



Revision Date: 4/1/2014

Issue date: 4/1/2014

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Quickbond Vane Primer Pen
Synonyms: DD VANE PRIME PEN CLM F
Item No. : 423033-TF; 022808TF
Emergency Contact: (800) 255-3924

Distributor Address:
Easton Technical Products
5040 Harold Gatty Drive
Salt Lake City, UT 84116
(801) 539-1400
www.eastonarchery.com

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	EINECS Number	Weight %	EU Classification
Heptanes	64742-49-0/ 142-82-5	265-151-9/ 205-563-8	100	F, Xn, R45, R46, R65

3. HAZARDS IDENTIFICATION**Emergency Overview – Danger:**

EXTREMELY FLAMMABLE LIQUID AND VAPOR, VAPOR MAY CAUSE FLASH FIRE. Vapor may travel considerable distance to source of ignition and flash back. Harmful or fatal if swallowed - can enter lungs and cause damage. May be harmful if inhaled or absorbed through the skin. Can cause eye, skin or respiratory tract irritation. Overexposure can cause central nervous system (CNS) depression and/or other target organ effects. Harmful to aquatic organisms.

Principal Routes of Exposure:

Skin, eyes, and inhalation.

POTENTIAL HEALTH EFFECTS**Eye Contact:**

This product can cause transient mild eye irritation with short-term contact with liquid sprays or mists. Symptoms include stinging, watering, redness, and swelling.

Skin Contact:

This material can cause skin irritation. The severity of irritation will depend on the amount of material that is applied to the skin and the speed and thoroughness that it is removed. Symptoms include redness, itching, and burning of the skin. Repeated or prolonged skin contact can produce moderate irritation (dermatitis).

Inhalation:

Breathing high concentrations may be harmful. Mist or vapor can irritate the throat and lungs. Breathing this material may cause central nervous system depression with symptoms including nausea, headache, dizziness, fatigue, drowsiness, or unconsciousness. Intentional misuse by deliberately concentrating and inhaling this product may be harmful or fatal.

Ingestion:

If swallowed, this material may irritate the mucous membranes of the mouth, throat, and esophagus. It can be readily absorbed by the stomach and intestinal tract. Symptoms include a burning sensation of the mouth and esophagus, nausea, vomiting, dizziness, staggered gait, drowsiness, loss of consciousness and delirium, as well as additional central nervous system (CNS) effects.

Due to its light viscosity, there is a danger of aspiration into the lungs during swallowing and subsequent vomiting. Aspiration can result in severe lung damage or death. Cardiovascular effects include shallow rapid pulse with pallor (loss of color in the face) followed by flushing (redness of the face). Also, progressive CNS depression, respiratory insufficiency and ventricular fibrillation leads to death.

Carcinogenic Effects:

ACGIH: Possible cancer hazard. May cause cancer based on animal data. Not listed on NTP or IARC.

Target Organ Effects:

May cause damage to the following organs: kidneys, lungs, liver, mucous membranes, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.

Medical Conditions Aggravated by Exposure:

Aggravates pre-existing skin disorders, respiratory system, liver, kidneys and central nervous system.

4. FIRST AID MEASURES

Skin contact:	Remove contaminated shoes and clothing. Flush affected area with large amounts of water. If skin surface is damaged, apply a clean dressing and seek medical attention. Do not use ointments. If skin surface is not damaged, clean affected area thoroughly with mild soap and water. Seek medical attention if tissue appears damaged or if pain or irritation persists.
Eye contact:	Flush eyes with cool, clean, low-pressure water for at least 15 minutes. Hold eyelids apart to ensure complete irrigation of the eye and eyelid tissue. If easily accomplished, check for and remove contact lenses. If contact lenses cannot be removed, seek immediate medical attention. Do not use eye ointment. Seek medical attention.
Inhalation:	Immediately move victim to fresh air. If victim is not breathing, immediately begin rescue breathing. If heart has stopped, immediately begin cardiopulmonary resuscitation (CPR). If breathing is difficult, 100 percent humidified oxygen should be administered by a qualified individual. Seek medical attention immediately.
Ingestion:	Do not induce vomiting. If spontaneous vomiting is about to occur, place victim's head below knees. If victim is drowsy or unconscious, place on the left side with head down. Never give anything by mouth to a person who is not fully conscious. Do not leave victim unattended. Seek medical attention immediately.

