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DURO SUPER GLUE IDH: 843778

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: DURO SUPER GLUE

Item No.: 01-06920-02, 01-06920-04, 01-01801, 01-34893, 01-81737,

01-81366, 01-81366-05, 01-81742

Product Type: Cyanoacrylate ester

2. COMPOSITION, INFORMATION ON INGREDIENTS

Ingredients CAS No. %

Ethyl cyanoacrylate 7085-85-0 60-100 Glyceryl ester Proprietary 10-30

Ingredients which have exposure limits

Exposure Limits (TWA) ACGIH OSHA OTHER

Ingredients (TLV) (PEL)

Ethyl cyanoacrylate 0.2 ppm TWA None None

3. HAZARDS IDENTIFICATION

Emergency Overview: Bonds skin in seconds. May cause eye, skin, and

respiratory irritation. Combustible liquid and vapor.

Inhalation: Exposure to vapors above the established exposure limit

results in respiratory irritation which may lead to difficulty in breathing and tightness in the chest. Bonds to skin in seconds. May cause skin irritation. Cyanoacrylates have been reported to cause allergic

reaction but due to rapid polymerization at the skin surface, an allergic response is rare. Cyanoacrylates generate heat on solidification. In rare circumstances a large drop will burn the skin. Cured adhesive does not present a health hazard even if bonded to the skin.

Eye contact: Irritating to eyes. Causes excessive tearing. Eyelids

may bond.

Ingestion: Not expected to be harmful by ingestion. Rapidly

polymerizes (solidifies) and bonds in mouth. It is

almost impossible to swallow.

Estimated acute oral LD50 more than $5000 \, \text{mg/kg}$ (rat). Estimated acute dermal LD 50 more than $2000 \, \, \text{mg/kg}$

(rabbit).

Primary Routes of Entry: Skin, inhalation, eyes

Existing Conditions

Skin contact:

Aggravated by Exposure: Eye, skin, and respiratory disorders.

(continued)

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Carcinogen

Product Name: DURO SUPER GLUE

IDH: 843778

3. HAZARDS IDENTIFICATION

Literature Referenced

Ingredients Target Organ and Other Health Effects NTP IARC OSHA

Ethyl cyanoacrylate ALG IRR RES NO NO NO Glyceryl ester IRR NO NO NO

Abbreviations

N/A Not Applicable AC3 ACGIH animal carcinogen.

ALG Allergen BLO Blood

BNM Bone Marrow CNS Central nervous system

EYE Eyes IMM Immune system

IRR Irritant LIV Liver

MUT Mutagen RES Respiratory SKI Skin THY Thyroid

4. FIRST AID MEASURES

Ingestion: Ingestion is not likely. See supplemental page for

emergency procedures.

Inhalation: Remove to fresh air. If symptoms persist,

obtain medical attention.

Skin Contact: Soak in warm water. See supplemental page for

emergency procedures.

Eye Contact: Immediately flush with plenty of water for at least 15

minutes. See supplemental page for emergency procedures.

5. FIRE FIGHTING MEASURES

Flash Point: 176 - 200°F Method: Tag Closed Cup

Autoignition temperature: 485°C (905°F)

Extinguishing media: Carbon dioxide, foam, dry powder

Special Firefighting

Procedures: Wear positive pressure self-contained breathing

apparatus (SCBA).

Hazardous combustion

products formed: Trace amounts of toxic and/or irritating fumes may be

released and the use of breathing apparatus is

recommended.

Unusual Fire or

Explosion Hazards: None

Explosive Limits:

(% by volume in air)Lower Not available (% by volume in air)Upper Not available

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Product Name:

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6. ACCIDENTAL RELEASE MEASURES

Steps to be taken in case

of spill or leak:

Do not use cloths for mopping. Flood wi polymerize and scrape off the floor. Cu be disposed of as non-hazardous waste.

Environmental precautions: Ventilate area. Prevent product from en

drains.

7. HANDLING AND STORAGE

Storage: Keep in a cool, well ventilated area aw

sparks and open flame. Keep container t until rady for use. No special restrict

with other products.

Handling: Avoid contact with skin, eyes and cloth

breathing vapor. Wash thoroughly after contact with fabric or paper goods. Con materials may cause rapid polymerizatio generate smoke and strong irritating va

thermal burns.

Contact Henkel Customer Service 1-800-243-4874 for shelf life info

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

Eyes: Safety glasses with side shields or gog Skin: Nitrile or polyethylene gloves and apro

Do not use PVC, nylon or cotton.

See supplemental page for additional in Ventilation: Positive down-draft exhaust ventilation

provided to maintain vapor concentration

Respiratory Use NIOSH approved respirator if there

exceed exposure limit(s).

See Section 2 for Exposure Limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear liquid Odor: Sharp, irritating

Boiling Point: More than 300°F (149°C)

pH: Does not apply

Solubility in Water: Polymerizes in presence of water

Specific Gravity: 1.1 @ 20°C

VOC Content: Less than 2%; 20 g/L (California SCAQMD

estimated)

Vapor Pressure: Less than 0.2 mm Hg

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9. PHYSICAL AND CHEMICAL PROPERTIES (continued)

Vapor Density: Approximately 3

Evaporation Rate

(Ether = 1) Not available

Partition coefficient

(n-octanol/water): Not applicable Odor Threshold: $1-2 \ ppm$

10. STABILITY AND REACTIVITY

Stability: Stable under recommended storage conditions.

