

ZIP GRIP 4404

This product appears in the following stock number(s):

44044 44045 44046 DA004 DA345

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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**Tradename:** ZIP GRIP 4404**General use:** Bonds skin and eyes immediately. In case of skin or eye contact, do not force bonded surfaces apart; follow first aid instructions below.**Chemical family:** Cyanoacrylates**MANUFACTURER**ITW Devcon
30 Endicott St.
Danvers, MA 01923**EMERGENCY INFORMATION****Emergency telephone number**
(CHEMTREC): (800) 424-9300
Other Calls: (978) 777-1100**2. COMPOSITION/INFORMATION ON INGREDIENTS****HAZARDOUS CONSTITUENTS****Exposure limits**

Constituent	Abbr.	CAS No.	Weight percent	ACGIH TLV	OSHA PEL	Other Limits
Ethyl-2-cyanoacrylate		7085850	> 60	0.2 ppm	n/e	n/e

"TLV" means the Threshold Limit Value exposure (eight-hour, time-weighted average, unless otherwise noted) established by the American Conference of Governmental Industrial Hygienists. "STEL" indicates a short-term exposure limit. "PEL" indicates the OSHA Permissible Exposure Limit. "n/e" indicates that no exposure limit has been established. An asterisk (*) indicates a substance whose identity is a trade secret of our supplier and unknown to us.

3. HAZARDS IDENTIFICATION**Emergency Overview**

Appearance, form, odor: colorless viscous liquid with slightly pungent odor.

WARNING! Contains Cyanoacrylate Esters. Can cause severe eye injury. Bonds body tissue in seconds.**Potential health effects****Primary routes of exposure:** Skin contact Skin absorption Eye contact Inhalation Ingestion**Symptoms of acute overexposure:****Skin:** Bonds skin rapidly and strongly. Large quantities may cause burns.**Eyes:** May bond eyelid. A large drop may cause a burn upon solidification. Lachrymator, double vision.**Inhalation:**

Avoid prolonged inhalation. Vapors may cause irritation of nose and bronchial passages.

Ingestion:

The adhesive solidifies and adheres in the mouth, almost impossible to swallow. Lips may bond.

Effects of chronic overexposure:

Possible respiratory sensitization, asthmatic effects.

Carcinogenicity -- OSHA regulated: No**ACGIH: No****National Toxicology Program: No****International Agency for Research on Cancer: No****Cancer-suspect constituent(s) : none****Medical conditions which may be aggravated by exposure:**

Eye, skin and respiratory disorders.

Other effects:

None known.

4. FIRST AID MEASURES**First aid for eyes:**

Flush with lukewarm water for 15 minutes. Call a physician immediately. Do not attempt to peel bonded eyelid from eye!

First aid for skin:

Immerse in warm soapy water. Do not force apart.

First aid for inhalation:

Move to fresh air. If symptoms persist, call a physician.

First aid for ingestion:

Apply warm water to lips. Use maximum wetting with saliva. Position victim to prevent ingestion of solid. Call a physician.

5. FIRE FIGHTING MEASURES**Extinguishing media:** Water Carbon dioxide Dry chemical Foam Alcohol foam**Flash Point (°F):** > 170**Method:** SCC**Explosive limits in air (percent) -- Lower:** nd **Upper:** nd**Special firefighting procedures:**

Wear full protective equipment including self-contained breathing apparatus.

Unusual fire and explosion hazards:

Water may spread fire due to product floating on surface. Cloths used to wipe spills may polymerize and auto-ignite.

Hazardous products of combustion:

Oxides of carbon, oxides of nitrogen, trace amounts of hydrogen cyanide and unidentified organic combustion products.

6. ACCIDENTAL RELEASE MEASURES**Spill control:**

Avoid personal contact. Evacuate area. Eliminate ignition sources. Ventilate area. Wear protective clothing and a NIOSH approved respirator for organic vapors or a self-contained breathing apparatus if needed.

Containment:

Dike with inert absorbent.

Cleanup:

Flood area with water to cure and to control product vapors. Scrape up cured product and dispose of in accordance with all applicable disposal regulations.

Special procedures:

Contact with cotton or wool may result in a strong exothermic reaction which can result in a fire.

7. HANDLING AND STORAGE**Handling precautions:**

Cyanoacrylates bond skin rapidly and strongly. May also bond eyelid to eyelid and/or skin. Wear appropriate personal protective equipment (see Section 8). Avoid dusting. Provide appropriate ventilation/respiratory protection against decomposition products (see Section 10) during welding/flame cutting operations and to protect against nuisance dust during sanding/grinding of cured product.

