A-300WH PVC Adhesive White

1. PRODUCT AND COMPANY INFORMATION

Trade name	PVC Adhesive White
Product codes	ZGA-300WH, A300WH
Chemical family	Pigmented resin solution
Intended use	Adhesive for welding of PVC
Company	Colorado Paint (a Swarco Company) 4747 Holly Street Denver, CO 80216; U. S. A.
Telephone	+1 303-388-9265
Web site	www.swarco.com/americas
Emergency (Chemtrec; 24 h)	1-800-424-9300 (U. S. A. and Canada)

2. HAZARD IDENTIFICATION

Emergency Overview

OSHA Hazards

Flammable Liquid, Target Organ Effect, Irritant.

Target Organs

Central nervous system, Liver, Kidney.

GHS Classification

Flammable liquids (Category 2)
Acute toxicity, Oral (Category 4)
Acute toxicity, Inhalation (Category 5)
Skin irritation (Category 2)
Eye irritation (Category 2A)
Specific target organ toxicity - single exposure (Category 3)

GHS Label elements, including precautionary statements

Pictograms:

Signal word: Danger

Hazard statements

H225 Highly flammable liquid and vapour.
H302 + H333 Harmful if swallowed or if inhaled.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 + H336 May cause respiratory irritation, dizziness, and drowsiness.

Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
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.
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

HMIS and NFPA Classification:

	HMIS	NFPA Hazard
Health	2	2
Chronic health hazard	*	--
Flammability	3	3
Reactivity / Physical hazard	--	0
Physical hazard	3	--

Potential Health Effects

Inhalation: May be harmful if inhaled. Causes respiratory tract irritation. Vapours may cause drowsiness and dizziness.
Skin: May be harmful if absorbed through skin. Causes skin irritation.
Eyes: Causes eye irritation.
Ingestion: May be harmful if swallowed.

3. COMPOSITION

Name	Synonym	CAS	EINECS	Index	Concentration
Tetrahydrofuran	THF, Oxolane	109-99-9	203-726-8	603-025-00-0	50-70%
Poly(vinyl chloride) resin	Modified PVC polymer	Proprietary mixture	n/a	n/a	20-35%
Methyl Ethyl Ketone	Butanone-2	78-93-3	201-159-0	606-021-00-7	10-20%
Titanium Dioxide	Titanium (IV) oxide	13466-67-7	236-675-5	n/a	2-3%

4. FIRST AID MEASURES

General advice

Consult a physician. Show this Material Safety Data Sheet to the attending doctor.

If inhaled

Move person to fresh air. If not breathing, give artificial respiration. Obtain proper medical attention.

If on skin

Wash off with soap and water. Consult a physician if needed.

In case of an eye contact

Rinse thoroughly with plenty of water for at least 15 minutes. Seek medical attention.

If swallowed

Do not induce vomiting. Rinse mouth with water. Seek immediate medical attention.

Most important symptoms and effects, both acute and delayed

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media

For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide.
For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

Special protective equipment for fire fighters

Wear self-contained breathing apparatus for fire fighting if necessary.

Hazardous combustion products

Hazardous decomposition products formed under fire conditions: Carbon oxides, nitrogen oxides (NO_x), chlorinated compounds.

Further information

Use water spray to cool unopened containers.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protective equipment. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate unnecessary personnel to safe areas. Beware of vapors accumulating to form explosive concentrations.

Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up
Contain spillage, and then collect with electrically protected equipment and place in container for disposal according to local regulations. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition – NO SMOKING. Take measures to prevent the build up of electrostatic charge.

Conditions for safe storage
Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature is 10-25 °C.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Occupational exposure limits

Name	CAS	OSHA TLV(1)	ACGIH TLV(2)	NIOSH PEL(3)	OSHA STEL(4)	EU(5)
Methyl ethyl ketone	78-93-3	590	590	590	885	600
	Upper Respiratory Tract irritation. Central Nervous System and Peripheral Nervous System impairment. Substance for which there is a Biological Exposure Index.					
Poly(Vinyl chloride) resin	Proprietary mixture	n/a	n/a	n/a	n/a	n/a
	No occupational exposure limits have been established. Per manufacturer, the resin is 'not hazardous and toxic chemical'.					
Tetrahydrofuran	109-99-9	590	147	735	735	150
	Can be absorbed through skin. There are concerns that dermal absorption will lead to systemic toxicity. Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhoea. Central Nervous System impairment. Upper Respiratory Tract irritation. Kidney damage. Confirmed animal carcinogen with unknown relevance to humans. The agent is carcinogenic in experimental animals at a relatively high dose, by route(s) of administration, at site(s), of histological type(s), or by mechanism(s) that may not be relevant to worker exposure. Available epidemiologic studies do not confirm an increased risk of cancer in exposed humans. Available evidence does not suggest that the agent is likely to cause cancer in humans except under uncommon or unlikely routes or levels of exposure.					
Titanium dioxide	13463-67-7	15	10	Fine particles: 2.4 Ultrafine particles: 0.3	n/a	4
	The established limits are for respirable dust (total dust maximum is 15 mg/m^3) only and are meaningless for the paint product as delivered, but apply while sanding or abrading of dried coating. Lower Respiratory Tract irritation. Slight lung fibrosis (carcinogenic in rats). Health Effect: Nuisance particulate, accumulation in lungs. Not classifiable as a human carcinogen. No increase in risk for lung cancer (or any other specific cause of death) among titanium dioxide manufacturing workers.					

