

SECTION 1 Identification**1.1 Product Identifier****Product form :** Mixture**Product name :** Vet Slide Stain Fixative Solution #1**Product code :** #10144, #10147, #10148**1.2 Other means of identification****Synonyms:** Vet-Slide Stain Fixative Solution #1**1.3 Recommended use of the chemical and restrictions on use****Use of the substance/mixture :** For laboratory and manufacturing use only, For professional use only**Restrictions on use :** Not for food, drug or household use**1.4 Supplier's details**

Kacey Inc dba Kacey Diagnostics

1864 A Hendersonville Rd. Box 112

Asheville, NC 28803

828.301.6550

www.kacediagnostics.com

1.4 Emergency phone number**Emergency number:** Chemtrec 1.800.424.9300 USA - 24 hours/Day, 7 Days/week**SECTION 2 Hazard Identification****2.1 Classification of the substance or mixture**

GHS US classification

Flammable liquid, Category 2 H225 Highly flammable liquid and vapor.

Acute toxicity (oral) Category 4, H302, Harmful if swallowed

Acute toxicity (inhalation dust, mist), Category 2, H331, Toxic if inhaled

Specific target organ toxicity - Single exposure, Category 1, H370, Causes damage to organs

(see section 16 for full text)

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US)

**Singel word (GHS US) :** Danger**Hazard statements (GHS US) :**

H225 - Highly flammable liquid and vapor

H302 - Harmful if swallowed

H331– Toxic if inhaled

H370 - Causes damage to organs

Precautionary statements (GHS US) : P210– Keep away from heat, hot surfaces, sparks, open flames and other ignition sources . No smoking.

P233 - Keep container tightly closed, volatile.

P240 - Ground/Bond container and receiving equipment

P241 - Use explosion - proof equipment

P242 - Use non-sparking tools

P243 - Take action to prevent static discharges

P260 - Do not breathe dust, fume, gas, mist, vapors, spray

P261 - Avoid breathing dust, fume, gas, mist, vapors, spray

P264 - Wash hands, forearms and face thoroughly after handling

P270 - do not eat, drink or smoke when using this product

P271 - Use only outdoors or in well-ventilated area

P280 - Wear protective gloves, protective clothing, eye protection, face protection, and hearing protection

P301 + P312 - If swallowed: Call a poison center or doctor if you feel unwell

P303 + P361 + P353 - if on skin (or hair): Take off immediately all containment clothing. Rinse skin with water/shower

P304 + P340 - If inhaled. Remove person to fresh air and keep comfortable for breathing

P307 + P311 - If exposed: Call a poison center/doctor

P311 - Call a poison center or doctor

P321 - Specific treatment (see supplemental first aid instruction on the label)

P330 - Rinse mouth

P370 + P378 - In case of fire: Use appropriate media to extinguish

P403 + P233 - Store in well -ventilated place. Keep container tightly closed

P403 + P235 - Store in a well-ventilated place. Keep cool

P405 - Store locked up

P501 - Dispose of contents and /or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations

2.3 Hazards associated with known or reasonably anticipated uses

No information available

2.4 Hazards not otherwise classified

No information available

2.5 Unknown acute toxicity

No information available

SECTION 3 Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Name	Product Identifier	Conc.	GHS US classification
Methanol	CAS-No.: 67-576-1	> 97	Flam. Liq 2, H255 Acute Tox. 4 (Oral), H302 Acute Tox.3 (inhalation), H331 STOT SE 1, H370
Fast Green FCF (C.I. 42053)	CAS- No.: 2353-45-9	<3	Not classified

Full text of hazard classes and H-statements : see section 16

SECTION 4 First aid measures**4.1 Description of necessary first-aid measures**

First-aid measures general : If exposed or concerned: Get medical advice/attention. Call a poison center/doctor/physician if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air keep comfortable for breathing. Call a doctor.

First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing.

First-aid measures after eye contact : Rinse eyes with water as a precaution.

Frist-aid measures after ingestion : Rinse mouth. Call a poison center/doctor/physician if you feel unwell.

4.2 Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation : Although no appropriate human or animal health effects data are known to exist This material is expected to be an inhalation hazard.

Symptoms/effects after skin contact : None under normal conditions.

Symptoms/effects after eye contact : None under normal conditions.

Symptoms/effects after ingestion : None under normal conditions.

4.3 Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Fire-fighting measures**5.1 Suitable (and unsuitable) extinguishing media**

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2 Specific hazards arising from chemical

Fire hazard : Highly Flammable liquid and vapor.

Explosion hazard : No direct explosion hazard.

Hazardous decomposition products in case fire : Toxic fumes may be released.

5.3 Special protective equipment and precaution for fire-fighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.

Protection during firefighting : do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6 Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.

