

Safety Data Sheet
acc. to OSHA HCS

Print Date 12/18/2015

Revision Date 12/18/2015

- **Product Identifier**
 - **Trade Name:** CA7204
 - **Application of the Substance or Mixture:** Cyanoacrylate Adhesive
- **Details of the Supplier of the Safety Data Sheet (SDS)**
 - **Manufacturer or Supplier:**
Resinlab, LLC
N109 W13300 Ellsworth Drive,
Germantown, WI 53022
1-800-388-8605
www.resinlab.com
 - **Information Department:** Product Safety Department: msds@resinlab.com
 - **Emergency Telephone Number:**
North America - Chemtrec: 1-800-424-9300 (24 hours)
International - Chemtrec: 01-703-527-3887 (24 hours)

2 Hazard(s) identification

- **Hazard Classification**
Flam. Liq. 4 H227 Combustible liquid.
Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2A H319 Causes serious eye irritation.
STOT SE 3 H335 May cause respiratory irritation.
- **Label Elements**
 - **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
 - **Pictogram(s)**



GHS07

- **Signal Word** Warning
- **Hazard-determining Component(s)**
Ethyl 2-cyanoacrylate
- **Hazard statements**
Combustible liquid.
Causes skin irritation.
Causes serious eye irritation.
May cause respiratory irritation.
- **Precautionary statements**
Keep away from flames and hot surfaces. – No smoking.
Avoid breathing dust/fume/gas/mist/vapors/spray
Wear protective gloves / eye protection / face protection.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER/doctor if you feel unwell.
If skin irritation occurs: Get medical advice/attention.
IF ON SKIN: Wash with plenty of water.
Take off contaminated clothing and wash it before reuse.
Store in a well-ventilated place. Keep container tightly closed.
Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Hazard Rating System**
 - **NFPA System**
 - **NFPA Ratings (scale 0 - 4)**



NFPA special hazards (water reactivity and oxidizing property): None

- **HMIS System**
 - **HMIS Ratings (scale 0 - 4)**



- **Other hazards**
 - **Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.

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3 Composition/information on ingredients

Chemical Characterization: Mixtures

Composition/Information on Ingredients

CAS: 7085-85-0 EINECS: 230-391-5 Index Number: 607-236-00-9 RTECS: UD3330050	Ethyl 2-cyanoacrylate	Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335 Flam. Liq. 4, H227	80-90%
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Classification System:

The Classifications were based on the Toxicological and Ecological Data of the substances/mixtures in the Section 11 and 12.

Additional Information:

If the chemical name/CAS number is proprietary and or weight percentage is listed as a range, the specific chemical identity and or percentage of composition has been withheld as a trade secret.

4 First-aid measures

Description of First Aid Measures

General Information

Ensure medical personnel are aware of exposure and take precautions for their personal protection; see Section 8 for the information of personal protection.

After Inhalation

Remove victim from exposure to fresh air. Keep person at rest. Provide oxygen if person is not breathing. In case of unconsciousness place patient stably in side position for transportation. Supply fresh air; consult doctor in case of complaints.

After Skin Contact

Remove all contaminated clothing and wash before reuse. Wash contaminated skin with water and soap and rinse thoroughly. Do not pull skin apart. Gently pull skin apart after soaking using a blunt object. Seek medical treatment in case of complaints.

After Eye Contact

Immediately bathe eyes for 15 minutes under running water. Immediately remove contact lenses if present. Continue rinsing. If eyelashes are bonded use cloth and warm water to release. Keep eye covered until bond releases. Weeping of the eye is normal and will help aid in the debonding process. Seek medical advice if bonded particles are trapped in the eye or if there are any other complaints.

After Swallowing

adhesive will become solid in contact with saliva, may adhere to inside of mouth. Avoid swallowing solid adhesive. Seek medical treatment in case of complaints.

Additional Information

For additional information, please consult the corresponding first aid measures in the most current version of Emergency Response Guidebook which is produced by the US Department of Transportation.

5 Fire-fighting measures

Extinguishing Media

Suitable Extinguishing Agent(s)

Use fire fighting measures and extinguishing agents that suit the environment. In case of fire, suitable extinguishing agents are:
Alcohol resistant foam.
Dry chemical or fire-extinguishing powder.
Carbon dioxide (CO₂).
Water spray or water fog.

Unsuitable Extinguishing Agent(s) No relevant information.