5. FIRE-FIGHTING MEASURES

Flash Point	15°F (-9°C)
Explosion Limits in Air – Upper (%)	1
Explosion Limits in Air – Lower (%)	6.7
OSHA Flammability Classification:	Flammable
Auto-ignition Temperature:	475°F (246°C)
Extinguishing Media:	<p>SMALL FIRE: Use dry chemicals, carbon dioxide, foam, or inert gas (nitrogen). Carbon dioxide and inert gas can displace oxygen. Use caution when applying carbon dioxide or inert gas in confined spaces.</p> <p>LARGE FIRE: Use foam, water fog, or water spray. Water may be ineffective. Water may not extinguish the fire. Water fog and spray are effective in cooling containers and adjacent structures. However, water can be used to cool the external walls of vessels to prevent excessive pressure, auto-ignition or explosion. DO NOT use a solid stream of water directly on the fire as the water may spread the fire to a larger area.</p>
Special Protective Equipment for Firefighters:	<p>Firefighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies.</p> <p>Evacuate area and fight the fire from a maximum distance or use unmanned hose holders or monitor nozzles. Cover pooling liquid with foam. Containers can build pressure if exposed to radiant heat; cool adjacent containers with flooding quantities of water until well after the fire is out. Withdraw immediately from the area if there is a rising sound from a venting safety device or discoloration of vessels, tanks, or pipelines. Be aware that burning liquid will float on water. Notify appropriate authorities of potential fire and explosion hazard if liquid enter sewers or waterways.</p>
Specific Hazards:	Flammable Liquid! This material releases vapors at or below ambient temperatures. When mixed with air in certain proportions and exposed to an ignition source, its vapor can cause a flash fire. Use only with adequate ventilation. Vapors are heavier than air and may travel long distances along the ground to an ignition source and flash back. A vapor and air mixture can create an explosion hazard in confined spaces such as sewers. If container is not properly cooled, it can rupture in the heat of a fire.
Hazardous Decomposition/Combustion Products:	Carbon dioxide, carbon monoxide, smoke, fumes, and/or unburned hydrocarbons.
Risk of Dust Explosion:	Not applicable.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Take proper precautions to ensure your own health and safety before attempting spill control or clean-up. For more specific information, refer to the Emergency Overview on Page 1, Exposure Controls and Personal Protection in Section 8 and Disposal Considerations in Section 13 of this MSDS. Flammable Liquid! Release causes an immediate fire or explosion hazard. Evacuate all non-essential personnel from immediate area and establish a "regulated zone" with site control and security. Vapor-suppressing foam may be used to reduce vapors. Eliminate all ignition sources. All equipment used when handling this material must be grounded. Stop the leak if it can be done without risk. Do not touch or walk through spilled material. Remove spillage immediately from hard, smooth walking areas. Prevent spilled material from entering waterways, sewers, basements, or confined areas.
Methods for Cleaning Up:	Absorb or cover with dry earth, sand, or other non-combustible material and transfer to appropriate waste containers. Use clean, non-sparking tools to collect absorbed material. For large spills, secure the area and control access. Prevent spilled material from entering sewers, storm drains, other drainage systems, and natural waterways. Dike far ahead of a liquid spill to ensure complete collection. Water mist or spray may be used to reduce or disperse vapors; but, it may not prevent ignition in closed spaces. This material will float on water and its run-off may create an explosion or fire hazard. Verify that responders are properly HAZWOPER-trained and wearing appropriate respiratory equipment and fire-resistant protective clothing during cleanup operations. In an urban area, cleanup spill as soon as possible; in natural environments, cleanup on advice from specialists. Pick up free liquid for recycle and/or disposal if it can be accomplished safely with explosion-proof equipment. Collect any excess material with absorbent pads, sand, or other inert noncombustible absorbent materials. Place into appropriate waste containers for later disposal. Comply with all applicable local, state and federal laws and regulations.
Environmental Precautions:	Do not permit spilled product to enter soil, drains, sewers rivers, or other water courses.

7. HANDLING AND STORAGE

Handling:	A spill or leak can cause an immediate fire or explosion hazard. Keep containers closed and do not handle or store near heat, sparks, or any other potential ignition sources. Avoid contact with oxidizing agents. Do NOT breathe vapor. Use only with adequate ventilation and personal protection. Never siphon by mouth. Avoid contact with eyes, skin, and clothing. Prevent contact with food and tobacco products. Do NOT take internally. Do NOT expose product containers to flames, sparks, heat or other potential ignition sources. Empty containers may contain material residues which can ignite with explosive force. Observe label precautions.
Storage:	Keep container tightly closed. Store in a cool, dry, well-ventilated area. Store only in approved containers. Do not store with oxidizing agents. Do not store at elevated temperatures or in direct sunlight. Protect containers against physical damage. Head spaces in tanks and other containers may contain a mixture of air and vapor in the flammable range. Vapor may be ignited by static discharge. Storage area must meet OSHA requirements and applicable fire codes. Additional information regarding the design and control of hazards associated with the handling and storage of flammable and combustible liquids may be found in professional and industrial documents including, but not limited to, the National Fire Protection Association (NFPA) publications NFPA 30 ("Flammable and Combustible Liquid Code"), NFPA77 ("Recommended Practice on Static Electricity") and the American Petroleum Institute (API) Recommended Practice 2003, ("Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents"). Consult appropriate federal, state and local authorities before reusing, reconditioning, reclaiming, recycling or disposing of empty containers or waste residues of this product.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS

Substance Applicable Workplace Exposure Levels Heptanes (19043) ACGIH TLV (United States). TWA: 342 ppm (1400 mg/M 3) 8 hour(s).

Notes: The TLV for the hydrocarbon solvent is based on the procedure described in Appendix H ("Reciprocal Calculations Method for Certain Refined Hydrocarbon Solvent Vapors") of the ACGIH TLVs and BEIs guidelines. The GGV mixture (ACGIH TLV) is based on Column B (McKee et al., 2005) of Table 1 ("Group Guidance Values") of Appendix H.

Heptane, all isomers ACGIH (United States).
TWA: 400 ppm 8 hour(s).
STEL: 500 ppm 15 minute(s).
OSHA (United States).
TWA: 500 ppm 8 hour(s).
Octanes, all isomers ACGIH (United States).
TWA: 300 ppm 8 hour(s).
OSHA (United States).
TWA: 500 ppm 8 hour(s).
Methylcyclohexane ACGIH (United States).
TWA: 400 ppm 8 hour(s).
OSHA (United States).
TWA: 500 ppm 8 hour(s).

ENGINEERING CONTROLS

Provide ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits indicated below. All electrical equipment should comply with the National Electrical Code.

PERSONAL PROTECTIVE EQUIPMENT

Personal protective equipment should be selected based upon the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to OSHA regulations. The following pictograms represent the minimum requirements for personal protective equipment. For certain operations, additional PPE may be required.

Respiratory Protection:

For known vapor concentrations above the occupational exposure guidelines (see below), use a NIOSH-approved organic vapor respirator if adequate protection is provided. Protection factors vary depending upon the type of respirator used. Respirators should be used in accordance with OSHA requirements (29 CFR 1910.134). For airborne vapor concentrations that exceed the recommended protection factors for organic vapor respirators, use a full-face, positive-pressure, supplied air respirator. Due to fire and explosion hazards, do not enter atmospheres containing concentrations greater than 10% of the lower flammable limit of this product.

Hand Protection:

Avoid skin contact. Use heavy duty gloves constructed of chemical resistant materials such as Viton or heavy nitrile rubber. Wash hands with plenty of mild soap and water before eating, drinking, smoking, use of toilet facilities or leaving work. DO NOT use gasoline, kerosene, solvents or harsh abrasives as skin cleaners.

Eye Protection:

Safety glasses equipped with side shields are recommended as minimum protection in industrial settings. Chemical goggles should be worn during transfer operations or when there is a likelihood of misting, splashing, or spraying of this material. A suitable emergency eye wash water and safety shower should be located near the work station.

Skin and Body Protection:

Avoid skin contact. Wear long-sleeved fire-retardant garments (e.g., Nomex) while working with flammable and combustible liquids. Additional chemical resistant protective gear may be required if splashing or spraying conditions exist. This may include an apron, boots and additional facial protection. If product comes in contact with clothing, immediately remove

soaked clothing and shower. Promptly remove and discard contaminated leather goods.

Other:

An emergency eye wash station and safety shower should be located near the work-station. General Comments: Warning! Use of this material in spaces without adequate ventilation may result in generation of hazardous levels of flammable vapors and/or inadequate oxygen levels for breathing. Odor is an inadequate warning for hazardous conditions.

9. PHYSICAL AND CHEMICAL PROPERTIES
--

Appearance:	Liquid
Odor:	Characteristic hydrocarbon solvent odor
pH:	Not applicable
Vapor Pressure:	6 kPa (45 mm Hg) (at 20 deg C)
Boiling point/range:	93 to 99 deg C (199 to 210 deg F)
Melting point/range:	Not applicable
Water Solubility:	Negligible
Specific Gravity:	0.696
% Volatile (by Volume):	696 g/l VOC (w/v)
Evaporation Rate:	Not determined
Viscosity:	Not determined

10. STABILITY AND REACTIVITY

Stability:	Stable
Hazardous Polymerization:	Will not occur

Mechanical Sensitivity (Shock):	Not applicable
Conditions to Avoid:	Keep away from heat, flame and other potential ignition sources. Keep away from strong oxidizing conditions and agents. Strong acids, alkalies, and oxidizers such as liquid chlorine and oxygen
Static Discharge Effects:	WARNING. Avoid static discharge. Use proper bonding and grounding when working with this product. Use only spark proof tools and equipment, or tools and equipment rated for use with flammable solvents.

