

MATERIAL SAFETY DATA SHEET

SP102
11 00

DATE OF PREPARATION
Sep 23, 2013

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER

SP102

PRODUCT NAME

VHT® FlameProof Coating 1300-2000°F (704-1093°C), Flat Black

MANUFACTURER'S NAME

VHT PRODUCTS CO.
101 Prospect Ave.
Cleveland, OH 44115

Telephone Numbers and Websites

| | |
|--|-------------------------------------|
| Product Information | (800) 247-3270 |
| Regulatory Information | (216) 566-2902 www.paintdocs.com |
| Medical Emergency | (216) 566-2917 |
| Transportation Emergency* | (800) 424-9300 |
| <small>*for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)</small> | |

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

| % by Weight | CAS Number | Ingredient | Units | Vapor Pressure |
|-------------|-------------|--------------------------------------|---------------------|----------------|
| 15 | 74-98-6 | Propane | | |
| | | ACGIH TLV | 1000 PPM | 760 mm |
| | | OSHA PEL | 1000 PPM | |
| 14 | 106-97-8 | Butane | | |
| | | ACGIH TLV | 1000 PPM | 760 mm |
| | | OSHA PEL | 800 PPM | |
| 18 | 108-88-3 | Toluene | | |
| | | ACGIH TLV | 20 PPM | 22 mm |
| | | OSHA PEL | 100 ppm (Skin) | |
| | | OSHA PEL | 150 ppm (Skin) STEL | |
| 2 | 100-41-4 | Ethylbenzene | | |
| | | ACGIH TLV | 20 PPM | 7.1 mm |
| | | OSHA PEL | 100 PPM | |
| | | OSHA PEL | 125 PPM STEL | |
| 9 | 1330-20-7 | Xylene | | |
| | | ACGIH TLV | 100 PPM | 5.9 mm |
| | | ACGIH TLV | 150 PPM STEL | |
| | | OSHA PEL | 100 PPM | |
| | | OSHA PEL | 150 PPM STEL | |
| 25 | 67-64-1 | Acetone | | |
| | | ACGIH TLV | 500 PPM | 180 mm |
| | | ACGIH TLV | 750 PPM STEL | |
| | | OSHA PEL | 1000 PPM | |
| 1 | 763-69-9 | Ethyl 3-Ethoxypropionate | | |
| | | ACGIH TLV | Not Available | 1.11 mm |
| | | OSHA PEL | Not Available | |
| 1 | 112926-00-8 | Amorphous Precipitated Silica | | |
| | | ACGIH TLV | 10 mg/m3 as Dust | |
| | | OSHA PEL | 6 mg/m3 as Dust | |
| 7 | 68186-94-7 | C.I. Pigment Black 26 (77494) | | |
| | | ACGIH TLV | 1 MG/M3 | |
| | | OSHA PEL | 1 MG/M3 | |

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE

INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.

EFFECTS OF OVEREXPOSURE

EYES: Irritation.

SKIN: Prolonged or repeated exposure may cause irritation.

INHALATION: Irritation of the upper respiratory system.

May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.

Prolonged overexposure to hazardous ingredients in Section 2 may cause adverse chronic effects to the following organs or systems:

- the liver
- the urinary system
- the cardiovascular system
- the reproductive system

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.

Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

None generally recognized.

CANCER INFORMATION

For complete discussion of toxicology data refer to Section 11.

HMIS Codes

| | |
|---------------------|----|
| Health | 2* |
| Flammability | 3 |
| Reactivity | 0 |

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.

SKIN: Wash affected area thoroughly with soap and water.

Remove contaminated clothing and launder before re-use.

INHALATION: If affected, remove from exposure. Restore breathing. Keep warm and quiet.

INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES**FLASH POINT**

Propellant < 0 °F

LEL

1.0

UEL

12.8

EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS

Containers may explode when exposed to extreme heat.

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.

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used.

Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED**

Remove all sources of ignition. Ventilate the area.

Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE**STORAGE CATEGORY**

Not Available

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Keep away from heat, sparks, and open flame. Vapors will accumulate readily and may ignite explosively.

During use and until all vapors are gone: Keep area ventilated - Do not smoke - Extinguish all flames, pilot lights, and heaters - Turn off stoves, electric tools and appliances, and any other sources of ignition.

Consult NFPA Code. Use approved Bonding and Grounding procedures.

