

**PRODUCT NAME:** Hybrid Windshield Adhesive ABRO  
**PRODUCT NUMBER/SIZE:** WA-066

**Rev Date:** 08/23/2023

## SECTION 1 Identification of the Substance and of the Company/Undertaking

**MANUFACTURER'S NAME:** ABRO INDUSTRIES, INC.

**ADDRESS:** 3580 Blackthorn Court  
South Bend, IN 46628  
USA

**PRODUCT DESCRIPTION:** Windshield Adhesive

**COMPANY PHONE:** 574-232-8289

**EMERGENCY 24-HR TELEPHONE:** Chemtrec: US/Canada 1-800-424-9300  
International +1-703-527-3887

## SECTION 2 Hazards Identification

**Classification:**

Toxic to reproduction (C.4.10), Cat. 1B

**Label Pictogram(s):**



**Signal Word:** DANGER

**Hazard Phrases:** May damage fertility or the unborn child [effect, route]

**Precautionary Phrases:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection.

**Response:** IF exposed or concerned: Get medical advice/attention.

**Storage / Disposal:** Store locked up. Dispose of contents/container in accordance with local/regional/national regulation.

**Other hazards which do not result in classification:** Product hydrolyses under formation of methanol (CAS no. 67-56-1). Methanol is toxic by inhalation, in contact with skin and if swallowed. Methanol causes damage to organs. Methanol is highly flammable.

## SECTION 3 Composition/Information on Ingredients

### Mixtures

#### Hazardous components

Component	Concentration
<b>Silane, vinyltrimethoxy- (CAS no.: 2768-02-7)</b> CLASSIFICATIONS: No data available. HAZARDS: No data available.	< 5 % (weight)
<b>Fatty acids, C3-24 (CAS no.: 68990-37-4)</b> CLASSIFICATIONS: No data available. HAZARDS: No data available.	< 2 % (weight)
<b>1-Propanamine, 3-(trimethoxysilyl)- (CAS no.: 13822-56-5)</b> CLASSIFICATIONS: No data available. HAZARDS: No data available.	< 2 % (weight)
<b>Methanol (CAS no.: 67-56-1)</b> Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation: vapor), H331 STOT SE 1, H370	< 0.1 % (weight)

## SECTION 4 First Aid Measures

**General advice:** Get medical attention if irritation or other symptoms occur. Before seeking medical attention remove contaminated clothing and shoes. Take a copy of the Safety Data Sheet when going for medical treatment.

**If inhaled:** If inhaled curing by-product, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.

**In case of skin contact:** For skin contact, immediately wipe away excess material. Use a waterless hand cleaner to remove as much of the remaining material as possible. Wash with soap and water.

**In case of eye contact:** If contact with eyes, immediately hold eyelids apart and flush with plenty of water for at least 15 min.

**If swallowed:** For ingestion, if conscious, give several glasses of water but do not induce vomiting. If vomiting does occur, give additional fluids. Get medical attention immediately.

**Most important symptoms/effects, acute and delayed:** Methanol (CAS 67-56-1) is readily and rapidly absorbed at all exposure routes and is toxic by all routes. Methanol may cause irritation of the mucosa, as well as nausea, vomiting, headaches, vertigo and visual disorders, including blindness (irreversible damage to the optic nerve), acidosis, spasms, narcosis and coma. There may be a delay in the onset of these effects after exposure.

## SECTION 5 Fire Fighting Measures

#### Suitable extinguishing media

water-mist, carbon dioxide, dry chemical or alcohol-resistant foam.

#### Specific hazards arising from the chemical

Hazardous decomposition products: carbon dioxide, carbon monoxide, formaldehyde, silicon dioxide, nitrogen oxides and incompletely burnt hydrocarbons. This material will burn with a lazy smoldering flame. Hydrolyzes on contact with moisture releasing ignitable, toxic vapors. Consider possible formation of explosive mixtures with air, for example in uncleaned containers.

**Special protective actions for fire-fighters**

Cool endangered containers with water. Fire fighters should wear full protective clothing including a self-contained breathing apparatus.

**Further information**

Unsuitable extinguishing media: sharp water jet.

**SECTION 6**  
**Accidental Release Measures**

**Personal precautions, protective equipment and emergency procedures**

Secure the area. Wear personal protection equipment (see section 8). Keep unprotected persons away. Avoid contact with eyes and skin. Do not inhale gases/vapors/aerosols. If material is released indicate risk of slipping. Do not walk through spilled material.

**Environmental precautions**

Prevent material from entering surface waters, drains or sewers and soil. Close leak if possible without risk. Retain contaminated water/extinguishing water. Dispose of in prescribed marked containers. Inform authorities if substance leaks into surface waters, sewerage or ground. Spills of material which could reach surface waters must be reported to the United States Coast Guard National Response Center's toll free phone number (800) 424-8802.

