



SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: V-35-A

Product type: vinyl adhesive

Restriction of use: None identified

Company Address: Precision Adhesives and Chemicals
131 Brown Street
Yatesville, PA 18640

Telephone numbers: 570-654-6735

Transport Emergency phone: Chemtrec 800-424-9300

Medical Emergency phone: Poison Control Center 1.877.671.4608

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture:

Flammable liquids (Category 2)

Acute toxicity, Inhalation (Category 4)

Acute toxicity, oral (Category 4)

Acute toxicity, dermal (Category 4)

Skin irritation (Category 2)

Eye irritation (Category 1)

Germ cell mutagenicity (Category 2)

Toxic to reproduction (category 1b)

Carcinogen (Category 2)

Target Organ Systemic Toxicity - Single Exposure (Category 3)

Signal Word: Danger

Hazard Statements:

H225: Highly flammable liquid and vapor.

H302: Harmful if swallowed.

H312: Harmful in contact with skin.

H315: Causes skin irritation.

H318: Causes serious eye damage

H332: Harmful if inhaled.

H335: May cause respiratory irritation

H336: May cause drowsiness or dizziness

H341: Suspected of causing genetic defects

H351: Suspected of causing cancer
 H360: May damage fertility of the unborn child

Pictograms:



Precautionary Statements:

P210: Keep away from heat / sparks / open flames /hot surfaces. No smoking.
 P270: Do not eat, drink or smoke when using this product.
 P261: Avoid breathing mist, vapors or spray
 P280: Wear protective gloves and eye protection/face protection.
 P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor / physician.
 P303 + P361 + P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P308+313: If exposed or concerned: Get medical attention/advice.

Supplemental information:

EUH019: May form explosive peroxides.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component	C.A.S. #	%
Cyclohexanone	108-94-1	2-15
Methyl Ethyl Ketone	78-93-3	30-50
Tetrahydrofuran (THF)	109-99-99	30-50
Polyvinyl Chloride Resin (PVC)	9002-86-2	20-30

SECTION 4: FIRST-AID MEASURES

SIGNS AND SYMPTONS OF EXPOSURE:

Eyes: Irritation Skin: Irritation Inhalation: dizziness, drowsiness, nausea

FIRST AID & EMERGENCY PROCEDURES:

Eyes: Immediately flush with plenty of water for at least 15 minutes, lifting eyelids occasionally during flushing to facilitate irrigation. Seek medical attention.

Skin: Immediately wash skin with soap and water. Remove contaminated clothing. Seek medical attention if irritation persists.

Inhalation: Remove to fresh air. If breathing is difficult, seek medical attention.

Ingestion: Take immediately to hospital or physician.

SECTION 5: FIRE FIGHTING MEASURES

Flash Point(Method Used): -4°F, -20°C

Flammable Limits: LEL 1.1
UEL 11.8

Autoignition temperature: 420°C (788°F)

Extinguishing Media: Dry Chemical, Carbon Dioxide, Foam, Water Spray.

Special Fire Fighting Procedures: Wear self-contained breathing apparatus and full protective clothing. Water may be used to cool fire-exposed containers.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Soak up with absorbent material, remove to a chemical disposal area. Enclose with diking material to prevent seepage into any natural bodies of water. Absorb residue and dispose of all waste according to all local, state, and federal regulations.

SECTION 7: HANDLING AND STORAGE

Use only with adequate ventilation. Avoid contact with eyes, skin and clothing. Keep container closed when not in use. Do not breath gas/fumes/vapor/spray. Wash thoroughly after handling. Do not store above 100° F.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Hazardous Component	C.A.S. #	ACGIH TWA/ppm	ACGIH STEL/ppm	OSHA TWA/ppm
Cyclohexanone	108-94-1	25 PPM Skin		50 PPM (trans) 25 PPM Skin
Methyl Ethyl Ketone	78-93-3	200 PPM		200 PPM
Tetrahydrofuran (THF)	109-99-99	200 PPM		200 PPM
Polyvinyl Chloride Resin (PVC)	9002-86-2	N/A		NA

Respiratory Protection: The use of respiratory protection depends on vapor concentration above the time-weighted TLV. Use a respirator/gas mask with appropriate cartridges and canister (NIOSH approved) or supplied air equipment, depending on airborne concentration.

Ventilation: General mechanical ventilation may be sufficient to keep product vapor concentrations within specified time-weighted TLV ranges. If general ventilation proves inadequate to maintain safe vapor concentrations, supplemental local exhaust may be required if vapor concentrations cannot be reduced to below the TLV by ventilation.

Protective Gloves: The use of gloves which are impermeable to the specific material handled is advised to prevent skin irritation and absorption.

Other Protective Clothing or Equipment: Safety glasses, chemical goggles and/or face shield are recommended to safeguard against potential eye contact, irritation or injury.

Special clothing is advised as good chemical handling practice. The availability of eye wash and safety showers in work areas is recommended.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point (°F): 151 °F	Vapor Density (Air=1): 2.49
Specific Gravity (H ₂ O=1): 1.02 ± 0.040 @ 73 ± 2 °F	Evaporation Rate (Butyl Acetate=1): 5-8
Vapor Pressure: 143 mm Hg. Based on THF	Water Solubility: Solvent portion completely soluble in water, Resin portion separates out.
% Volatile by Volume: Approx: 70 – 90%	Appearance and Odor: thick white opaque liquid – ether like odor

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable **HAZARDOUS POLYMERIZATION:** May not occur

CONDITIONS TO AVOID: Exposure to heat, sparks, open flames, static electricity.

INCOMPATIBILITY (MATERIALS TO AVOID): Avoid contact with strong oxidizing agents,

strong acids and strong alkalies.

