

SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT IDENTIFIER:..... PRO-SET® 552-P
APPLICABLE PRODUCT CODES: 552-P
CHEMICAL FAMILY:..... Alcohol-dye mixture.
INTENDED PRODUCT USES:..... Quality assurance dye for epoxy resins.
PRODUCT USE RESTRICTIONS: None identified.
SDS VERSION: 552-P-2019a

MANUFACTURER:
Gougeon Brothers, Inc.
100 Patterson Ave.
Bay City, MI 48706, U.S.A.
Phone: 888-377-6738 or 989-684-7286
www.prosetepoxy.com

EMERGENCY TELEPHONE NUMBERS (24 HRS):
Transportation
CHEMTREC: 800-424-9300 (U.S.)
703-527-3887 (International)
Non-transportation
Poison Hotline: 800-222-1222

2. HAZARDS IDENTIFICATION

Classification of Substance or Mixture

Acute toxicity – Oral, Category 4
Acute toxicity – Inhalation, Category 4
Eye damage/irritation, Category 2A

Label Elements

Hazard Pictogram(s):



Signal Word
WARNING

Hazard Statements

H302 Harmful if swallowed
H332 Harmful if inhaled
H319 Causes serious eye irritation.

Precautionary Statements

Prevention

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection.

Response

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 If eye irritation persists: Get medical attention/advice.

Disposal

P501 Dispose of contents/container in accordance with local, regional and international regulations.

Other Hazards Not Resulting In Classification

None known.

3. COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

| INGREDIENT NAME | CAS # | CONCENTRATION (%) |
|---------------------------------|------------|-------------------|
| Benzyl alcohol | 100-51-6 | 96.5 |
| Solvent Blue 36 (non-hazardous) | 14233-37-5 | 3.5 |

The exact chemical identity and/or exact percentage (concentration) of each ingredient may be held as confidential business information (CBI). Any ingredient not disclosed in this section may have been determined not to be hazardous to health or the environment, or it may be present at a level below its disclosure threshold.

4. FIRST AID MEASURES

FIRST AID FOR EYES:..... SYMPTOMS: Causes serious irritation and redness. RESPONSE: Flush immediately with water for at least 15 minutes. Remove contact lenses if present and easy to do. Consult a physician or ophthalmologist if irritation develops and persists.

FIRST AID FOR SKIN:..... SYMPTOMS: May cause slight irritation to the skin. RESPONSE: Remove contaminated clothing. Wash with soap and water. Consult a physician if effects occur.

FIRST AID FOR INHALATION:..... SYMPTOMS: Overexposure may cause dizziness, drowsiness, headache, nausea, central nervous system depression and even loss of consciousness. RESPONSE: Remove to fresh air if respiratory irritation occurs and keep comfortable for breathing. Call a POISON CENGTER or doctor if symptoms develop and you feel unwell.

FIRST AID FOR INGESTION:..... SYMPTOMS: Ingestion may cause dizziness, drowsiness, headache, nausea, central nervous system depression, loss of consciousness, vomiting, diarrhea and convulsions. RESPONSE: Call a POISON CENTER or doctor if a significant amount was ingested and you fell unwell.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA:..... SUITABLE: Foam, carbon dioxide (CO₂), dry chemical, water spray-mist. NON-SUITABLE: Direct high-pressure water stream.

FIRE AND EXPLOSION HAZARDS:..... Product is not considered a fire hazard, but will burn if ignited. During a fire, smoke may contain the original materials in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include, but are not limited to: benzaldehyde, carbon monoxide, and carbon dioxide.

SPECIAL FIRE FIGHTING PROCEDURES:..... Wear a self-contained breathing apparatus and complete full-body personal protective equipment. Closed containers may rupture (due to buildup of pressure) when exposed to extreme heat.

6. ACCIDENTAL RELEASE MEASURES

EMERGENCY PROCEDURES:..... Keep unnecessary and unprotected personnel from entering area. Use appropriate safety and personal protective equipment as indicated in Section 8.

MITIGATION AND CLEAN UP PROCEDURES:..... Stop leak without additional risk. Isolate area. Dike and absorb with inert material (e.g., sand) and collect in a suitable, closed container. Warm, soapy water or non-flammable, safe solvent may be used to clean residual.

ENVIRONMENTAL PRECAUTIONS:..... Prevent from entering into soil, ditches, sewers, waterways and groundwater. See Section 12 for environmental impact information.