Contents under pressure. Do not puncture, incinerate, or expose to temperature above 120F. Heat from sunlight, radiators, stoves, hot water, and other heat sources could cause container to burst. Do not take internally. Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION**PRECAUTIONS TO BE TAKEN IN USE**

Use only with adequate ventilation.

Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.

Wash hands after using.

This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m³ (total dust), 3 mg/m³ (respirable fraction), OSHA PEL 15 mg/m³ (total dust), 5 mg/m³ (respirable fraction).

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.

When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

PROTECTIVE GLOVES

None required for normal application of aerosol products where minimal skin contact is expected. For long or repeated contact, wear chemical resistant gloves.

EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

OTHER PRECAUTIONS

Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

| | | |
|---|--|---------------|
| PRODUCT WEIGHT | 6.44 lb/gal | 771 g/l |
| SPECIFIC GRAVITY | 0.77 | |
| BOILING POINT | <0 - 342 °F | <-18 - 172 °C |
| MELTING POINT | Not Available | |
| VOLATILE VOLUME | 93% | |
| EVAPORATION RATE | Faster than ether | |
| VAPOR DENSITY | Heavier than air | |
| SOLUBILITY IN WATER | Not Available | |
| pH | 7.0 | |
| VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged) | Less Water and Federally Exempt Solvents | |
| | Volatile Weight 59.01% | |

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable**CONDITIONS TO AVOID**

None known.

INCOMPATIBILITY

None known.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION

Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ethylbenzene is classified by IARC as possibly carcinogenic to humans (2B) based on inadequate evidence in humans and sufficient evidence in laboratory animals. Lifetime inhalation exposure of rats and mice to high ethylbenzene concentrations resulted in increases in certain types of cancer, including kidney tumors in rats and lung and liver tumors in mice. These effects were not observed in animals exposed to lower concentrations. There is no evidence that ethylbenzene causes cancer in humans.

TOXICOLOGY DATA

| CAS No. | Ingredient Name | | | |
|-------------|-------------------------------|----------------------|-----|--------------------------------|
| 74-98-6 | Propane | LC50 RAT LD50 RAT | 4HR | Not Available Not Available |
| 106-97-8 | Butane | LC50 RAT LD50 RAT | 4HR | Not Available Not Available |
| 108-88-3 | Toluene | LC50 RAT LD50 RAT | 4HR | 4000 ppm 5000 mg/kg |
| 100-41-4 | Ethylbenzene | LC50 RAT LD50 RAT | 4HR | Not Available 3500 mg/kg |
| 1330-20-7 | Xylene | LC50 RAT LD50 RAT | 4HR | 5000 ppm 4300 mg/kg |
| 67-64-1 | Acetone | LC50 RAT LD50 RAT | 4HR | Not Available 5800 mg/kg |
| 763-69-9 | Ethyl 3-Ethoxypropionate | LC50 RAT LD50 RAT | 4HR | Not Available Not Available |
| 112926-00-8 | Amorphous Precipitated Silica | LC50 RAT LD50 RAT | 4HR | Not Available Not Available |
| 68186-94-7 | C.I. Pigment Black 26 (77494) | LC50 RAT LD50 RAT | 4HR | Not Available Not Available |

SECTION 12 — ECOLOGICAL INFORMATION**ECOTOXICOLOGICAL INFORMATION**

No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS**WASTE DISPOSAL METHOD**

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers.

Do not incinerate. Depressurize container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

US Ground (DOT)

May be classed as LTD. QTY. OR ORM-D
UN1950, AEROSOLS, 2.1, LIMITED QUANTITY, (ERG#126)

Canada (TDG)

May be classed as LTD. QTY. OR ORM-D
UN1950, AEROSOLS, CLASS 2.1, LIMITED QUANTITY, (ERG#126)

IMO

May be shipped as Limited Quantity
UN1950, AEROSOLS, CLASS 2.1, LIMITED QUANTITY, EmS F-D, S-U

IATA/ICAO

UN1950, AEROSOLS, FLAMMABLE, 2.1, LIMITED QUANTITY

SECTION 15 — REGULATORY INFORMATION

SARA 313 (40 CFR 372.65C) SUPPLIER NOTIFICATION

| CAS No. | CHEMICAL/COMPOUND | % by WT | % Element |
|-----------|--------------------|---------|-----------|
| 108-88-3 | Toluene | 18 | |
| 100-41-4 | Ethylbenzene | 2 | |
| 1330-20-7 | Xylene | 9 | |
| | Manganese Compound | 7 | 2.4 |
| | Copper Compound | 7 | 1.8 |

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.