Storage:

Store away from heat and direct sunlight. Store in a dry location. Keep container tightly closed when not in use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Engineering controls****Ventilation :**

General ventilation is adequate for occasional use. Where the adhesive is in continual use or is heated, or heating cured adhesive over 400 F, provide local exhaust to keep vapors below the TLV.

Other engineering controls :

Have emergency shower and eye wash available.

Personal protective equipment**Eye and face protection:**

Safety glasses with side shields or safety goggles.

Skin protection:

Polyethylene gloves and apron. Do not wear rubber or cloth gloves.

Respiratory protection:

Use NIOSH approved respirator for organic vapors or self-contained breathing apparatus if appropriate ventilation is not available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Specific gravity:	1.05	Boiling point (°F):	>300
Melting point (°F):	n/d	Vapor density (air = 1):	>1
Vapor pressure (mmHg):	0.17 mm Hg at 68 °F	Evaporation rate (butyl acetate = 1):	n/d
VOC (grams/liter):	n/d	Solubility in water:	<0.1%
Percent volatile by volume:	0	pH (5% solution or slurry in water):	n/d
Percent solids by weight:	100		

10. STABILITY AND REACTIVITY

This material is chemically stable. Hazardous polymerization may occur.

Conditions to avoid :

High temperatures, light and humidity

Incompatible materials:

Base cotton, wool, water, alkaline (basic) materials

Hazardous products of decomposition:

Oxides of carbon, oxides of nitrogen, trace amounts of hydrogen cyanide and unidentified organic decomposition products.

Conditions under which hazardous polymerization may occur:

Contamination with water, alkaline materials or peroxides may build-up pressure in a closed container.

11. TOXICOLOGICAL INFORMATION

Acute oral effects: LD50 (rat): not determined

Acute dermal effects: LD50 (rabbit): not determined

Instantly bonds skin. Large drops may cause burns upon solidification.

Acute inhalation effects: LC50 (rat): not determined

Exposure: hours.

Causes irritation of nose and bronchial passages.

Eye irritation:

Instantly bonds eyelid to eyelid and/or eye.

Subchronic effects:

None known.

Carcinogenicity, teratogenicity, and mutagenicity:

None known.

Other chronic effects:

None known.

Toxicological information on hazardous chemical constituents of this product:

Constituent	Oral LD50 (rat)	Dermal LD50 (rabbit)	Inhalation LC50 4hr, (rat)
Ethyl-2-cyanoacrylate	n/d	n/d	n/d

'n/d' = 'not determined'

12 ECOLOGICAL INFORMATION**Ecotoxicity:**

No data available.

Mobility and persistence:

No data available

Environmental fate:
No data available.

13. DISPOSAL CONSIDERATIONS

Please see also Section 15, Regulatory Information.

Waste management recommendations:

As shipped this product is not a hazardous waste as specified in 40 CFR 261. Dispose of according to local, state, and federal regulations. Incineration is the preferred method of disposal.

14. TRANSPORT INFORMATION

Proper shipping name: Non-regulated
Technical name : N/A
Hazard class : N/A
UN number: N/A
Packing group: N/A
Emergency Response Guide no.: N/A
IMDG page number: N/A
Other: N/A

15. REGULATORY INFORMATION**U.S. Federal Regulations****TSCA**

All ingredients of this product are listed, or are exempt from listing, on the TSCA inventory.

The following RCRA code(s) applies to this material if it becomes waste:

None

Regulatory status of hazardous chemical constituents of this product:

Constituent	Extremely Hazardous*	Toxic Chemical**	CERCLA RQ (lbs)	TSCA 12B Export Notification
Ethyl-2-cyanoacrylate	No	No	0.0	Not required

*Consult the appropriate regulations for emergency planning and release reporting requirements for substances on the SARA Section 301 Extremely Hazardous Substance list.

**Substances for which the "Toxic Chemical" column is marked "Yes" are on the SARA Section 313 list of Toxic Chemicals, for which release reporting may be required. For specific requirements, consult the appropriate regulations.

For purposes of SARA Section 312 hazardous materials inventory reporting, the following hazard classes apply to this material: - Immediate health hazard -- Fire hazard -- Reactivity hazard -

Canadian regulations

WHMIS hazard class(es) : D2B; B3

All components of this product are on the Domestic Substances List.

16. OTHER INFORMATION

Hazardous Materials Identification System (HMIS) ratings:	Health 2*	Flammability 2	Reactivity 2
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