

SAFETY DATA SHEET

Revision Date 19-May-2015

Version 1

1. IDENTIFICATION

Product Identifier Product Name	MEK
Other means of identification	
Product Code	N-4006
UN/ID no.	UN1193
SKU(s)	None

Recommended use of the chemical and restrictions on useRecommended UseNo information available.Uses advised againstNo information available

Details of the supplier of the safety data sheet Manufacturer Address Diamond Vogel Paint 1020 Albany Place SE Orange City, IA 51041 Phone: 712-737-4993

Emergency telephone number Emergency Telephone

Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

Fax: 712-737-4997

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

Emergency Overview

Danger	x .	
Hazard statements Causes serious eye irritation May cause drowsiness or dizziness Highly flammable liquid and vapor		
Appearance No information available	Physical state liquid	Odor No information available

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection Avoid breathing dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area Keep away from heat/sparks/open flames/hot surfaces. - No smoking Keep container tightly closed Ground/bond container and receiving equipment Use only non-sparking tools Take precautionary measures against static discharge Keep cool Use explosion-proof electrical/ ventilating/ lighting/ equipment

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Call a POISON CENTER or doctor/physician if you feel unwell In case of fire: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other Information

• May be harmful if inhaled Unknown acute toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%	Trade Secret
Methyl Ethyl Ketone	78-93-3	60 - 100	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice	Immediate medical attention is required. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). If symptoms persist, call a physician.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician. Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing.
Skin Contact	Wash off immediately with plenty of water. Immediate medical attention is not required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician.
Inhalation	Remove to fresh air. If symptoms persist, call a physician. Immediate medical attention is not required. Move to fresh air in case of accidental inhalation of vapors.

Ingestion	Rinse mouth. Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician.	
Self-protection of the first aider	Remove all sources of ignition. Use personal protective equipment as required.	
Most important symptoms and effects, both acute and delayed		
Symptoms	No information available.	
Indication of any immediate medical attention and special treatment needed		
Note to physicians	Treat symptomatically.	

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical Extremely flammable.

Explosion data Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions	Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Use personal protective equipment as required. Keep people away from and upwind of spill/leak.	
Environmental precautions		
Environmental precautions	Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. See Section 12 for additional ecological information.	
Methods and material for containment and cleaning up		
Methods for containment	Prevent further leakage or spillage if safe to do so.	
Methods for cleaning up	Pick up and transfer to properly labeled containers. Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Soak up with inert absorbent material.	
7. HANDLING AND STORAGE		

Precautions for safe handling

Advice on safe handling	Ensure adequate ventilation, especially in confined areas. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. All equipment used when handling the product must be grounded. Use with local exhaust ventilation. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray.
Conditions for safe storage, including	ng any incompatibilities
Storage Conditions	Keep tightly closed in a dry and cool place. Keep in properly labeled containers. Keep containers tightly closed in a cool, well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).
Incompatible materials	None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Methyl Ethyl Ketone	STEL: 300 ppm	TWA: 200 ppm	IDLH: 3000 ppm
78-93-3	TWA: 200 ppm	TWA: 590 mg/m ³	TWA: 200 ppm
		(vacated) TWA: 200 ppm	TWA: 590 mg/m ³
		(vacated) TWA: 590 mg/m ³	STEL: 300 ppm
		(vacated) STEL: 300 ppm	STEL: 885 mg/m ³
		(vacated) STEL: 885 mg/m ³	

NIOSH IDLH Immediately Dangerous to Life or Health

Other Information

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Controls	Showers
	Eyewash stations
	Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection	Tight sealing safety goggles. Face protection shield.
Skin and body protection	No special technical protective measures are necessary.
Respiratory protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
General Hygiene Considerations	When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Appearance Color	liquid No information available No information available	Odor Odor threshold	No information available No information available
Property	Values	Remarks • Method	

pH Melting point/freezing point Boiling point / boiling range Flash point Evaporation rate	No information available No information available >= 79 °C / 174 °F -7 °C / 19 °F No information available
Flammability (solid, gas)	No information available
Flammability Limit in Air	
Upper flammability limit:	No information available
Lower flammability limit:	No information available
Vapor pressure	No information available
Vapor density	No information available
Specific Gravity	0.81
Water solubility	No information available
Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Kinematic viscosity	No information available
Dynamic viscosity	No information available
Explosive properties	No information available
Oxidizing properties	No information available
Other Information	
Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
n u	0.74 11 / 1

Molecular weight VOC Content (%) Density Bulk density Percent solids by weight Percent volatile by weight Percent solids by volume Actual VOC (lbs/gal) Actual VOC (grams/liter) EPA VOC (grams/liter) EPA VOC (grams/liter) EPA VOC (grams/liter) No information available No information available No information available 6.71 lbs/gal No information available 0.0% 100.0% 0.0% 6.7 804.3 6.7 804.3 0