Firefighting Procedures

Isolate fire and deny unnecessary entry. Eliminate all ignition sources if safe to do so. Do not extinguish fire unless flow can be stopped. Fight fire remotely due to the risk of explosion. Burning liquids may be moved by flushing with water; protect personnel and minimize property damage.

Special Hazards Arising in Fire

Caution! Combustible liquid. In case of fire, following can be released:
Carbon dioxide (CO₂) and Carbon monoxide (CO)
Nitrogen oxides

Advice for Firefighters

If employees are expected to fight fires, they must be trained and equipped as stated in the OSHA fire brigades standard (29 CFR 1910.156). As with any fire, wear positive-pressure self-contained breathing apparatus and full protective gear that are NIOSH approved.

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· **Additional Information** Ensure adequate and functional fire fighting facilities equipped in working area at all times.

6 Accidental release measures

- **Personal Precautions**
Caution! Combustible liquid; wear fire/flammable resistant or retardant clothing during cleaning up.
Do not breathe the gas, vapors, dusts or mists if their inhalable particles occur during use.
Ensure personnel take precautions for their personal protection during clean up; see Section 8 for the specific requirements.
- **Environmental Precautions** Keep away from sewage system or other water courses; do not penetrate ground/soil.
- **Cleaning Up Methods**
Ensure adequate ventilation.
Keep unauthorized personnel away.
Allow molten product to cool.
Absorb residues with liquid-binding materials.
Ventilate and wash area after clean-up is complete.
Collect spills in suitable and properly labeled containers.
Do not use solvents unless following safe handling practices and within the recommended exposure guidelines.
Dispose contaminated chemicals as waste according to Section 13.

7 Handling and storage

- **Handling**
 - **Precautions for Safe Handling**
Store in original container.
Ensure good ventilation and/or exhaustion at workplace.
Keep away from incompatible material(s).
Avoid any release into the environment.
Keep container tightly closed when not in use if product is volatile so as to generate hazardous atmosphere.
For industrial or professional use only
Observe all the personal protection requirements in Section 8.
- **Storage**
 - **Requirements to be Met by Storerooms and Receptacles**
Caution! Combustible liquid; keep away from direct sunlight, heat, sparks, flame and other ignition sources during storage.
Store in tightly closed containers in a cool, and well-ventilated area.
Store in a well-ventilated place; provide ventilation for receptacles.
Keep stored in accordance with local, regional, national, and international regulations.
 - **Information about Storage in One Common Storage Facility**
Store away from incompatible material(s).
Store away from foodstuffs.
Avoid release to the environment.
- **Additional Information** No further relevant information.

8 Exposure controls/personal protection

- **Engineering Measures or Controls**
 - **Exposure Limit Values that Require Monitoring at the Workplace**

7085-85-0 Ethyl 2-cyanoacrylate
TLV Long-term value: 1 mg/m ³ , 0.2 ppm

 - **Other Engineering Measures or Controls**
Ventilation rates should be matched to conditions.
If applicable, use process enclosure(s), local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits.
- **Personal Protective**
 - **General Protective and Hygienic Measures**
Avoid any contact with eye.
Do not eat, drink or smoke during work.
Clean hands and exposed skin thoroughly after work and before breaks.
 - **Personal Protective Equipment (PPE)**
 - **Breathing Equipment**
Caution! Improper use of respirators is dangerous.
In case of brief exposure or low pollution, use a respiratory filter device.
In case of intensive or longer exposure, use a positive-pressure respiratory protective device that is independent of circulating air.
 - **Hand Protection**
Selection of glove material should take into consideration the penetration times, rates of diffusion, and the degradation.
Suggested glove type(s):
Polyvinyl Chloride (PVC) Gloves
Nitrile Gloves
 - **Eye Protection** safety glasses
 - **Body Protection** No relevant information.

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Additional Information

All protective clothing (suits, gloves, footwear, headgear) should be clean, available every day, and put on before work. The Engineering measures or controls, and PPE recommendations are only guidelines and may not apply to every situation. For additional information, please consult the corresponding requirements under OSHA 29 CFR 1910.94-95, and 29 CFR 1910.132-138.

9 Physical and chemical properties

Information on Basic Physical and Chemical Properties

- **Appearance:**
- **Form:** Liquid
- **Color:** Clear
- **Odor:** uncharacteristic
- **Odor Threshold:** Not determined.

- **PH-Value:** Not determined.

