RHINO GLUE GEL

Revision 2
Revision Date 07-January-2019

SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY

PRODUCT DESCRIPTION: RHINO GLUE GEL

PRODUCT TYPE: Cyanoacrylate Adhesive

MANUFACTURER: Acro Products
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2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Skin corrosion/irritation	H315 Causes skin irritation	Category 2
Serious eye irritation	H319 Causes serious eye irritation	Category 2
Specific target organ toxicity-single exposure	H335 May cause respiratory irritation	Category 3

Label elements:

Hazard pictogram:

Single word:	Warning
Emergency Overview:	Causes skin irritation Causes serious eye irritation May cause respiratory irritation Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of the reach of children.
Precautionary Statement - Prevention	Avoid breathing dust/fumes/gas/mist/vapors/spray Wear protective gloves/protective clothing/eye protection/face protection
Precautionary Statement - Response	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. If eye irritation persists get medical advice/attention. IF ON SKIN: Wash with plenty of soap and water.
Precautionary Statement – Storage	Store locked up.
Precautionary Statement – Disposal	Dispose of contents/container to an approved waste disposal plant.

Other hazards:

None if used properly.

3. COMPOSITION / INFORMATION ON INGREDIENTS

General chemical description: Cyanoacrylate Adhesive

Base substances of preparation: Cyanoacrylate

Chemical Name	CAS-No	EINECS Number Index Number REACH-Reg No.	Weight - %
Ethyl-2-cyanoacrylate	7085-85-0	230-391-5 607-236-00-9 01-2119527766-29-0002	>70-<100% *

* The exact percentage (concentration) of composition has been withheld as a trade secret

4. FIRST AID MEASURES

Description of first aid measures

General advice: Avoid breathing gas/fumes/vapor/spray.

Inhalation: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, call a physician.

Skin contact: IF ON SKIN: Wash with soap and water. Allow warm water to penetrate the bond and gently attempt to remove bonded areas without pulling the skin away from bonded area. If skin irritation persists, call a physician.

Eye contact: IF IN EYES: Rinse immediately with plenty of water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. Get medical advice/attention.

Ingestion: Not an expected route of exposure. Ensure that breathing passages are not obstructed. The product will polymerize immediately in the mouth making it almost impossible to swallow. Saliva will slowly separate the solidified product from the mouth.

Self-protection of the first aider: Use personal protective equipment as required.

Most important symptoms and effect, both acute and delayed

May cause allergic or asthma symptoms or breathing difficulties if inhaled.

Eye: Irritation, conjunctivitis.

Skin: Redness, inflammation.

Respiratory: Irritation, coughing, shortness of breath, chest tightness.

Indication of any immediate medical attention and special treatment needed

In the case of lung irritation: Primary treatment using corticoide spray, e.g. Auxiloson spray, Pulmicort-dosage-spray. (Auxiloson and Pulmicort are registered trademarks.)

5. FIRE FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, dry powder, carbon dioxide, water spray jet

Unsuitable extinguishing media: High volume water jet.

Special hazards arising from the substance or mixture

In the event of fire, the following can be released: Nitrogen oxides (NOx), carbon monoxide (CO), carbon dioxide (CO_2).

Advice for firefighters

In case of fire and/or exposure do not breathe fumes. Firefighters should wear positive pressure self-contained breathing apparatus (SCBA). Firefighting operations, rescue and cleaning work under effect of combustion and smolder gases may be done with breathing apparatus. Dispose of contaminated extinction water according to official regulations.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: Use personal protective clothing.

For emergency responders: Ensure adequate ventilation. Avoid contact with eyes or skin.

Environmental precautions

If leakage occurs, dam up. Resolve leaks, if possible, without risk. Prevent surface and ground-water infiltration, as well as ground penetration. Prevent from entering drainage system. If accidental entry into drainage system occurs, inform responsible authorities.

Methods and material for containment and cleaning up

Do not use cloth for clean-up. Flood with water to complete polymerization and scrape up the polymer. Solid material can be disposed as non-hazardous waste.

Reference to other sections

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling: Handle in accordance with good industrial hygiene and safety practice. Avoid contact with eyes, skin and clothing. Avoid breathing vapor and mists. Wash thoroughly after handling. Avoid contact with fabric and paper goods. Contact with these may cause polymerization that can generate smoke and strong irritating vapors and can cause thermal burns.

Advice on general occupational hygiene: Wash hands and face before eating.

Conditions for safe storage, including and incompatibilities

Keep in a cool, well-ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready to use. Incompatible products: Do not store together with alkalis.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Chemical Name	ACGIH TLV	OSHA PEL	EH40 WEL
Ethyl-2-cyanoacrylate 7085-85-0	0.2ppm TWA	----	0.3 ppm, 1.5 mg/m^3 STEL (15 min)

Exposure controls

Appropriate Engineering Controls: If general ventilation is insufficient to maintain vapor concentration below established exposure limits, use protective downdraft exhaust ventilation.

Individual protection measures / General protective and hygienic measures: Keep away from food stuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with eyes and skin.