7. HANDLING AND STORAGE

STORAGE TEMPERATURE (min./max.):..... 10°F (-12°C) / 104°F (40°C)

STORAGE:..... Store in cool, dry place. Store in tightly sealed containers and well-ventilated areas. Store away from incompatible substances listed in Section 10. Do not allow product to freeze. Avoid storage in aluminum or iron containers. Product will readily oxidize. Avoid excessive light. It is recommended that opened containers be padded with nitrogen.

HANDLING PRECAUTIONS:..... Avoid all skin and eye contact. Wash thoroughly after handling. Avoid inhalation of heated and concentrated vapors.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:..... Use with adequate general ventilation and/or local ventilation to keep exposures below established limits.

EYE PROTECTION GUIDELINES:..... Safety glasses with side shields or chemical splash goggles.

SKIN PROTECTION GUIDELINES:..... Wear liquid-proof, chemical resistant gloves (butyl rubber for full contact; nitrile-butyl rubber or neoprene for minor or splash contact).

RESPIRATORY PROTECTION GUIDELINES:..... When ventilation cannot be made adequate enough to keep exposures below established limits, use a NIOSH approved respirator with an organic vapor cartridge, or organic vapor cartridge + P100 particulate filter, depending on specific workplace conditions. Consult with your respirator and cartridge supplier to ensure proper selection of respirator and cartridge based on ingredients listed in Section 3 and specific workplace conditions. Use and select a respirator according the guidelines established in OSHA 1910.134 or other applicable respiratory protection standard.

ADDITIONAL PROTECTIVE MEASURES:..... Practice good caution and personal cleanliness to avoid skin and eye contact. Wash thoroughly after handling. Generally speaking, working cleanly and following basic precautionary measures will greatly minimize the potential for harmful exposure to this product under normal use conditions.

OCCUPATIONAL EXPOSURE LIMITS: Exposure limits may not be established for this product as a whole. For established exposure limits of specific ingredients in this product, or other available exposure limit information, refer to the table below.

| Ingredient Name | CAS# | Exposure Limit Information |
|---------------------------------|------------|----------------------------|
| Benzyl alcohol | 100-51-6 | 10 ppm (AIHA-WEEL) |
| Solvent Blue 36 (non-hazardous) | 14233-37-5 | No data available |

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM: Liquid.
COLOR: Blue.
ODOR: Aromatic.
ODOR THRESHOLD: No data available
pH: No data available
MELTING POINT / FREEZING POINT No data available
BOILING POINT (760mm/Hg): > 400°F (204°C). (Benzyl alcohol)
FLASH POINT: 210°F (93°C). (Benzyl alcohol). Tag Closed Cup
FLAMMABILITY (solids or gasses) No data available
AUTO IGNITION TEMPERATURE 817 °F (436 °C)
LOWER EXPLOSIVE LIMIT (LEL) 1.3% (Benzyl alcohol)
UPPER EXPLOSIVE LIMIT (UEL) 13% (Benzyl alcohol)
VAPOR PRESSURE <1 mm Hg @ 20 °C
SPECIFIC GRAVITY/DENSITY (water = 1) 1.05
BULK DENSITY 8.76 lb./gal. (1.05 kg/L)
VAPOR DENSITY (air = 1) Heavier than air. Estimated based on ingredient data.
EVAPORATION RATE (Butyl Acetate = 1) <0.01 (Benzyl alcohol)
WATER SOLUBILITY (% BY WT.) 40 g/L @ 20°C (Benzyl alcohol)
PARTITION COEFFICIENT, n-OCTANOL/WATER (log Pow) 1.1 (Benzyl alcohol)
KINEMATIC VISCOSITY: 7.65 mm²/s @ 20°C (Benzyl alcohol)
DECOMPOSITION TEMPERATURE: No data available.
% VOLATILE BY WEIGHT: 96-100%

10. STABILITY AND REACTIVITY

STABILITY: Product is stable at normal temperatures and pressures. In the presence of air, benzyl alcohol will slowly oxidize to benzaldehyde.
REACTIVITY/HAZARDOUS REACTIONS: Product will not undergo hazardous polymerization.
INCOMPATIBILITIES: Can react violently in contact with strong oxidizing agents, isocyanates, acetaldehyde, lithium aluminum hydride, aluminum alkyl compounds, strong mineral acids (i.e. sulfuric acid), and hydrogen bromide. Will attack some plastics.
CONDITIONS TO AVOID: Do not freeze. Avoid excessive sunlight. Avoid direct, prolonged exposure to air, moisture and elevated temperatures.
DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide and benzaldehyde may be produced when exposed to air or heated.