- **Change in Condition:**
- **Melting Point:** Not determined.
- **Boiling Point:** Not determined.
- **Flash Point:** 82 °C (180 °F)

- **Decomposition Temperature:** Not determined.
- **Flammability:** Not determined.
- **Explosion:** Not determined.

- **Explosion Limits:**
- **Lower:** Not determined.
- **Upper:** Not determined.

- **Vapor Pressure:** Not determined.
- **Vapor Density:** not determined
- **Density at 20 °C (68 °F):** 1.0 g/cm³ (8.345 lbs/gal)

- **Solubility in or Miscibility with**
- **Water:** Not miscible or difficult to mix.
- **Viscosity:**
- **Dynamic:** Not determined.
- **Kinematic:** Not determined.

10 Stability and reactivity

- **Physical Hazard(s)** Combustible liquid.
- **Hazardous Reactivity and Chemical Stability** May form explosive vapor-air mixtures when heated above the flash point.
- **Thermal Decomposition and Conditions to be Avoided**
Keep away from incompatible material(s).
Thermally decomposes during fire or high heat; keep away from heat, sparks, open flame and other ignition sources.
- **Possibility of Other Hazardous Reaction(s)**
May also polymerize in presence of amines, alkalis and alcohols.
May polymerize in contact with water or moisture.
- **Incompatible Material(s)** water, soil, amines, alcohols
- **Hazardous Decomposition Product(s)**
Thermally decomposes during fire or very high heat. See Section 5 for fire hazards evolved during thermal decomposition.
- **Hazardous Polymerization Product(s)** No relevant information.

11 Toxicological information

Acute Toxicity**Oral****7085-85-0 Ethyl 2-cyanoacrylate**

Oral	LD50	> 5000 mg/kg (rat) (OECD TG 401; males; neat substance) One out of six rats died on the fourth day at 5000 mg/kg dose level; the substance was not classified as toxic to rats based on the classification criteria. Reference: ECHA (2012).
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- **Potential Health Effect(s):** See acute inhalative effect(s) for further information

Dermal**7085-85-0 Ethyl 2-cyanoacrylate**

Dermal	LD50	> 2000 mg/kg (rabbit) (LD0; OECD TG 402; males; neat substance) No mortality occurred; the substance was therefore considered as non-toxic via dermal application. Reference: ECHA (2012).
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- **Potential Health Effect(s):**
No further relevant information available; classification is not possible.
See acute inhalative effect(s) for further information.

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Inhalative

7085-85-0 Ethyl 2-cyanoacrylate

Inhalative LC50/4 h > 21.1 mg/l (rat) (LC50/1 hour; vapor)
Reference: ACToR (2012).

Potential Health Effect(s):

While not possible to classify the acute inhalative hazard due to missing data, the product may cause the following symptom(s):

Skin Corrosion or Irritation

7085-85-0 Ethyl 2-cyanoacrylate

Corrosion/Irritation irritating (rabbit) (OECD TG 404; 0.5g neat substance; 24hr-exposure)
Primary dermal irritation index (PDII): 0.87 (Max. score unknown; Time point: 24+72 hrs; mean score of all treated male rabbits); the substance was considered as irritating (Category 2) to rabbit skin by ECHA.
Reference: ECHA (2012).

Potential Health Effect(s):

Causes skin irritation.
In contact with skin, may cause:
redness and pain

Eye Serious Damage or Irritation

7085-85-0 Ethyl 2-cyanoacrylate

Damage/Irritation irritating (rabbit) (OECD TG 405; males; 0.1 ml neat substance)
Overall irritation score: 29.33, 15.33, and 9.66 (Max. score unknown; Time point: 24hr, 48hr, and 72hr respectively); the substance was classified as irritating (Category 2A) to rabbit eyes by ECHA.
Reference: ECHA (2012).

Potential Health Effect(s):

Causes serious eye irritation.
In contact with eye, may cause:
redness and pain

Respiratory or Skin Sensitization

7085-85-0 Ethyl 2-cyanoacrylate

Sensitization	Skin	(No data available)
	Respiratory	(No data available)

Potential Health Effect(s): No relevant information for respiratory sensitization; classification is not possible.