HAZARDOUS DECOMPOSITION PRODUCTS OR BYPRODUCTS: Carbon monoxide, carbon dioxide, smoke, fumes, other unidentified toxic materials.

SECTION 11: TOXICOLOGICAL INFORMATION

Cyclohexanone CAS# 108-91-1:

Acute Toxicity:

Oral rat LD50: 1800 mg/kg; Inhalation rat LC50: 8000ppm / 4 hr

Skin rabbit LD50: 1 mL/kg; Irritation: eye rabbit.

Standard Draize: 20 mg, severe; skin rabbit, Open Draize: 500 mg, mild

Investigated as a tumorigen, mutagen and reproductive effector.

Tetrahydrofuran CAS# 109-99-99

Acute toxicity

Oral LD50 – rat - 2,050 - 2,850 mg/kg

Inhalation LC50 – rat - 4 h - 54 mg/l

Dermal LD50 – rat - > 2,000 mg/kg

Other information on acute toxicity

no data available

Skin corrosion/irritation

Skin – rabbit - Mild skin irritation - Draize Test

Serious eye damage/eye irritation

Eyes – rabbit - Risk of serious damage to eyes. - Draize Test

Respiratory or skin sensitisation

guinea pig - Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

In vivo tests did not show mutagenic effects

Genotoxicity in vitro - Ames test - *S. typhimurium* – negative

Carcinogenicity

Suspected human carcinogens

IARC:

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP:

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA:

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

No toxicity to reproduction

Teratogenicity
no data available

Specific target organ toxicity - single exposure
May cause drowsiness or dizziness. - Nervous system
May cause respiratory irritation.

Specific target organ toxicity - repeated exposure
The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration hazard
No aspiration toxicity classification

Potential health effects
Inhalation - May be harmful if inhaled. Causes respiratory tract irritation.
Ingestion - May be harmful if swallowed.
Skin - May be harmful if absorbed through skin. Causes skin irritation.
Eyes - Causes eye irritation.

Signs and Symptoms of Exposure
Central nervous system depression, Cough, chest pain, Difficulty in breathing, Exposure to high airborne concentrations can cause anesthetic effects., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Synergistic effects
no data available

Additional Information
RTECS: LU595000

MEK CAS# 78-93-3
Acute Toxicity (Oral LD50): mg/kg (oral rat) > 2000 - □ 5000
Acute Toxicity (Inhalation LC50): > 5000 ppm
Acute Toxicity (Dermal LD50): Rabbit mg/kg > 5000

NTP Carcinogen: not known or anticipated
IARC Category: none

Inhalation:
Causes irritation to the nose and throat. Concentrations above the TLV may cause headache, dizziness, nausea, shortness of breath, and vomiting. Higher concentrations may cause central nervous system depression and unconsciousness.

Ingestion:

May produce abdominal pain, nausea. Aspiration into lungs can produce severe lung damage and is a medical emergency. Other symptoms expected to parallel inhalation.

Skin Contact:

Causes irritation to skin. Symptoms include redness, itching, and pain. May be absorbed through the skin with possible systemic effects.

Eye Contact:

Vapors are irritating to the eyes. Splashes can produce painful irritation and eye damage.

Chronic Exposure:

Prolonged skin contact may defat the skin and produce dermatitis. Chronic exposure may cause central nervous system effects.

Aggravation of Pre-existing Conditions:

Persons with pre-existing skin disorders or eye problems or impaired respiratory function may be more susceptible to the effects of the substance.

Specific Target Organ Toxicity - Single Exposure (Globally Harmonized System):

May cause drowsiness or dizziness.

Specific Target Organ Toxicity - Repeated Exposure (Globally Harmonized System):

No data available

SECTION 12: ECOLOGICAL INFORMATION

Not available.

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of only in accordance with local, state, and federal rules and regulations.

SECTION 14: TRANSPORT INFORMATION

D.O.T. Shipping Name: UN1133, Adhesives, 3, PG II

HMIS Rating: Health: 2

Flammability: 3

Reactivity: 0

Contains:

Hazardous Component	C.A.S. #
Cyclohexanone	108-94-1
Methyl Ethyl Ketone	78-93-3
Tetrahydrofuran (THF)	109-99-99
Polyvinyl Chloride Resin (PVC)	9002-86-2

D.O.T. Label: Flammable liquid

SECTION 15: REGULATORY INFORMATION

Federal and State Regulations:

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: none

Pennsylvania RTK: Cyclohexanone, THF

Massachusetts RTK: Cyclohexanone, THF

New Jersey RTK: Cyclohexanone, THF

TSCA 8(b) inventory: Cyclohexanone

TSCA 8(d) H and S data reporting: Cyclohexanone

SARA 313 toxic chemical notification and release reporting: Cyclohexanone

SARA 311/312 Hazards: Cyclohexanone, THF

CERCLA: Hazardous substances: Cyclohexanone, 5000 lbs.

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 3

Reactivity: 0

Personal Protection: h

National Fire Protection Association (U.S.A.):

Health: 2

Flammability: 3

Reactivity: 0

Specific hazard: none

SECTION 16: OTHER INFORMATION

Updated: 1/30/18

SPECIAL COMMENT REGARDING ALL MATERIALS MANUFACTURED

All information, recommendations and suggestions appearing herein concerning our products are based upon test data believed to be reliable. However, it is the user's responsibility to determine the safety, toxicity and suitability for use of the product described herein. Since the actual use by others is beyond our control, no guarantee, expressed or implied, is made by Adhesives and Chemicals as to the effects or such use, the results to be obtained, or the safety and toxicity of the product nor does Adhesives and Chemicals assume any liability arising out of use, by others, of the product referred to herein. The information herein is not to be considered as absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations.