SAFETY DATA SHEET

Section 1 - Chemical Product and Company Information

Akron Paint and Varnish
(dba APV Engineered Coatings)
1390 Firestone Parkway
Akron, Ohio 44301 USA

www.apvcoatings.com
Information Telephone: (800) 772-3452
Facsimile: (330) 773-1028
Emergency Telephone: (330) 773-8911
CHEMTREC: (703) 527-3887

NSN: 8010-00-141-7838

Product Code: G-5132-01
Product Name: 34088 OLIVE DRAB WW II
Product Use: Paint
Not recommended for: Contact with food

Section 2 - Hazards Identification

GHS Ratings

Flammable liquid	2	Flash point < 23°C and initial boiling point > 35°C (95°F)
Skin corrosive	2	Reversible adverse effects in dermal tissue, Draize score: >= 2.3 < 4.0 or persistent inflammation
Aspiration hazard	1	Aspiration Toxicity Category 1: Known (regarded)- human evidence - hydrocarbons with kinematic viscosity ? 20.5 mm2/s at 40° C.
Aquatic toxicity	C2	Acute toxicity > 1.00 but <= 10.0 mg/l and lack of rapid degradability and log Kow >= 4 unless BCF < 500 and unless chronic toxicity > 1 mg/l

GHS Hazards

H225	Highly flammable liquid and vapour
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H411	Toxic to aquatic life with long lasting effects.

GHS Precautions

P210	Keep away from heat/sparks/open flames/hot surfaces ? No smoking
P233	Keep container tightly closed
P240	Ground/bond container and receiving equipment
P241	Use explosion-proof electrical/ventilating/light/manufacturer/equipment
P242	Use only non-sparking tools
P243	Take precautionary measures against static discharge
P264	Wash contact area thoroughly after handling.
P273	Avoid release to the environment
P280	Wear protective gloves/protective clothing/eye protection/face protection
P321	Specific treatment (see supplemental first aid instruction on this label)
P331	Do NOT induce vomiting
P362	Take off contaminated clothing and wash before reuse
P391	Collect spillage
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P302+P352	IF ON SKIN: Wash with soap and water
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P332+P313	If skin irritation occurs: Get medical advice/attention
P370+P378	In case of fire: Use … for extinction
P405	Store locked up
P403+P235	Store in a well ventilated place. Keep cool

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

Signal Word: Danger

Acute Toxicity

N/A

Conditions Aggravated

N/A

Chronic Effects

N/A

Section 3 - Composition / Information on Ingredients

Chemical Name	CAS number	Weight Concentration %
Crystalline Silica	14808-60-7	40.00% - 50.00%
Naphtha, petroleum, hydrotreated light	64742-49-0	10.00% - 20.00%
Halloysite nanoclay	1332-58-7	5.00% - 10.00%
Titanium (IV) dioxide	13463-67-7	0.10% - 1.00%
Carbon Black	1333-86-4	0.10% - 1.00%

Section 4 - First Aid Measures

INHALATION - Move affected person to fresh air, rest in a half upright position, and loosen clothing . If breathing is difficult, administer oxygen. If breathing has stopped, give artificial respiration. Seek medical advice after significant exposure.

EYE CONTACT - Flush with large amounts of water for at least 15 minutes. Lift eyelids occasionally. Get prompt medical attention.

SKIN - Wash thoroughly with soap and water immediately. Remove all contaminated clothing immediately. Seek medical advice if irritation persists.

INGESTION - Seek medical advice. The decision to induce vomiting or not must be made by a physician after careful consideration of all matterials ingested. Risk of aspiration into lungs.

Section 5 - Fire Fighting Measures

Suitable Extinguishing Media

Carbon Dioxide---Dry Chemical---Foam---Water Fog
Use water for cooling material stored in vicinity of fire.

Explosion Hazards

Vapors are heavier than air and may travel along the ground to an ignition source some distance from material handling point. Ignition sources include pilot lights, smoking, heaters, electric motors, sparks from electrical switches and static discharges.

CAUTION: Never use cutting torch on empty containers! Residual solvent vapor in empty container may explode. Application to hot surfaces requires special precautions. During emergency conditions, overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain Medical Attention.

Hazardous Combustion Products

N/A

Recommended Fire Equipment

Use self-contained breathing apparatus with a full-face piece operated in a pressure-demand or other positive pressure mode. Wear protective clothing.

Section 6 - Accidental Release Measures

In Case of Spill

Evacuate non-emergency personnel, Isolate the area and prevent access. Remove ignition sources. Notify management. Put on protective equipment. Control source of the leak. Ventilate. Contain the spill to prevent spread to drains, sewers, water supplies, or soil. Contact APV (**330-773-8911)** for assistance and advice.

Cover spill area with a suitable absorbent material (Kitty Litter, Oil-Dri, etc.). Saturate absorbent material with neutralization solution and mix. Wait 15 minutes. Collect material in open-head metal containers. Repeat applications of decontamination solution with scrubbing, followed by absorbent until the surface is decontaminated. Check for residual surface contamination. Swipe test kits have been used for this purpose. Apply lid loosely and allow containers to vent for 72 hours to let carbon dioxide diffuse.

To minimize vapor, cover the spillage with fire fighting foam (AFFF). Released material may be pumped into closed, but not sealing, metal containers for disposal. Process can generate heat.

Neutralization solutions

(1) Colorimetric Laboratories Inc. (CLI) decontamination solution.
(2) A mixture of 75% water, 20% non-ionic surfactant (e.g. Plurafac SL-62, Tergitol TMN-10) and 5% n-propanol.
(3) A mixture of 80% water, 20% non-ionic surfactant (e.g. Plurafac SL-62, Tergitol TMN-10).
(4) A mixture of 90% water 3-8% ammonium hydroxide or concentrated ammonia and 2% liquid detergent.

APV requires that CHEMTREC be immediately notified (**800-424-9300**) when this product is unintentionally released from its container during its course of distribution, regardless of the amount released. Distribution includes transportation, storage incidental to transportation, loading and unloading. Such notification must be immediate and made by the person have knowledge of the release.

Section 7 - Handling and Storage

Precautions for Safe Handling

Keep away from food, drink and heat. Keep away from sources of ignition. No smoking. Do not breathe vapor. Avoid contact with skin and eyes. Never use pressure to empty. Take precautionary measures against static discharges.

Storage temperature-

Minimum:	do not freeze
Maximum:	40°C (104°F)

Storage Period- See technical data sheet.

Section 8 - Exposure Controls / Personal Protection

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Crystalline Silica 14808-60-7	10 mg/m PEL (dust)	0.025 mg/m3 TWA (respirable fraction)	NIOSH: 0.05 mg/m3 TWA (respirable dust)
Naphtha, petroleum, hydrotreated light 64742-49-0	N/A	TWA: 1500 mg/m3	N/A
Halloysite nanoclay 1332-58-7	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)	2 mg/m3 TWA (particulate matter containing no asbestos and <1% crystalline silica, respirable fraction)	NIOSH: 10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust)
Titanium (IV) dioxide 13463-67-7	15 mg/m3 TWA (total dust)	10 mg/m3 TWA	N/A
Carbon Black 1333-86-4	3.5 mg/m3 TWA	3 mg/m3 TWA (inhalable fraction)	NIOSH: 3.5 mg/m3 TWA; 0.1 mg/m3 TWA (Carbon black in presence of Polycyclic aromatic hydrocarbons, as PAH)

Provide sufficient ventilation in volume and pattern to keep air containment concentration below current applicable OSHA permissible exposure limit or ACGIH TLV limit, and volatiles below lower explosive limit. Heavy solvent vapors should be removed from the lower levels of area, and all ignition sources (non-explosion proof equipment) should be eliminated if flammable mixtures will be encountered. Remove decomposition products formed during welding or flame cutting of surfaces coated with this product. For baking finishes - vent vapors emitted on heating.

Respiratory Protection- Operator is to use an approved half mask organic vapor respirator unless air monitoring demonstrates exposure levels and or WEEL to be below control limits. An air supplied, positive pressure respirator may be required if working conditions to not provide adequate ventilation to keep exposures below permissible limits.

Skin and Body Protection- Wear chemical resistant gloves (nitrile) and paint suits. The most suitable glove must be chosen in consultation with the gloves supplier who can inform about the breakthrough time of the glove material.

Eye Protection- Wear approved chemical safety goggles where exposure to vapor or contact with eyes is possible. Eye wash stations should also be made available.