10. STABILITY AND REACTIVITY

Reactivity No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	No data available
Inhalation	No data available.
Eye contact	No data available.
Skin Contact	No data available.
Ingestion	No data available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Methyl Ethyl Ketone	= 2483 mg/kg (Rat) = 2737 mg/kg	= 5000 mg/kg (Rabbit)= 6480	= 11700 ppm (Rat) 4 h
78-93-3	(Rat)	mg/kg (Rabbit)	

Information on toxicological effects

Symptoms

No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Chronic toxicity	Avoid repeated exposure.
Target Organ Effects Aspiration hazard	Avoid repeated exposure. Central nervous system, Eyes, Respiratory system, Skin. No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment

	Chemical Name	Algae/aquatic plants		Fish	Crustacea
Ī	Methyl Ethyl Ketone	-	3130 -	3320: 96 h Pimephales	520: 48 h Daphnia magna mg/L
	78-93-3		promelas	s mg/L LC50 flow-through	EC50 5091: 48 h Daphnia magna
					mg/L EC50 4025 - 6440: 48 h
					Daphnia magna mg/L EC50 Static

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Chemical Name	Partition coefficient
Methyl Ethyl Ketone	0.29
78-93-3	

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Methyl Ethyl Ketone

78-93-3

U159

200.0 mg/L regulatory level

Disposal of wastes	Disposal sho regulations.	Disposal should be in accordance with applicable regional, national and local laws and regulations.		
Contaminated packaging	Do not reuse	container.		
US EPA Waste Number	D001 U159			
Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes

Included in waste streams:

F005, F039

This product contains one or more substances that are listed with the State of California as a hazardous waste.

U159

Chemical Name	California Hazardous Waste Status
Methyl Ethyl Ketone	Toxic
78-93-3	Ignitable

14. TRANSPORT INFORMATION

<u>DOT</u> UN/ID no. Proper shipping name Hazard Class	UN1193 Methyl ethyl ketone Class 3, Flammable Liquid
Packing Group Special Provisions Description Emergency Response Guide Number	II IB2, T4, TP1 UN1193, Methyl ethyl ketone, Class 3, Flammable Liquid, II 127
<u>TDG</u> UN/ID no. Proper shipping name Hazard Class Packing Group Description	UN1193 Methyl ethyl ketone 3 II UN1193, Methyl ethyl ketone, 3, II
MEX UN/ID no. Proper shipping name Hazard Class Packing Group Description	UN1193 Methyl ethyl ketone 3 II UN1193, Methyl ethyl ketone, 3, II
ICAO (air) UN/ID no. Proper shipping name Hazard Class Packing Group Description	UN1193 Methyl ethyl ketone 3 II UN1193, Methyl ethyl ketone, 3, II
IATA UN/ID no. Proper shipping name Hazard Class Packing Group ERG Code Description	UN1193 Methyl ethyl ketone 3 II 3L UN1193, Methyl ethyl ketone, 3, II

IMDG

UN/ID no. Proper shipping name Hazard Class Packing Group EmS-No. Description	UN1193 Methyl ethyl ketone 3 II F-E, S-D UN1193, Methyl ethyl ketone, 3, II
<u>RID</u> UN/ID no. Proper shipping name Hazard Class Packing Group Classification code Description	UN1193 Methyl ethyl ketone 3 II F1 UN1193, Methyl ethyl ketone, 3, II
ADR UN/ID no. Proper shipping name Hazard Class Packing Group Classification code Tunnel restriction code Description Labels	UN1193 Methyl ethyl ketone 3 II F1 (D/E) UN1193, Methyl ethyl ketone, 3, II, (D/E) 3
ADN Proper shipping name Hazard Class Packing Group Classification code Description Hazard label(s) Limited quantity (LQ) Ventilation	Methyl ethyl ketone 3 II F1 UN1193, Methyl ethyl ketone, 3, II 3 1 L VE01

15. REGULATORY INFORMATION

International Inventories	
TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances ENCS - Japan Existing and New Chemical Substances IECSC - China Inventory of Existing Chemical Substances KECL - Korean Existing and Evaluated Chemical Substances PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Methyl Ethyl Ketone	5000 lb	-	RQ 5000 lb final RQ
78-93-3			RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Methyl Ethyl Ketone	Х	X	Х
78-93-3			

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

Hazardous air pollutants (HAPS) content

This product contains no reportable Hazardous Air Pollutants

19-May-2015

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

<u>NFPA</u>	Health hazards 2	Flammability 3	Instability 0	Physical and Chemical Properties -
HMIS	Health hazards 2	Flammability 3	Physical hazards 0	Personal protection X

Revision Date Revision Note

No information available

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Shipping information may vary based upon container size and shipping destination. Each user of this material needs to evaluate the conditions of use and design the appropriate protective mechanisms to prevent employee exposures, property damage, or release to the environment. The manufacturer assumes no responsibility for injury to the recipient or third persons, or for any damages to any property resulting from misuse of the product.

End of Safety Data Sheet