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

Germ Cell Mutagenicity

7085-85-0 Ethyl 2-cyanoacrylate

Mutagenicity negative (Test species listed below)
In Vitro (Mammalian chromosome aberration test; OECD TG 473; Human lymphoblastoid cells (TK6)) - negative with and without metabolic activation
In Vitro (Mammalian cell gene mutation assay; OECD TG 476; Mouse lymphoma L5178Y cells) - negative with and without metabolic activation
Reference: ECHA (2012).

Potential Health Effect(s): No further relevant information; classification is not possible.

Carcinogenicity

7085-85-0 Ethyl 2-cyanoacrylate

Carcinogenicity negative (Test species: n/a)
Not listed as a carcinogen according to ACGIH, IARC, NTP, or OSHA.

Potential Health Effect(s): Not a known Carcinogen.

Reproductive Toxicity

7085-85-0 Ethyl 2-cyanoacrylate

Reproductive Toxi. (No data available)

Specific Target Organ Toxicity - Single Exposure

7085-85-0 Ethyl 2-cyanoacrylate

STOT-Single (Human)
There were respiratory irritation results reported in human victims that caused by the substance. The substance was classified as a Category 3 respiratory irritant from the view point of safety.
Reference: GHS-J (2006).

Potential Health Effect(s): May cause respiratory irritation.

Specific Target Organ Toxicity - Repeated Exposure

7085-85-0 Ethyl 2-cyanoacrylate

STOT-Repeated (No data available)

Aspiration Hazard

7085-85-0 Ethyl 2-cyanoacrylate

Aspiration Hazard (No data available)

Potential Health Effect(s): No relevant information; classification is not possible.

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12 Ecological information

· Aquatic Environmental Toxicity

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Algae Toxicity	(No data available)
Crustacean Toxicity	(No data available)
Fish Toxicity	(No data available)

· Aquatic Environmental Toxicity Assessment: No further relevant information; classification is not possible.

· Degradability and Stability

7085-85-0 Ethyl 2-cyanoacrylate

Biodegradation	(No data available) Based on the persistent properties, the substance is expected to be non-biodegradable.
Persistence	(Test species: n/a) The substance is persistent. Reference: Canada DSL (2007).
Photodegradation	(No data available)
Stability in water	unstable (Test species: n/a) The substance readily polymerizes in the presence of moisture. Reference: ACToR (2012).

· Bioaccumulation and Distribution

7085-85-0 Ethyl 2-cyanoacrylate

LogPow	(Not applicable) The partition coefficient for the substance can't be determined due to its ready polymerization in the presence of moisture. Reference: ACToR (2012).
BCF	(No data available) The substance is not bioaccumulative. Reference: Canada DSL (2007).
Koc	(No data available)

· Degradability and Bioaccumulation Assessment: Non-rapidly degradable, and low bioaccumulative.

13 Disposal considerations

· Hazardous Waste List

· Description: It may be necessary to contain and dispose of the substance/mixture as a hazardous waste.

· Waste Treatment Recommendation:

Generation of waste should be avoided or minimized wherever possible.
Chemical waste, even small quantities, is neither allowed to be poured down drains, sewage system or waterways; nor disposed with household garbage.
Dispose of contents/containers in accordance with local, regional, national, and international regulations.

· Unused and Uncontaminated Packagings

· Recommendation Dispose of according to your local waste regulations.

14 Transport information

· UN-Number

· DOT, ADR, ADN, IMDG	-
· IATA	UN3334

· UN Proper Shipping Name

· DOT, ADR, IMDG, IATA	Cyanoacrylate ester
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· Transport hazard class(es)

· DOT, ADR, ADN, IMDG	-
· Class	-
· IATA	-



· Class	9 Miscellaneous dangerous substances and articles
· Label	9

· Packing group

· DOT, ADR, IMDG	III
· IATA	III

· Environmental Hazards:

Not applicable.

· Special Precautions:

Not applicable.

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- **Transport in Bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.
- **UN "Model Regulation":** UN3334, AVIATION REGULATED LIQUID, N.O.S. (Ethyl 2-cyanoacrylate), 9, III

15 Regulatory information

- **USA Regulation Lists**
- **SARA (Superfund Amendments and Reauthorization Act of 1986)**

- **Section 302 (Extremely Hazardous Substances)**

None of the ingredients is listed.

- **Section 313 (Toxics Release Inventory (TRI) reporting)**

None of the ingredients is listed.

- **Section 311/312 (Hazardous Chemical Inventory Reporting)**

None of the ingredients is listed.