11. TOXICOLOGICAL AND HAZARD ENDPOINT INFORMATION

| Component Name | CAS# | LD ₅₀ Oral | LD ₅₀ Dermal | LC ₅₀ Inhalation |
|---------------------------------|------------|-----------------------|-------------------------|-----------------------------|
| Benzyl alcohol | 100-51-6 | 1620 mg/kg | No data | >4.18 mg/l 4 h aerosol |
| Solvent Blue 36 (non-hazardous) | 14233-37-5 | No data | No data | No data |

ACUTE TOXICITY: No specific toxicity data exists for this mixture. Classification is based on acute toxicity estimation methods using ingredient data.
 Oral: Category 4 – Harmful if swallowed. May cause nausea, vomiting and diarrhea.
 Dermal: Not classified. Based on available data does not meet acute dermal toxicity criteria.
 Inhalation: Category 4 – Harmful if inhaled. Inhalation of high vapor concentrations can cause headache, nausea, dizziness and possible eye and respiratory irritation.
SKIN CORROSION / IRRITATION: Not classified. Based on available data does not meet classification criteria.
SERIOUS EYE DAMAGE / IRRITATION: Category 2A. Causes serious eye irritation.

RESPIRATORY SENSITIZATION:..... Not classified. Based on available data does not meet classification criteria.

SKIN SENSITIZATION:..... Not classified. Based on available data does not meet classification criteria. However, some cases of skin sensitization have been reported.

REPRODUCTIVE TOXICITY:..... Not classified. Based on available data does not meet classification criteria. No effects on reproductive organs were observed in sub-chronic and long-term studies with rats and mice. Developmental toxicity oral study, mouse, NOAEL: maternal toxicity=550 mg/kg bw/day; NOAEL: developmental toxicity = 550 mg/kg bw/day. No developmental effects were observed in the absence of maternal toxicity.

MUTAGENICITY:..... Not classified. Based on available data does not meet classification criteria. Ames testing using benzyl alcohol showed no mutagenic activity and mixed results both positive and negative were observed from other in-vitro genotoxicity assays. Benzyl alcohol showed no genotoxicity during in-vivo testing. The weight of evidence shows that benzyl alcohol is mutagenic or clastogenic.

CARCINOGENICITY:..... Not classified. Based on available data does not meet classification criteria. No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA, NTP or IARC. Under conditions of a 2-year NTP gavage study, there was no evidence of carcinogenic activity for rats or mice receiving 200 and 400 mg/kg of benzyl alcohol.

SPECIFIC TARGET ORGAN TOXICITY (Single Exposure):..... Not classified. Does not meet STOT SE criteria.

SPECIFIC TARGET ORGAN TOXICITY (Repeated Exposure): Not classified. Does not meet STOT RE criteria.

Benzyl Alcohol – long-term animal studies indicate a gavage NOAOL >400 mg/kg/day for rats and >200 mg/kg/day for mice. At higher doses, effects on body weights, brain lesions, thymus, skeletal muscle, kidneys, liver and central nervous systems were observed. In a 4-week inhalation study in rats, no adverse effects were observed with a NOAEC of 1072 mg/m³.

ASPIRATION HAZARD: Not classified. Based on available data does not meet classification criteria.

OTHER HEALTH HAZARD INFORMATION:..... None known.

12. ECOLOGICAL INFORMATION

ACUTE AQUATIC TOXICITY:..... No specific test data available for the mixture. Calculated Estimate: Not classified. Based on available data does not meet classification criteria.

CHRONIC AQUATIC TOXICITY: No specific test data available for the mixture. Calculated Estimate: Not classified. Based on available data does not meet classification criteria.

PERSISTANCE AND BIODEGRADABILITY: No specific test data available for the mixture.

MOBILITY IN SOIL: No specific test data available for the mixture.