(1) Occupational Safety and Health Administration (OSHA); Threshold Limit Value (8-hour time-weighted average) pursuant to (a) for general industry: 29 CFR 1910.1000 Table Z-1, (b) for construction industry: 29 CFR 1926.55 Appendix A, and (c) for maritime industry: 29 CFR 1915.1000 Table Z. (2) American Conference of Governmental Industrial Hygienists; Threshold Limit Value. (3) National Institute for Occupational Safety and Health; Recommended Exposure Limit. (4) OSHA Short Term Exposure Limit (STEL). (5) European Union exposure limit per Directive 98/24/EC, as amended or UK EH40 Occupational Exposure Limit.

Ventilation
Use only where adequate ventilation can be maintained. Use explosion-proof exhaust fans when the product is used in enclosed areas.

Personal protective equipment

Respiratory protection
A full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges are recommended as a backup to engineering controls.

Hand protection
Handle with gloves. Dispose of contaminated gloves after use in accordance with applicable laws and good work hygiene practices. The selected protective gloves have to satisfy the specifications of the standard EN 374.

Eye protection
Safety glasses with side shields are required. Face shield are recommended. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection
Wear impervious, flame retardant antistatic protective clothing.

Hygiene measures
Handle in accordance with good industrial hygiene and safety practice. Wash your hands thoroughly. Never intentionally inhale the contents. Use only for the intended purpose.

9. PHYSICAL PROPERTIES

Appearance

Physical state	Liquid
Color	White
Odor	Strong, irritating, characteristic of tetrahydrofuran

Safety data

Boiling point	>60 °C (solvent data)
Freezing point	Not available
Flash point	>–13 °C (solvent data)
Upper explosion limit	3 vol% (solvent data)
Lower explosion limit	16 vol% (solvent data)
Solubility in water	Solvents are soluble
Vapor pressure	213.3 hPa at 25 °C (solvent data)
Density	0.8-1.1 $g \cdot cm^{-3}$ at 25 ºC
Viscosity	70-95 KU (Stormer, at 25 °C)
pH	Not applicable

10. STABILITY AND REACTIVITY DATA

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
Vapours may form explosive mixture with air.

Conditions to avoid
Heat, flames, and sparks. Extremes of temperature and direct sunlight.

Materials to avoid
Bases, strong acids, oxidizing agents, reducing agents, phosphorous oxychloride.

Hazardous decomposition products
Hazardous decomposition products formed under fire conditions: Carbon oxides, nitrogen oxides (NO_x).

11. TOXICOLOGICAL DATA

Acute toxicity

Name	NIOSH IDLH (mg/m^3)	Oral LD_{50} (mg/kg) rat	Inhalation LC_{50} (rat)	Dermal LD_{50} (mg/kg) rabbit
Methyl ethyl ketone	5900	2737	32000 (mouse) 38000 (mammal)	6480 (rabbit)
Poly(vinyl chloride) resin	n/a	n/a	n/a	n/a
Tetrahydrofuran	5877	1650 (rat) 2300 (guinea pig)	61000 (3h) Drowsiness. Lungs Thorax or Respiration	>2000 (rat)
Titanium dioxide	5,000	>10,000	n/a	>10,000

Prolonged Exposure

Name	Skin corrosion / irritation	Serious eye damage / irritation	Respiratory or skin sensitization
Methyl ethyl ketone	Rabbit – skin irritation (24h)	No data available	No data available
Poly(vinyl chloride) resin	No data available	No data available	No data available
Tetrahydrofuran	Rabbit – mild skin irritation (Draize test)	Rabbit – risk of serious damage to eyes (Draize test)	Mouse – did not cause sensitization on laboratory animals
Titanium dioxide	Human: Mild skin irritation (3h)	Rabbit: No eye irritation	Will not occur

Germ cell mutagenicity

Tetrahydrofuran	In vivo tests did not show mutagenic effects
Titanium dioxide	Genotoxicity in vitro – hamster – ovary: Micronucleus test. Genotoxicity in vitro – hamster – lungs: DNA inhibition. Genotoxicity in vitro – hamster – ovary: Sister Chromatoid exchange. Genotoxicity in vivo – mouse – intraperitoneal: Micronucleus test.
All other ingredients	No data available

Carcinogenicity

Methyl ethyl ketone	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.
Poly(vinyl chloride) resin	Mouse – Implant: Tumorigenic. Equivocal tumorigenic agent by RTECS criteria. Tumors at site or application. This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.
Tetrahydrofuran	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
Titanium dioxide	Rat – inhalation: Tumorigenic: Carcinogenic by RTECS criteria. Lungs, Thorax, or Respiration: Tumors. Rat – intramuscular: Tumorigenic: Neoplastic by RTECS criteria. Blood: Lymphomas including Hodgkin's disease. Tumors at site or application. IARC: 2B - Group 2B: Possibly carcinogenic to humans (Titanium dioxide).