**Methods and materials for containment and cleaning up**

Scoop up large quantities after dusting surfaces with sand or Fuller's earth to prevent sticking. Sweep or scrape up the spilled material and place in an appropriate chemical waste container. Clean any slippery coating that remains using a detergent / soap solution or another biodegradable cleaner. Apply sand or other inert granular material to improve traction.

**Reference to other sections**

Exhaust vapors. Eliminate all sources of ignition. Consider explosion protection. Observe notes under section 7.

**SECTION 7**  
**Handling and Storage**

**Precautions for safe handling**

Ensure adequate ventilation. Keep away from incompatible substances in accordance with section 10. Precautions against fire and explosion: Product can separate methanol. Flammable vapors may accumulate and form explosive mixtures with air in containers, process vessels, including partial, empty and uncleaned containers and vessels, or other enclosed spaces. Keep away from sources of ignition and do not smoke. Take precautionary measures against electrostatic charging.

**Conditions for safe storage, including any incompatibilities**

Observe local/state/federal regulations. Store in a dry and cool place. Protect against moisture. Store container in a well-ventilated place.

**SECTION 8**  
**Exposure Controls/Personal Protection**

**Control parameters**

**CAS: 98-82-8**

Methanol ACGIH: 200 ppm inhalation; OSHA: 260 mg/m<sup>3</sup> inhalation

**Appropriate engineering controls**

Use only with adequate ventilation. Local exhaust: In case of potential decomposition products: Local exhaust ventilation which meets the requirements of ANSI Z9.2 is recommended to control airborne contaminants at the point of use. (to maintain concentration below TLV) .

**Individual protection measures, such as personal protective equipment (PPE)****Eye/face protection**

Safety glasses with side shields or chemical safety goggles.

**Skin protection**

Hand protection: Any liquid-tight rubber or vinyl gloves.

**Body protection**

General hygiene and protection measures: Avoid contact with eyes, skin and clothing. Avoid breathing dust/vapor/mist/gas/aerosol. Do not eat, drink or smoke when handling. Follow standard industrial hygiene practices when using this material. Wash thoroughly after handling. Additional protective clothing or equipment is not normally required. Provide eye bath and safety shower.

**Respiratory protection**

Respiratory protection is not normally required. A NIOSH approved air purifying respirator equipped with universal multi-contaminant, multi-gas/vapor cartridges and at least P-99 solid/aerosol particulate filters is recommended if overexposure to dusts, mists, or vapors could occur.

**SECTION 9**  
**Physical and Chemical Properties**

<b>Physical State:</b>	Paste
<b>Odor:</b>	Mild odor
<b>Odor Threshold:</b>	N/A
<b>pH:</b>	N/A
<b>Melting point/Freezing point:</b>	N/A
<b>Initial boiling point and range:</b>	N/A
<b>Flash point:</b>	> 200 °C
<b>Evaporation rate:</b>	N/A
<b>Flammability (solid, gas):</b>	N/A
<b>Upper/lower flammability limits:</b>	N/A
<b>Vapor pressure:</b>	N/A
<b>Vapor density:</b>	N/A
<b>Relative density:</b>	1.4 g/cm <sup>3</sup> @ 23C
<b>Solubility(ies):</b>	N/A
<b>Partition coefficient: n-octanol/water:</b>	N/A
<b>Auto-ignition temperature:</b>	N/A
<b>Decomposition temperature:</b>	N/A
<b>Viscosity:</b>	N/A
<b>Explosive properties:</b>	Explosion limits for released methanol: 5.5 – 44%(V)
<b>Oxidizing properties:</b>	N/A

**SECTION 10**  
**Stability and Reactivity****Reactivity**

If stored and handled in accordance with standard industrial practices no hazardous reactions are known.

**Chemical stability**

Reacts with: water. Reaction causes the formation of: methanol.

**Possibility of hazardous reactions**

Hazardous polymerization cannot occur.

**Conditions to avoid**

Moisture

**Hazardous decomposition products**

Under the effect of humidity, water and protic agents: methanol.

**SECTION 11  
Toxicological Information**

**Information on toxicological effects**

**Acute toxicity**

Route of exposure	Result/Effect	Species/Test system	Source
oral	LD50: > 2000 mg/kg	rat	Conclusion by analogy
dermal	LD50: > 2000 mg/kg	rat	Conclusion by analogy

**Skin corrosion/irritation**

Based on the available data a clinically relevant skin irritation hazard is not expected. Temporary symptoms of an irritation cannot be excluded if the adhesive product is removed mechanically after contact. Product details:

Result/Effect	Species/Test system	Source
not irritating	rabbit	Conclusion by analogy

**Serious eye damage/irritation**

Based on the available data a clinically relevant eye irritation hazard is not expected. Temporary symptoms of an irritation cannot be excluded if the adhesive product is removed mechanically after contact. Product details:

Result/Effect	Species/Test system	Source
not irritating	rabbit	Conclusion by analogy

**Respiratory or skin sensitization**

Product details:

Route of exposure	Result/Effect	Species/Test system	Source
Dermal	not sensitizing	guinea-pig; Bühler	Conclusion by analogy

**Germ cell mutagenicity**

For this endpoint no toxicological test data is available for the whole product.