Eye/Face protection: Safety glasses with side shields or chemical splash goggles.

Skin protection: Do not use PVC, rubber, cotton or nylon gloves.

Hand protection: Tested protective gloves are to be worn: Suitable material: Synthetic rubber gloves. For special applications, it is recommended to check the chemical resistance with the glove manufacturer.

Respiratory protection: If there is a potential to exceed exposure limits, use an approved respirator.

Environmental exposure controls: Do not empty into drains or the aquatic environment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state: Liquid

Appearance: Colorless to straw color

Odor: Sharp, irritating

Odor threshold: Not available.

pH:	Not applicable.
Melting point/freezing point:	-22°C
Initial boiling point and boiling range:	>200°C
Flash point	80-93.4°C (Method: Tag closed cup)
Evaporation rate (Butyl acetate = 1):	Not available.
Flammability:	Not available.
Upper flammability limit:	Not available.
Lower flammability limit:	Not available.
Vapor Pressure (25°C):	Less than 0.2 mmHg
Vapor Density (Air=1):	Approximately 3
Relative Density:	1.1g/cm^3
Solubility:	Polymerizes in the presence of water.
Partition coefficient:	Not applicable.
Auto-ignition temperature:	485°C
Decomposition temperature:	Not applicable.
Viscosity	1500-2500 cps.
Explosive properties:	Product is not explosive.
Oxidizing properties:	Product is not oxidizing.
Other information	
Specific gravity:	1.10 (25°C)
VOC content:	Less than 2%; 20g/l (California SCAQMD Method 361B)

10. STABILITY AND REACTIVITY

Reactivity

Rapid exothermic polymerization will occur in the presence of water, amines, alkalis, oxidizing agents, alcohols.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

Danger of polymerization. Polymerization with evolution of heat.

Conditions to avoid

Spontaneous polymerizations.

Incompatible materials

Water, amines, alkalis, oxidizing agents and alcohols.

Hazardous decomposition products

Carbon monoxide and carbon dioxide. Nitrous oxides (NOx).

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation	May cause irritation of respiratory tract
Eye contact	Contact with eyes may cause irritation. May cause redness and tearing of the eyes.
Skin contact	Irritating to the skin. Bonds skin in seconds.
Ingestion	It is almost impossible to swallow as it rapidly polymerizes in the mouth.

Acute toxicity:

Chemical Name CAS-No	Oral LD50	Dermal LD50	Inhalation LC50

Ethyl-2-cyanoacrylate 7085-85-0	>5000mg/kg (Rat)	>2000mg/kg (Rabbit)	----

Information on toxicological effects

Symptoms No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available

Germ cell mutagenicity No information available

Carcinogenicity According to NTP, OSHA and IARC, the substance is not carcinogen.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Biological and chemical oxygen demands (BOD and COD) are insignificant. Do not empty into drains/ surface water/ ground water. Do not allow uncontrolled leakage of product into the environment.

Persistence and degradability: No information available.

Bioaccumulative potential: No information available.

Mobility in soil: Cured adhesives are immobile.

Results of PBT and vPvB Assessment: PBT: Not applicable.
vPvB: Not applicable.

Other adverse effects: No further relevant information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes: Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging: Do not reuse container.

US EPA Waste Number: Not applicable

Special precautions: Not available.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)
PROPER SHIPPING NAME: NOT REGULATED

AIR (ICAO/IATA)
PROPER SHIPPING NAME: NOT REGULATED

VESSEL (IMO/IMDG)
SHIPPING NAME: NOT REGULATED

TDG (Transportation of Dangerous Goods): NOT REGULATED

The transport information provided in this section only applies to the material formulation/itself, and is not specific to any package/configuration.

15. REGULATORY INFORMATION

United State Regulatory Information:

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act.

TSCA 12 (b) Export Notifications: None above the reporting de minimis.

CERCLA/SARA Section 302 EHS: None above the reporting de minimis.

CERCLA/SARA Section 311/312:	Immediate Health, Delayed Health, Fire, Reactive
CERCLA/SARA Section 313:	This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). Beta-Methoxyethyl Cyanoacrylate (CAS# 27816-23-5).
California Proposition 65:	No California Proposition 65 listed chemicals are known to be present.

Canada Regulatory Information

CEPA DSL/NDSL Status:	Contains one or more components listed on the Non-Domestic Substances List. All other components are listed or are exempt from listing on the Domestic Substances List. Components listed on the NDSL must be tracked by all Canadian Importers of Record as required by Environment Canada. They may be imported into Canada in limited quantities. Please contact Regulatory Affairs for additional details.

16. OTHER INFORMATION

NFPA	Health hazards 2	Flammability 2	Instability 1	---
HMIS	Health hazards 2	Flammability 2	Physical hazards 1	Personal protection B

NFPA (National Fire Protection Association)
HMIS (Hazardous Material Information System)

Further information	This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties. Substances have been classified in accordance with Regulation (EC) 1272/2008 (CLP).