For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Do not breathe dust /fume/gas/ mist/vapors/spray.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8. "Exposure controls/personal protection".

Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

Environmental precautions : Avoid release to the environment.
6.2 Methods and materials for containment and cleaning up

For containment : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leaks, if possible without risk.

Methods of clean up : Dispose of materials or solid residues at an authorized site.

For further information refer to section 13

SECTION 7 Handling and storage
7.1 Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bound container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Do not breathe dust/fume/gas/mist./vapors/spray. Use only outdoors or in well-ventilated area.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash your hands after handling the product.

Additional hazards when processed : Not expected to present significant hazard under anticipated conditions of normal use. YyY

7.2 Conditions for safe storage, including incompatibilities

Technical measures : Ground/bound container and receiving equipment.

Storage Conditions : Store in well-ventilated place. Keep cool. Keep container tightly close. Store locked up.

Packaging materials : Store always product in container of same material as original container.

SECTION 8 Exposure controls/personal protection

Methanol (67-56=1)

USA - ACGHI - Occupational Exposure Limits

Local name	Methanol
ACGIH OEL TWA	200 ppm
ACGIH OEL STEL	250 ppm
Remarks (ACGIH)	TLV ® Basis : Heache, eye dam; dizziness; nausea. Notations: Skin; BEI
Regulatory reference	ACGIH 2024

USA - ACGIH - Biological Exposure Indices

Local name	Methanol
BEI	15mg/l Parameter: Methano - Medium: urine- Sampling time: End of shift - Notations: B, Ns
Regulatory reference	ACGIH 2024

USA - OSHA - Occupational Exposure Limits

Local name	Methyl alcohol
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8.1 Control parameters

Methanol (67-56-1)	
OSHA PEL TWA	260 mg/m cubed
	200 ppm
Regulatory reference (US=OSHA)	OSHA Annotated Table Z-1

8.2 Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental : Avoid release to the environment.

8.3 Individual protection measures, such as personal protective equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Hand protection:
Protective gloves
Eye Protection:
Safety glasses
Skin and body protection:
Wear suitable protective clothing
Respiratory protection:
(In case of inadequate ventilation) wear respiratory protection.



Personal protective equipment protection symbol(s):

SECTION 9 Physical and chemical properties

9.1 Basic physical and chemical properties : No data available

Physical state : Liquid

Color : No data available

Odor threshold : No data available

Melting point : Not applicable

Boiling point : No data available

Flammability (solid, gas) : Not applicable

Relative vapor density at 20°C : No data available

Solubility : Water: Solubility in water of component(s) of the mixture:

- Methanol: ≥100 g/100ml

Partition coefficient n-octanol/water (log Pow): No data available

Decomposition temperature : No data available

Odor : No data available

pH : No data available

Freezing point : No data available

Flash point : No data available

Vapor pressure : No data available

Relative density : No data available

Auto-ignition temperature : No data available

Viscosity : Kinematic : No data available**Explosion limits** : No data available**Particle characteristics** : No data available

Methanol	
Boiling point	65°C (1013 hPa)
Flah point	10 °C (Closed cup. 1013 hPa. EU Method A-9: Flash-Point)
Auto-ignition temperature	455 °X (1013 hPa, DIN 51794: Sel-ignition temperature, T1)
Vapor pressure	128 hPa (20 °C)
Vapor pressure at 50 °C	552 hPa
Particle characteristics	No data available

Fast Green (C.I.42053)	
Particle characteristics	No data available

9.2 Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity**10.1 Reactivity**

Highly flammable liquid and vapor.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4 Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames. No sparks. Eliminate all sources of ignition.

10.5 Incompatible materials

No additional information available

10.6 Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11 Toxicological information**Acute toxicity (oral)** : Harmful if swallowed.**Acute toxicity (dermal)** : Not classified**Acute toxicity (inhalation)** : Inhalation: dust, mist: Toxic if inhaled..

Veti-Slide Stain Fixative Sol# 1	
ATE US (oral)	1223.711 mg/kg body weight

Veti-Slide Stain Fixative Solution #1	
ATE US (dust, mist)	0.515 mg/l/4h
Methanol (67-56-1)	
LD50 oral rat	1187 - 2769 mg/kg body weight (BASF test, Rat, Male / female, Experimental value, 15 - 35% aqueous solution, Oral, 7 day(s))
Ld50 dermal rabbit	17100 mg/kg (Rabbit, Inconclusive, insufficient data, Dermal)
LC50 Inhalation - Rat	128.2 mg/L air (BASF test, 4 h, Rat, Male / Female, Experimental value, inhalation (vapor), 14 day(s))
ATE US (oral)	1187 mg/kg body weight
ATE US (dermal)	17100 mg/kg body weight
ATE US (gases)	700 ppm V/4h
ATE US (vapors)	3 mg/l/4h
ATE US (dust, mist)	0.5 mg/l/4h