ADDITIONAL ECOTOXICITY INFORMATION:..... This product may be harmful to aquatic life. Prevent release to the environment, sewers and natural waters.

| Ingredient | CAS# | Ecotoxicity Classification Information |
|---------------------------------|------------|---|
| Benzyl alcohol | 100-51-6 | Not Classified. Fish 96 hr LC50 = 460 mg/L Invertebrates 46 hr EC50 = 230 mg/L Algae 72 hr EC50 770 mg/L Readily biodegradable BCF = 1.37 (calculated); Log Kow = 1.05 Mobility in soil = 15.7 (calculated) |
| Solvent Blue 36 (non-hazardous) | 14233-37-5 | No data available |

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD:..... Evaluation of this product using RCRA criteria shows that it is not a hazardous waste, either by listing or characteristics, in its purchased form. It is the responsibility of the user to determine proper disposal methods.

Incinerate, recycle (fuel blending) or reclaim may be preferred methods when conducted in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

US DOT

U.N./N.A. NUMBER:..... Not regulated.

SHIPPING NAME:..... Not applicable.

TECHNICAL SHIPPING NAME: Not applicable.
 HAZARD CLASS: Not applicable.
 PACKING GROUP: Not applicable.

CANADA TDG

U.N./N.A. NUMBER: Not regulated.
 SHIPPING NAME: Not applicable.
 TECHNICAL SHIPPING NAME: Not applicable.
 HAZARD CLASS: Not applicable.
 PACKING GROUP: Not applicable.

IMDG

U.N. NUMBER: UN3082.
 SHIPPING NAME: Environmentally hazardous substance, liquid, n.o.s.
 TECHNICAL SHIPPING NAME: Epoxy Resin.
 HAZARD CLASS: Class 9.
 PACKING GROUP: PG III.
 EmS Number: F-A, S-F
 MARINE POLLUTANT Yes

ICAO/IATA

U.N. NUMBER: UN3082.
 SHIPPING NAME: Environmentally hazardous substance, liquid, n.o.s.
 TECHNICAL SHIPPING NAME: Epoxy Resin.
 HAZARD CLASS: Class 9.
 PACKING GROUP: PG III.
 MARINE POLLUTANT: Yes

15. REGULATORY INFORMATION

| COUNTRY | INVENTORY LIST | STATUS |
|---------------|------------------|--|
| United States | TSCA | All ingredients are listed or otherwise compliant. |
| Europe | EINECS or ELINCS | All ingredients are listed or otherwise compliant. |
| Canada | CEPA (DSL/NDSL) | All ingredients are listed or otherwise compliant. |
| Australia | AICS | All ingredients are listed or otherwise compliant. |
| Japan | ENCS | All ingredients are listed or otherwise compliant. |
| South Korea | KECI | All ingredients are listed or otherwise compliant. |
| China | IECSC | All ingredients are listed or otherwise compliant. |
| Philippines | PICCS | All ingredients are listed or otherwise compliant. |

US EPA TSCA Requirements: No data available.

Canada WHMIS Confidential Business Information (CBI): No data available.

US EPA SARA TITLE III Reporting and Notification Requirements:

Subject to Section 302 (TPQ) No data available.
 Subject to Section 304 (RQ) No data available.
 Subject to Section 311 or 312 Refer to the health and physical classifications in Section 2.
 Subject to Section 313 No data available.

STATE REGULATORY INFORMATION:

Chemicals listed below may be specifically regulated by individual states. For details on state regulatory requirements you should contact the appropriate state agency.

COMPONENT NAME

/CAS NUMBER

Benzyl alcohol
 100-51-6

STATE CODE

NJ, PA, MA

16. OTHER INFORMATION

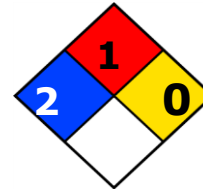
REASON FOR ISSUE: Updates to sections 3, 8, 11 and 15.
 PREPARED BY: Gougeon Brothers, Inc.
 SDS CONTACT: safety@gougeon.com
 TITLE: Health, Safety & Environmental Manager
 APPROVAL DATE: January 15, 2019
 SUPERSEDES DATE: May 11, 2017
 SDS VERSION: 552-P-2019a

OTHER HAZARD INFORMATION AND RATING SYSTEMS:

HMIS® RATING

| | |
|-----------------------------|----------|
| HEALTH: | 2 |
| FLAMMABILITY: | 1 |
| PHYSICAL HAZARD: | 0 |
| PERSONAL PROTECTION: | |

NFPA® 704 CODES



Approximate HMIS and NFPA Risk Ratings Legend:
0 = Low or None; 1 = Slight; 2 = Moderate; 3 = Serious; 4 = Severe

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