Reproductive toxicity

Tetrahydrofuran	No toxicity to reproduction.
All other ingredients	No data available.

Teratogenicity

No data available

Specific target organ toxicity - single exposure (Globally Harmonized System)

Methyl ethyl ketone	May cause drowsiness or dizziness.
Tetrahydrofuran	Inhalation - May cause respiratory irritation. May cause drowsiness or dizziness. Nervous system
All other ingredients	No data available.

Specific target organ toxicity - repeated exposure (Globally Harmonized System)

No data available.

Aspiration hazard

No data available

Potential health effects

Inhalation: May be harmful if inhaled. Causes respiratory tract irritation. Vapours may cause drowsiness and dizziness.
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

To the best of our knowledge, the chemical, physical, and toxicological properties of this product (a mixture) have not been thoroughly investigated.
The following symptoms have been reported for overexposure to the ingredients: Central Nervous System depression, Cough, chest pain, difficulty in breathing, Gastrointestinal disturbance, narcosis.

Synergistic effects

No data available.

12. ECOLOGICAL DATA

Toxicity

Name	Fish LC_{50} (mg/dm^3/96 h)	Daphnia and other marine invertebrates EC_{50} (mg/dm^3/48 h)	Bacteria LC_{50} (mg/dm^3)
Methyl ethyl ketone	Mortality NOEC: 400 Cyprinodon variegatus (sheepshead minnow) 3,130 Pimephales promelas	LC50 >520 (mg/dm^3/48 h) EC50 7,060 (mg/dm^3/24 h)	n/a
Poly(vinyl chloride) resin	No data available	No data available	No data available
Tetrahydrofuran	2,160 Pimephales promelas (fathead minnow)	n/a	Growth inhibition NOEC: 3,700 mg/dm^3 (Algae)
Titanium dioxide	>1,000 (other fish)	1,000	No data available.

Persistence and degradability

Tetrahydrofuran	Expected to be biodegradable
All other ingredients	No data available.

Bioaccumulative potential

No data available.

Mobility in soil

No data available.

PBT and vPvB assessment

No data available.

Other adverse effects

Data for the entire preparation (a mixture) is not available.

13. DISPOSAL CONSIDERATIONS

Unused or spoiled product

The user must determine if it meets applicable definitions of a hazardous waste per 40 CFR 261 and other regulations. Dispose according to the environmental laws. Contact a licensed professional waste disposal service to arrange for appropriate removal. Burn the material in a chemical incinerator equipped with an afterburner and scrubber.

Container

Empty packaging may contain product residue and should not be reused. Dispose as of unused product.

14. TRANSPORTATION INFORMATION

Information provided for guidance purpose only and not meant to be inclusive. Packaging suitability and compliance with regulations must be reviewed prior to shipment.

Quantities smaller than 2.0 litres may be shipped as CONSUMER COMMODITY (per 49 CFR 171.8). Bulk quantities are regulated as follows:

DOT (U. S. A.); IMDG; IATA
UN1133; Class 2; Packing Group II

Proper shipping name
Adhesive, containing a flammable liquid.

Other information
Not considered marine pollutant or poison inhalation hazard.

DOT reportable ingredients:

Proper Shipping Name	Amount	Reportable quantity
Methyl ethyl ketone	10-20%	2,267 kg (5,000 lb)
Tetrahydrofuran	40-55%	454 kg (1,000lb)

15. REGULATORY INFORMATION

OSHA Hazards
Flammable Liquid, Target Organ Effect, Harmful by ingestion, Irritant, Carcinogen.

TSCA and DSL
Listed or exempt

SARA 302
To the best of our knowledge, no chemicals in this product are subject to the reporting requirements of SARA Title III, Section 302 (40 CFR 355.30)

SARA 311/312 Hazards
Fire Hazard, Acute Health Hazard, Chronic Health Hazard.

SARA 313
To the best of our knowledge, no chemicals in this product are subject to the reporting requirements of SARA Title III, Section 313

California Proposition 65
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Volatile Organic Compounds
Below 700 g/l

16. ADDITIONAL INFORMATION

This safety data sheet complies with 29 CFR 1910.1200 and with EC 1907/2006, as amended. Paper copies of this publication may be made by the users for internal purposes only.
Last modified: Dec 1, 2014.

Disclaimer
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