Skin corrosion/irritation : Not classified

methanol (67-56-1)	
pH	No data available in the literature

Serious eye damage/irritation : Not Classified

methanol (67-56-1)	
pH	No data available in the literature

Respiratory or skin sensitization : Not classified

Germ cel mutagenicity : Not classified

Carcinogenicity : Not classified

Fast Green FCF (C.I. 42053) (2363-45-9)	
IARC group	3- Not classifiable

Reproductive toxicity : Not classified

STOT - single exposure : Causes damage to organs

methanol (67- 56-1)	
STOT - single exposure	Causes damage to organs

STOT - repeated exposure : Not classified

Aspiration hazard : Not classified

Veti-Slide Stain Fixative Solution #1	
Viscosity, kinematic	No data available
methanol (67-56-1)	
Viscosity, kinematic	0.68 - 0.747 mm ² /s
Fast Green FCF (C.I.42053) (2353-45-9)	
Viscosity, kinematic	No data available

Symptoms/effects after inhalation : Although no appropriate huma or animal health effect data are known to exist, this material is expected to be an inhalation hazard.

Symptoms/effects after skin contact : None under normal conditions.

Symptoms/effects after eye contact : None under normal conditions

Symptoms/effects after ingestion : None under normal conditions

SECTION 12 Ecological information

12.1 Ecotoxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, long-term (chronic) : Not classified

Methanol (67-56-1)	
LC50- Fish (1)	15400 mg/l (EPA 660/3- 75/009, 96 h, Lepomis macrochirus, Flow-through system, Freshwater, Experimental value, Lethal)
EC50 - Crustacea (1)	18260 mg/l (OECD 202: Daphnia sp. Acute Immobilization Test, 96 h, Daphnia magna, Semi-static system, Fresh water, Experimental value, Locomotor effect)
EC5050 96h - Algae (1)	22000 mg/l (OECD 201: Alga, Growth Inhibition Test, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Growth rate)
NOEC (chronic)	208 mg/L Test organisms (species): Daphnia magna Duration: '21 d'
NOec chronic fish	446.7 mg/l Test organisms (species). Pimephales promelas Duration: '2B d'

12.2 Persistence and degradability

Veti-Slide Stain Fixative Solution #2	
Persistence and degradability	Not rapidly degradable

12.3 Bioaccumulative potential

Methanol (67-56-1)	
Persistence and degradability	Readily biodegradable in teh soil, Readily biodegradable in water
Biochemical oxygen demand (BOD)	0.6 - 1.12 g O ₂ /g substance
Chemical oxygen deman (COD)	1.42 g O ₂ /g substance
ThOD	1.5g O ₂ /g substance

Fast Green FCF (C.I. 42053) (2353-45-9)	
Persistence and degradability	Not rapidly degradable

Methanol (67-56-1)	
BCF - Fish (1)	1 - 4.5 (72 h. Cyprinus carpio, Static system, Fresh water, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	-0.77 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500)

12. 4 Mobility in soil

Methanol (67-56-1)	
Mobility in soil	2.75 Source: HSDB

Methanol (67-56-1)	
Surface tension	No data available in the literature
Organic Cargon Normalized Adsorption Co-efficient (Log Koc)	--0.89 - -0.21 (log Koc, Calculated value)
Ecology - soil	Highly mobile in soil

12.5 Other adverse effects

Ozone : Not classified

Fluorinated greenhouse gases : No

Regional waste regulation : Disposal must be done according to official regulations.

Waste treatment methods : Dispose of contents/container in the accordance with licensed collector's sorting instructions.

Sewage disposal recommendations : Disposal must be done according to official regulations.

Product/Packaging disposal recommendation : Disposal must be done according to official regulations.

Additional information : Flammable vapors may accumulate in the container. Do not re-use empty containers.

SECTION 14 Transport information

In accordance with DOT /TDG / IMDG / IATA

14.1 UN number

UN-No. (DOT) : Un1230

UN-No. (TDG) : UN1230

UN-No. (IMDG) : 1230

UN-No. (IATA) : 1230

14.2 UN Proper Shipping name

Proper shipping Name (DOT) : Methanol

Proper Shipping Name (TDG) : METHANOL

Proper Shipping Name (IMDG) : METHANOL

Proper Shipping Name (IATA) : Methanol

14.3 Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : 3 (6.1)



TDG

Hazard labels (DOT) : 3.6.1



IMDG**Transport hazard class(es) (IMDG) : 3 (6.1)****IATA****Transport hazard class(es) (IATA) : 3 (6.1)****Hazard labels (IATA) : 3.6.1****14.4 Packing group****Packing group (DOT) : II****Packing group (TDG) : II****Packing group (IMDG) : II****Packing group (IATA) : II****14.5 Environmental hazards**

Other information : No supplementary information available

14.6 Transport in bulk

Not applicable

14.7 Special precautions for user**DOT****UN-No.(DOT) : UN1230****DOT Special Provisions (49 CFR 172.102) :** IB2= Authorized IBCs: Metal (31a, 31B and 3N), Rigid plastics (31H1 and 31H2); Composite (31HX1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 °C (111 bar at 122 °F), or 130 kPa at 55°C (1.3 bar at 131 °F) are authorized.

T7 -4 178.274 (d)(2) Normal..... 178.275(d)(3) TP2 - a.

The maximum degree of filling must not exceed the degree of filling determined by the following. (image) Where: tr is the maximum mean bulk temperature during transport. If is the temperature in degrees Celsius of the liquid during filling, and is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees Celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 °C (59 °F) and 50 °C (122 °F). Respectively.

DOT Packaging Exceptions (49 CFR 173.xxx) : 150**DOT Packaging Non Bulk (49 CFR 173.xxx) : 202****DOT Packaging Bulk (49 CFR 173.xxx) : 242****DOT Quantity Limitations Passenger aircraft/rail (49 : 1L****CFR 173.27)****DOT Quantity Limitations Cargo aircraft only (49 : 60L****CFR 175.75)**

DOT Vessel Stowage Location : B- (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k) (2) (i) of this section is exceeded.

DOT Vessel Stowage Other : 40 - Stow "clear of living quarters"

TDG

UN-No. (TDG) : UN1230

TDG Special Provisions : 43 - Despite section 2.1 of Part 2 (Classification), these dangerous goods are assigned to this classification based on human experience.

Explosive Limit and Limited Quantity Index : 1L

Excepted quantities (TDG) : E2

Passenger Carrying Road Vehicle or Passenger : 1L

Carrying Railway Vehicle Index

Emergency Response Guide (eRG) Number : 131

IMDG

Special provision (IMDG) : 279

Limited quantities (IMDG) : 1L

Excepted quantities (IMDG) : E2

Packing instructions (IMDG) : P001

IBC packing instructions (IMDG) : IBC02

Tank instructions (IMDG) : T7

Tank special provisions (IMDG) : TP2

 EmS-No. (Fire)
 LIQUIDS : F-e - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE

EmS-No. (Spillage) : S-D SPILLAGE SCHEDULE Delta - FLAMMABLE LIQUIDS

Stowage category (IMDG) : B

Stowage and handling (IMDG) : SW2

Flash point (IMDG) : 12°C c.c.

Properties and observations (IMDG) : Colorless volatile liquid. Flashpoint: 12 °C c.c. Explosive limits: 6% to 36.5%. Miscible with water. Toxic if swallowed: may cause

blindness. Avoid skin contact.

IATA

Special provision (IATA) : A113

PCA excepted quantities (IATA) : E2

PCA limited quantities (IATA) : Y341

PCA limited quantities max net quantity (IATA) : 1L

PCA packing instructions (IATA) : 352

PCA max net quantity (IATA) : 1L

CAO packing instructions (IATA) : 364

CAO max net quantity (IATA) : 60L

ERG code (IATA) : 3L

SECTION 15 Regulatory information

15.1 Federal regulations

All components of this product are present and listed as Active on the United States EPA Toxic Substances Control Act (TSCA) inventory.

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendment and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372

Methanol

CAS-No.67-56-1

>97%

Methanol (67-56-1)	
Listed on EPA Hazardous Air Pollutant (HAPS)	
CERCA RQ	5000 lb

15.2 International regulations

CANADA

Methanol (67-56-1)

Listed on the Canadian DSL (Domestic Substances List)

Fast Green FCF (C.I. 42053) (2353-45-9)
Listed on the Canadian DSL (Domestic Substances List)

EU- Regulations

No additional information available

National regulations

Methanol (67- 56-1)
Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3 State regulations



WARNING:

This product can expose you the Methanol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Component	State or local regulations
Methanol (67-56-1)	U.S.—Massachusetts—Right To Know List; U.S.— New Jersey-Right to Know Hazardous Substance List

SECTION 16 Other Information

according to the Federal Register / Vol. 77, No.58 / Monday, March 26, 2012 / Rules and Regulations Issue date : 10/4/24

Full text of hazard classes and H-statements	
H225	Highly flammable liquid and vapor
H302	Harmful if swallowed
H331	Toxic if inhaled
H370	Causes damage to organs

NFPA health hazard : 1 - Materials that, under emergency conditions, can cause significant

NFPA fire hazard : 3 - Liquids and solids (including finely divided suspended solids) that can be ignited under almost all ambient temperature conditions.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.