Hazardous Polymerization: Rapid exothermic polymerization will occur in the

presence of water, amines, alkalis and alcohols.

Incompatibility: Water, alcohols, amines, alkalis.

Conditions to Avoid: Spontaneous polymerization

Hazardous Decomposition

Products: None

11. TOXICOLOGICAL INFORMATION

See Section 3.

12. ECOLOGICAL INFORMATION

No data available

13. DISPOSAL CONSIDERATIONS

Recommended methods of

disposal: Dispose of in accordance with Federal, State and local

regulations.

EPA Hazardous Waste

Number: Not a RCRA Hazardous Waste

14. TRANSPORTATION INFORMATION

DOT (49 CFR 172) - Domestic Ground Transport:

Proper Shipping Name: Combustible liquids, n.o.s. (Cyanoacrylate ester)

Hazard Class or

Division: 3

Identification Number: NA 1993 Packing group: None

Exceptions: Unrestricted (Not more than 450 L)

Marine Pollutant: None

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Product Name: DURO SUPER GLUE

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International Air Transportation (ICAO/IATA):

Proper Shipping Name: Aviation regulated liquid, n.o.s., (Cya

Ester)

Class or Division:

UN or ID Number: UN 3334 Packing group: None

Exceptions: (Not more than 500mL) Unrestricted

Water Transportation (IMO/IMDG):

Proper Shipping Name: Unrestricted

Class or Division: None
UN or ID Number: None
Packing group: None
Marine pollutant: None

15. REGULATORY INFORMATION

United States

Status:

TSCA 8(b) Inventory

Toxic Substances C

All components are listed or exempt fro Toxic Substances Control Act Inventory.

TSCA 12(b) Export

Notification: None.

CERCLA/SARA 302: None.

CERCLA/SARA 311/312: Immediate Health Hazard, Delayed Health

Reactive

CERCLA/SARA 313: None.

CA Proposition 65: No Prop 65 listed chemicals are known t

Canada

CEPA DSL/NDSL Status: One or more components are not listed o

exempt from listing on either the the D

Substances List or the Non-Domestic Sub

WHMIS hazard class: B.3, D.2.B

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16. OTHER INFORMATION

Estimated NFPA(R) Code:

Health Hazard: 2
Fire Hazard: 2
Reactivity Hazard: 1

Reactivity Hazard: 1
Specific Hazard: Does not apply

Estimated HMIS(R) Code:

Health Hazard: 2
Flammability Hazard: 2
Reactivity Hazards: 1

Personal Protection: See Section 8.

NFPA is a registered trademark of the National Fire Protection As HMIS is a registered trademark of the National Paint and Coatings

Prepared by:

Company: Regulatory Affairs

Henkel Corporation, Avon, Ohio

(24hr.) Phone: (440) 937-7000

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Supplement

INFORMATION FOR FIRST AID AND CASUALTY ON TREATMENT FOR ADHESION OF HUMAN SKIN TO ITSELF IF CAUSED BY CYANOACRYLATE ADHESIVES

Cyanoacrylate adhesive is a very fast setting and strong adhesive. It bonds human tissue including skin in seconds. Experience has shown that accidents due to cyanoacrylates are handled best by passive, nonsurgical first aid. Treatment of specific types of accidents are given below.

SKIN CONTACT

Remove excess adhesive. Soak in warm, soapy water. The adhesive will come loose from the skin in several hours. Cured adhesive does not present a health hazard even when bonded to the skin.

Avoid contact with clothes, fabrics, rags, or tissue. Contact with these materials may cause polymerization. The polymerization of large amounts of adhesive will generate heat causing smoke, skin burns, and strong, irritating vapors. Wear nitrile or polyethylene gloves and apron when handling large amounts of adhesive.

SKIN ADHESION

First immerse the bonded surfaces in warm, soapy water. Peel or roll the surfaces apart with the aid of a blunt edge, e.g. a spatula or a teaspoon handle; then remove adhesive from the skin with soap and water. Do not try to pull surfaces apart with a direct opposing action.

EYELID TO EYELID OR EYEBALL ADHESION

In the event that eyelids are stuck together or bonded to the eyeball, wash thoroughly with warm water and apply a gauze patch. The eye will open without further action, typically in 1-4 days. There will be no residual damage. Do not try to open the eyes by manipulation.

ADHESIVE ON THE EYEBALL

Cyanoacrylate introduced into the eyes will attach itself to the eye protein and will disassociate from it over intermittent periods, generally covering several hours. This will cause periods of weeping until clearance is achieved. During the period of contamination, double vision may be experienced together with a lachrymatory effect, and it is important to understand the cause and realize that disassociation will normally occur within a matter of hours, even with gross contamination.

MOUTH

If lips are accidentally stuck together, apply lots of warm water to the lips and encourage maximum wetting and pressure from saliva inside the mouth. Peel or roll lips apart. Do not try to pull the lips with direct opposing action.

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It is almost impossible to swallow cyanoacrylate. The adhesive solidifies and adheres in the mouth. Saliva will lift the adhesiv one half to two days. In case a lump forms in the mouth, position patient to prevent ingestion of the lump when it detaches.

BURNS

Cyanoacrylates give off heat on solidification. In rare cases a l drop will increase in temperature enough to cause a burn. Burns should be treated normally after the lump of cyanoacrylate i released from the tissue as described above.

SURGERY

It should never be necessary to use such a drastic method to separ accidentally bonded skin.