**Carcinogenicity**

For this endpoint no toxicological test data is available for the whole product.

**Reproductive toxicity**

For this endpoint no toxicological test data is available for the whole product.

Summary of evaluation of the CMR properties

For this endpoint no toxicological test data is available for the whole product.

STOT-single exposure

For this endpoint no toxicological test data is available for the whole product.

STOT-repeated exposure

For this endpoint no toxicological test data is available for the whole product.

Aspiration hazard

Based on the physical-chemical properties of the product no aspiration hazard must be expected.

Additional information 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. Quartz has been classified by IARC as carcinogen group 1 ("carcinogenic to humans") and by NTP as known to be a human carcinogen. Titanium dioxide has been classified by IARC as carcinogen group 2B ("possibly carcinogenic to humans"). Data related to ingredients: Product of hydrolysis (Methanol): Methanol (CAS 67-56-1) is readily and rapidly absorbed at all exposure routes and is toxic by all routes. Methanol may cause irritation of the mucosa, as well as nausea, vomiting, headaches, vertigo and visual disorders, including blindness (irreversible damage to the optic nerve), acidosis, spasms, narcosis and coma. There may be a delay in the onset of these effects after exposure.

**SECTION 12**  
**Ecological Information**

**Toxicity**

Assessment: No expected damaging effects to aquatic organisms. According to current knowledge adverse effects on water purification plants are not expected.

Product details:

Result/Effect	Species/Test system	Source
LC50: > 100 mg/l The assessment is made under consideration of relevant data on ingredients	static (water-accommodated fraction) Fish (96 h)	expert opinion
EC50: > 100 mg/l The assessment is made under consideration of relevant data on ingredients.	static (water-accommodated fraction) Daphnia magna (48 h)	expert opinion
IC50 (growth rate): > 100 mg/l The assessment is made under consideration of relevant data on ingredients.	algae (72 h)	expert opinion
NOEC: > 1 mg/l The assessment is made under consideration of relevant data on ingredients.	Daphnia magna (21 d)	expert opinion

**Persistence and degradability**

Product of hydrolysis (Methanol): The product of hydrolysis (methanol) is readily biodegradable.

**Bioaccumulative potential**

No data known.

**Mobility in soil**

No data known.

**Results of PBT and vPvB assessment**

No data known.

**Other adverse effects**

None known

**SECTION 13**  
**Disposal Considerations**

**Disposal of the product**

Recommendation: Material that cannot be used, reprocessed or recycled should be disposed of in accordance with Federal, State, and local regulations at an approved facility. Depending on the regulations, waste treatment methods may include, e.g., landfill or incineration.

**Disposal of contaminated packaging**

Recommendation: Completely discharge containers (no tear drops, no powder rest, scraped carefully). Containers may be recycled or re-used. Observe local/state/federal regulations. Uncleaned packaging should be treated with the same precautions as the material.

**SECTION 14**  
**Transport Information**

**DOT (US)**

UN Number: Not Regulated for Transport  
Class:  
Packing Group:  
Proper Shipping Name:

**IMDG**

UN Number: Not Regulated for Transport  
Class:  
Packing Group:  
EMS Number:  
Proper Shipping Name:

**IATA**

UN Number: Not Regulated for Transport  
Class:  
Packing Group:  
Proper Shipping Name:

## SECTION 15 Regulatory Information

Safety, health and environmental regulations specific for the product in question

California Prop. 65 Components

Chemical name: Quartz

CAS number: 14808-60-7

Chemical name: Methanol

CAS number: 67-56-1

Massachusetts Right To Know Components

Chemical name: Quartz

CAS number: 14808-60-7

Chemical name: Methanol

CAS number: 67-56-1

New Jersey Right To Know Components

Chemical name: Quartz

CAS number: 14808-60-7

Chemical name: Methanol

CAS number: 67-56-1

Pennsylvania Right To Know Components

Chemical name: Quartz

CAS number: 14808-60-7

Chemical name: Methanol

CAS number: 67-56-1

## SECTION 16 Other Information

The supplier disclaims all expressed or implied warranties of merchantability or fitness for a specific use, with respect to the product or the information provided herein, except for conformation to contracted specifications. All information appearing herein is based upon data obtained from manufacturers and/or recognized technical sources. While the information is believed to be accurate, we make no representations as to its accuracy or sufficiency. Conditions of use are beyond our control, and therefore users are responsible for verifying the data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product. Users also assume all risks in regards to the publication or use of, or reliance upon, information contained herein.

This information relates only to the product designated herein, and does not relate to its use in combination with any other material or process.

**ABBREVIATIONS:**

NG="NOT GIVEN"

<="LESS THAN"

ND = Not Determined

BT="BETWEEN"

>="GREATER THAN"

NA = Not Applicable