Section 9 - Physical and Chemical Properties

Information on basic physical and chemical properties:

pH: N/a	**% Weight Solids** 71.19
% Volume Solids 48.59	**VOC Wt/Gal (wet)** 3.26
U.S. VOC Wt/Gal (wet) 3.26	**Specific Gravity (SG)** 1.352
Odor: Aromatic	**Odor Threshold:** Not determined
Color: Green	**Boiling Point:** 90°C
Flash Point: 50 F,10 C	**LEL/UEL:** 1% - 7%
Autoignition Temperature: 232°C	**Evaporation Rate (nBuAc=1):** Not determined
Vapor Pressure: 2.2 kPa	**Vapor Density:** 4.0
Freezing Point: Not determined	**Partition coefficient:** Not determined

Viscosity: Not determined	

Section 10 - Stability and Reactivity

Stability and reactivity profile

This material is considered stable

Hazardous polymerization will not occur.

The following materials should be avoided in contact with the mixture

Oxidizing agents

Strong acids

Hazardous decomposition products

Titanium/titanium oxides

Carbon oxides

Section 11 - Toxicological Information

Mixture Toxicity

Component Toxicity

64742-49-0 Naphtha, petroleum, hydrotreated light

Oral LD50: 2,000 mg/kg (Rat) Dermal LD50: 2,000 mg/kg (Rabbit)

LC_{50} and LD_{50} toxicity for this product are merely estimates and have yet to be determined. For individual component ecotoxicity, please refer to Section 11.

Possible Routes of Entry

Inhalation Skin Contact Eye Contact Ingestion

Potential Target Organs

Eyes Lungs Central Nervous System Respiratory System

Effects of Overexposure

Not Available

The following components are possible carcinogens

*Materials labeled a carcinogen in dust form are supplied in solution, thus eliminating the hazard

CAS Number	Description	% Weight	Carcinogen Rating
1333-86-4	Carbon Black	0.1 to 1.0%	Carbon Black: (*dust) NIOSH: potential occupational carcinogen IARC: Possible human carcinogen OSHA: listed
14808-60-7	Crystalline Silica	40 to 50%	Crystalline Silica: (*dust) NIOSH: potential occupational carcinogen IARC: Human carcinogen OSHA: listed
13463-67-7	Titanium (IV) dioxide	0.1 to 1.0%	Titanium (IV) dioxide: (*dust) NIOSH: potential occupational carcinogen IARC: Possible human carcinogen OSHA: listed

Section 12 - Ecological Information

Mixture Ecotoxicity

Toxicity- Do not release into environment. May cause long term adverse effects.
Persistence and degradability- N/A
Bioaccumulative potential- N/A
Mobility in Soil- N/A

Component Ecotoxicity

Naphtha, petroleum, hydrotreated light	96 Hr LC50 Chaetogammarus marinus: 2.6 mg/L
Carbon Black	24 Hr EC50 Daphnia magna: >5600 mg/L 96 Hr LC50 Brachydanio rerio > 1000 mg/L 72 Hr EC50 Algae > 10000 mg/L 3 Hr EC0 Activated sludge > 800 mg/L

Section 13 - Disposal Considerations

Dispose of in accordance with federal, state and local regulations. Controlled incineration is recommended for disposal of unused product. Prevent contamination of soil, drains and surface waters. Dispose of large containers to a licensed reconditioner. Dispose of small containers in compliance with local regulations.

Section 14 - Transport Information

Agency	Proper Shipping Name	UN Number	Packing Group	Hazard Class
DOT	PAINT	UN1263	II	3
IATA	PAINT Pkg Instr: Y341/353/364	UN1263	II	3
IMDG	PAINT EmS: F-E, S-E	UN1263	II	3

Section 15 - Regulatory Information

The following chemicals are listed in Californa Title 8 CCR Sections as Hazardous Substances
1333-86-4 Carbon Black

The following chemicals are listed in Section 64 of the Canadian Environmental Protection Act, 1999 (CEPA)
- None

The following chemicals are classified by China - Environmental Quality Standards for Surface Water
- None

The following biocides have been listed as exempt by the European Union and are acceptable for regional use:
- None

The following chemicals have been listed by the EU-End of Life Vehicles (2000/53/EC) (ELV):
- None

The following chemicals are listed in the EU-Substances of Very High Concern (2008/67/ED) (SVHC):
- None

The following chemcials are listed in the EU-Restriction of the use of certain Hazardous Substances (2011/65/EU) (RoHS):
- None

The following chemicals are listed under the European Union- Waste Electrical and Electronic Equipment (2012/19/EU) (WEEE)
- None

The following chemicals are included in the Global Automotive Declarable Substance List (GADSL)

14808-60-7 Crystalline Silica

The following substances are required for notification by the Japanese Enforcement Order of the Industrial Safety and Health Law (ISHL):

1333-86-4 Carbon Black
13463-67-7 Titanium (IV) dioxide
64742-49-0 Naphtha, petroleum, hydrotreated light
14808-60-7 Crystalline Silica

The following chemicals are listed on the Massachusetts Right-to-Know Hazardous Substances List.