11. TOXICOLOGICAL INFORMATION

n-Heptane was not mutagenic in the Salmonella/microsome (Ames) assay and is not considered to be carcinogenic.

12. ECOLOGICAL INFORMATION

Ecotoxicity: Ecotoxicity data are not available for this product. Aquatic toxicity values are expected to be in the range of 1 - 10 mg/l based upon data from components and similar products. This mixture contains components that are potentially toxic to freshwater and saltwater ecosystems.

Environmental Fate: This product will normally float on water. Components will evaporate rapidly. This material may be harmful to aquatic organisms and may cause long term adverse effects in the aquatic environment. The octanol-water partition coefficient (log Kow) for this product is expected to be in the range of 2.1 to 5.

13. DISPOSAL CONSIDERATIONS

Disclaimer: Information in this section pertains to the product as shipped in its intended composition as described in Section 3 of this MSDS. Contamination or processing may change waste characteristics and requirements.

Regulations may also apply to empty containers, liners or rinsate. State/provincial and local regulations may be different from federal regulations.

Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly, it is the responsibility of the user to determine the proper storage, transportation, treatment and/or disposal methodologies for spent materials and residues at the time of disposition.

Maximize material recovery for reuse or recycling. Recovered non-usable material may be regulated by US EPA as a hazardous waste due to its ignitibility (D001) and/or its toxic (D018) characteristics. Conditions of use may cause this material to become a "hazardous waste", as defined by federal or state regulations. It is the responsibility of the user to determine if the material is a RCRA "hazardous waste" at the time of disposal. Transportation, treatment, storage and disposal of waste material must be conducted in accordance with RCRA regulations (see 40 CFR 260 through 40 CFR 271). State and/or local regulations may be more restrictive. Contact your regional US EPA office for guidance concerning case specific disposal issues.

14. TRANSPORT INFORMATION

DOT:

Shipping Name: Heptanes
Identification: UN1206
Hazard Class: 3
Packing Group: II

MARPOL III Status

Not a DOT "Marine Pollutant" per 49 CFR 171.8.

15. REGULATORY INFORMATION

Hazard Classification

United States – OSHA (29 CFR 1910.1200): This product is considered under OSHA.

International Inventories

All components of this product are listed on or exempt from the following inventories:

(yes) - European Inventory of Existing Commercial Substances (EINECS)
 (yes) - United States Toxic Substances Control Act (TSCA) Inventory

U.S. Federal Regulations

Clean Air Act amendments of 1990 (CAA, Section 11240: CFR 82): Contains no hazardous air pollutants.

Clean Water Act (CWA, 40 CFR 116): This material is classified as an oil under Section 311 of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA). Discharges or spills which produce a visible sheen on waters of the United States, their adjoining shorelines, or into conduits leading to surface waters must be reported to the EPA's National Response Center at (800) 424-8802. Does not contain any priority pollutants.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA, 40 CFR 302): This product or refinery stream is not known to contain chemical substances subject to this statute. However, it is recommended that you contact state and local authorities to determine if there are any other reporting requirements in the event of a spill.

Superfund Amendments and Reauthorization Act, Title III (SARA):
SARA Section 302 (40 CFR 355) Extremely Hazardous Substances: None.

SARA Section 311/312 (40 CFR 370) Hazard Category: Fire, acute, chronic.

SARA Section 313 (40 CFR 372) Toxics Release Inventory: None.

U.S. State Regulations

California Proposition 65: This material may contain the following components which are known to the State of California to cause cancer, birth defects or other reproductive harm, and may be subject to the requirements of California Proposition 65 (CA Health & Safety Code Section 25249.5):

Toluene: <0.05%
Benzene: <0.001%
Ethyl benzene: <0.001%

16. OTHER INFORMATION

HMIS Rating

HMIS Index: *- chronic, 0 – Minimal, 1 – slight, 2- moderate, 3 – serious, 4 –severe

Health: *1
Flammability: 3
Physical Hazard: 0

This material safety data sheet contains changes from the previous version in sections: New Material Safety Data Sheet format.

Prepared by: Easton Technical Products

DISCLAIMER: The information and recommendations contained herein are based upon data believed to be correct and are accurate to the best knowledge of Easton Technical Products. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. Any use of the product which is not in conformance with this data sheet or which involves using the product in combination with any other product or process is the responsibility of the user.