- **Hazard Abbreviations for SARA 311/312**

A - Acute Health Hazard
C - Chronic Health Hazard
F - Fire Hazard
R - Reactive Hazard
S - Sudden Release of Pressure Hazard

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

All ingredients are listed.

- **Proposition 65**

- **Chemicals Known to Cause Cancer**

None of the ingredients is listed.

- **Chemicals Known to Cause Reproductive Toxicity for Females**

None of the ingredients is listed.

- **Chemicals Known to Cause Reproductive Toxicity for Males**

None of the ingredients is listed.

- **Chemicals Known to Cause Developmental Toxicity**

None of the ingredients is listed.

- **Carcinogenic Categories**

- **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

- **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is 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.

- **International Regulation Lists**

- **Canadian Domestic Substance Listings:**

All ingredients are listed.

- **Canadian Ingredient Disclosure list (limit 0.1%)**

None of the ingredients is listed.

- **Canadian Ingredient Disclosure list (limit 1%)**

None of the ingredients is listed.

- **Chinese Chemical Inventory of Existing Chemical Substances:**

All ingredients are listed.

- **Japanese Existing and New Chemical Substance List:**

All ingredients are listed.

- **Korean Existing Chemical Inventory:**

All ingredients are listed.

- **European Pre-registered substances:**

All ingredients are listed.

- **REACH - Substances of Very High Concern (SVHC) List:**

None of the ingredients is listed.

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Restriction of Hazardous Substances Directive (RoHS) list:

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.

- **Department Issuing (M)SDS:** Product Safety Department
- **Contact:** msds@resinlab.com

· **Abbreviations and acronyms:**

- ACGIH: American Conference of Governmental Industrial Hygienists
- ADR: European Agreement Concerning the International Carriage of Dangerous Goods by Road
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- DOT: US Department of Transportation
- HMIS: US National Paint & Coatings Association (NPCA) Hazardous Materials Identification System
- IARC: International Agency for Research on Cancer developed by United Nations World Health Organisation (WHO)
- ICAO-TI: Technical Instructions (TI) by the International Civil Aviation Organization (ICAO)
- IMDG: International Maritime Dangerous Goods; the principal international rules for International Carriage of Dangerous Goods by SEA under the Recommendations on the Transport of Dangerous Goods by United Nations (RTDG)
- LC50/LD50: Lethal Concentration/Dose, 50 percent
- N/a: Not available or Not applicable
- NFPA: US National Fire Protection Association
- NIOSH: US National Institute of Occupational Safety and Health
- OSHA: US Occupational Safety and Health Administration
- P: Marine Pollutant
- RCRA: Resource Conservation and Recovery Act (USA)
- REACH: EU Registry, Evaluation and Authorisation of Chemicals
- SARA: US Superfund Amendments and Reauthorization Act
- TEEL: Temporary Emergency Exposure Limit developed by US Subcommittee on Consequence Assessment and Protective Actions (SCAPA) of US Department of Energy (DOE)
- TSCA: US Toxic Substance Control Act
- ACToR: US EPA Aggregated Computational Toxicology Resource
- BCF: Bioconcentration Factor
- CCRIS: US NLM TOXNET Chemical Carcinogenesis Research Information System
- CHRIP: Japan NITE Information on Biodegradation and Bioconcentration of the Existing Chemical Substances in the Chemical Risk Information Platform
- DSL: Canada Domestic Substance List
- ESIS: European Chemical Substances Information System
- HSDB: US NLM TOXNET Hazardous Substances Databank
- HSNO CCID: New Zealand Hazardous Substances and New Organisms Chemical Classification Information Database
- IATA-DGR: Dangerous Goods Regulations (DGR) by the International Air Transport Association (IATA)
- ICSC: International Chemical Safety Cards
- Koc: Partition coefficient, soil Organic Carbon to water
- NITE: National Institute of Technology and Evaluation, Japan
- OECD: Organisation for Economic Co-operation and Development
- RID: the Regulations Concerning the International Carriage of Dangerous Goods by Rail; published by the Central Office for International Carriage by Rail (OTIF)
- RTDG: the Recommendations on the Transport of Dangerous Goods by United Nations (UN)
- RTECS: US Registry of Toxic Effects of Chemical Substances
- SIDS: OECD existing chemicals Screening Information Data Sets
- SVHC: EU ECHA Substance of Very High Concern
- TOXLINE: US NLM bibliographic database search system
- **Date of preparation / last revision** 12/18/2015 / 3