1333-86-4 Carbon Black
13463-67-7 Titanium (IV) dioxide
9004-34-6 Cellulose
1332-58-7 Halloysite nanoclay
14808-60-7 Crystalline Silica

The following chemicals are listed on the New Jersey Right-to-Know Hazardous Substances List.

1333-86-4 Carbon Black
13463-67-7 Titanium (IV) dioxide
9004-34-6 Cellulose
1332-58-7 Halloysite nanoclay
14808-60-7 Crystalline Silica

The following chemicals are listed on the Pennsylvania Right-to-Know Hazardous Substances List.

1333-86-4 Carbon Black
13463-67-7 Titanium (IV) dioxide
9004-34-6 Cellulose
1332-58-7 Halloysite nanoclay
14808-60-7 Crystalline Silica

The following chemicals are listed by the State of California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

1333-86-4 Carbon Black 0.1 to 1.0 % Carcinogen
13463-67-7 Titanium (IV) dioxide 0.1 to 1.0 % Carcinogen
14808-60-7 Crystalline Silica 40 to 50 % Carcinogen

Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) requires certain facilities manufacturing, processing, or otherwise using listed toxic chemicals to report their environmental releases of such chemicals annually. The following chemicals are listed:

- None

Under Section 12(b) of the Toxic Substances Control Act (TSCA), exporters may need to notify the U .S. Environmental Protection Agency if they export or intend to export a product containing a chemical substance that is present on this list. The following substances are containted within this material:

- None

The following chemicals are listed as a *Hazardous Air Pollutant* under listed under the U.S. CAA (Clean Air Act)

- None

Country	Regulation	All Components Listed
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Canadian Domestic Substances List (DSL)	Yes
Canada	Canadian Non-Domestic Substances List (NSDL)	No
China	Inventory of Existing Chemical Substances Produced or Imported in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Europe	REACH Registered or Pre-Registered Substances and Intermediates	Yes

Japan	Japanese Inventory of Existing and New Chemical Substances (ENCS)	No
Japan	Japan Inventory of Industrial Saftey and Health Law Substances (ISHL)	No
Korea	Korean Existing Chemical Inventory (KECI)	Yes
New Zealand	New Zealand Inventory of Chemicals (NZIoC)	Yes
Philippines	Philippines Inventory of Chemicals and Chemical Substances (PICCS)	Yes
USA	Toxic Substances and Control Act (TSCA)	Yes

EU Risk Phrases

Not Available

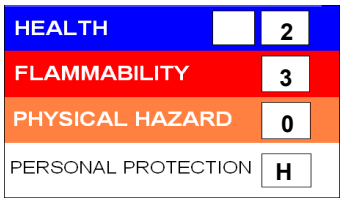
Safety Phrase

Not Available

Section 16 - Other Information

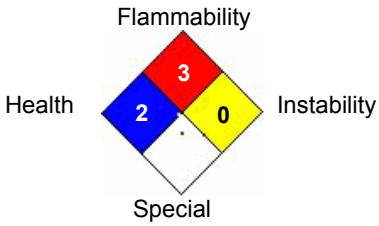
NFPA and HMIS use a numbering scale ranging from 0 to 4 to indicate the degree of hazard . A value of zero means that the substance possesses essentially no hazard; a rating of four indicates extreme danger. Although similar, the two rating systems are intended for different purposes, and use different criteria . The NFPA system was developed to provide an on-the-spot alert to the hazards of a material, and their severity, to emergency responders . The HMIS system was designed to communicate workplace hazard information to employees who handle hazardous chemicals.

Hazardous Material Information System (HMIS)



HMIS & NFPA Hazard Rating Legend
*** = Chronic Health Hazard**
0 = INSIGNIFICANT
1 = SLIGHT
2 = MODERATE
3 = HIGH

National Fire Protection Association (NFPA)



The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

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