Vapour density Not determined.

· Evaporation rate Not determined.

· Solubility in / Miscibility with

water: Fully miscible.

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

· Viscosity:

Dynamic: Not determined.

Kinematic: Not determined.

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

10. STABILKITY AND RECTIVITY

10.1 Reactivity

· **10.2 Chemical stability**

· **Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

· **10.3 Possibility of hazardous reactions**

Reacts with catalysts, oxidizing agents and strong alkali. Reacts with peroxides and other radical forming substances.

Reacts with strong acids.

· **10.4 Conditions to avoid** Store away from oxidizing agents.

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

· **10.6 Hazardous decomposition products:**

Nitrogen oxides

Carbon monoxide

11. TOXICOLOGICAL INFORMATION

· **Acute toxicity:** · LD/LC50 values relevant for classification:

100-51-6 Benzyl alcohol

Oral	LD50	1230 mg/kg (rat)
Dermal	LD50	2000 mg/kg (rabbit)

1477-55-0 m-phenylenebis(methylamine)

Oral	LD50	1040 mg/kg (rat)
Inhalative	LC50/4 h	2,4 mg/l (rat)

2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine

Oral	LD50	1030 mg/kg (rat)
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· **Primary irritant effect:**

- **on the skin:** Caustic effect on skin and mucous membranes.
- **on the eye:** Strong caustic effect.

· **Sensitization:**

Sensitizing effect through inhalation is possible by prolonged exposure. Sensitization possible through skin contact.

· **Additional toxicological information:**

(Contd. of page 8)

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Harmful Corrosive Irritant

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

Inhalation of concentrated vapours as well as oral intake will lead to anaesthesia-like conditions and headache, dizziness, etc.

- **Sensitisation** Sensitization possible by skin contact.
- **Repeated dose toxicity** Repeated exposures may result in skin and/or respiratory sensitivity.

12 ECOLOGICAL INFORMATION

· 12.1 Toxicity

· **Aquatic toxicity:** The product contains materials that are harmful to the environment.

· **12.2 Persistence and degradability** The product is partly biodegradable. Significant residuals remain.

· 12.3 Bioaccumulative potential

Due to the distribution coefficient n-octanol/water an accumulation in organisms is possible.

· **12.4 Mobility in soil** No further relevant information available.

· **Additional ecological information:**

· **General notes:**

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system. Must not reach sewage water or drainage ditch undiluted or unneutralized. Danger to drinking water if even small quantities leak into the ground.

· **12.5 Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **12.6 Other adverse effects** No further relevant information available.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

· **Recommendation**

Can be disposed of with household garbage after solidification following consultation with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations. Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

· **Uncleaned packaging:**

· **Recommendation:** Disposal must be made according to official regulations.

· **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14. TRANSPORTATION CONSIDERATIONS

14.1 UN-Number

- **DOT, ADR, IMDG, IATA** UN1760

- 14.2 UN proper shipping name
- **DOT, IMDG, IATA** Corrosive Liquid, N.O.S. (M-Phenylenebis(Methylamine), Isophoronediamine)
- **ADR** 1760 Corrosive Liquid, N.O.S. (M-Phenylenebis(Methylamine), Isophoronediamine)
- 14.3 Transport hazard class(es)
- DOT



- Class 8 Corrosive substances.
- Label 8
- ADR



- Class 8 (C7) Corrosive substances.
- Label 8
- IMDG, IA TA



Class 8 Corrosive substances.

- Label 8
- 14.4 Packing group
- DOT, ADR, IMDG, IATA II
- 14.5 Environmental hazards:
- Marine pollutant: No
- **14.6 Special precautions for user** Warning: Corrosive substances.
- Danger code (Kemler): 80
- **EMS Number:** F-A,S-B
- Segregation groups Alkalis
- 14.7 Transport in bulk according to Annex II of **MARPOL73/78 and the IBC Code** Not applicable.
- Transport/Additional information:
- ADR
- Limited quantities (LQ) 1L
- Transport category 2
- Tunnel restriction code E
- **UN "Model Regulation":** UN1760, Corrosive Liquid, N.O.S. (M-Phenyl

15 .REGULATORY INFORMATION

- **United States (USA)**
- **SARA · Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

- Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

- **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

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

None of the ingredients is listed.

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

None of the ingredients is listed.

16. OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

H302: Harmful if swallowed.

H312: Harmful in contact with skin.

H314: Causes severe skin burns and eye damage.

H317: May cause an allergic skin reaction.

H332: Harmful if inhaled.

H412: Harmful to aquatic life with long lasting effects.

R20/22: Harmful by inhalation and if swallowed.

R21/22: Harmful in contact with skin and if swallowed.

R22: Harmful if swallowed.

R34: Causes burns.

R43: May cause sensitisation by skin contact.

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· **Abbreviations and Acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH) LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Notice to reader

NOTE: TO THE BEST OF OUR KNOWLEDGE, THE INFORMATION CONTAINED HEREIN IS ACCURATE. HOWEVER C.D. PRODUCTS INC. ASSUMES NO LIABILITY WHATSOEVER FOR THE ACCURACY OR COMPLETENESS OF THE INFORMATION CONTAINED HEREIN. THE FINAL DETERMINATION OF SUITABILITY OF ANY MATERIAL IS THE SOLE RESPONSE OF THE USER. ALL MATERIALS MAY PRESENT UNKNOWN HEALTH HAZARDS AND SHOULD BE USED WITH CAUTION. ALTHOUGH CERTAIN HAZARDS ARE DESCRIBED HEREIN, WE CANNOT GUARANTY THAT THESE ARE THE ONLY HAZARDS WHICH EXIST.