# SAFETY DATA SHEET

Revision Date 15-Jul-2015 Version 2

# 1. IDENTIFICATION

Product identifier

Product Name Graphite E-Z Slide L/F

Other means of identification

Product Code TP940SP UN/ID no. UN1950 SKU(s) None

Recommended use of the chemical and restrictions on use
Recommended Use
Uses advised against
No information available.
No information available

Details of the supplier of the safety data sheet

Supplier Address

TISCO

PO Box 82222 Lincoln, NE 68501 Phone: 402-476-6558 Fax: 402-476-6749

Emergency telephone number

Emergency Telephone Chemtrec 1-800-424-9300

# 2. HAZARDS IDENTIFICATION

#### Classification

### **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
Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 1A
Specific target organ toxicity (single exposure)	Category 3
Aspiration toxicity	Category 1
Flammable aerosols	Category 1

# **Emergency Overview**

### Danger

# Hazard statements

Causes serious eye irritation
May cause genetic defects

May cause cancer

May cause drowsiness or dizziness

May be fatal if swallowed and enters airways

Extremely flammable aerosol

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Appearance No information available

Physical state Aerosol

Odor No information available

# **Precautionary Statements - Prevention**

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Wash face, hands and any exposed skin thoroughly after handling

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

#### **Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention

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 INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Do NOT induce vomiting

#### **Precautionary Statements - Storage**

Store locked up

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

### **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

# Hazards not otherwise classified (HNOC)

### Other Information

Unknown acute toxicity

13.23% of the mixture consists of ingredient(s) of unknown toxicity

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%	Trade Secret
Acetone	67-64-1	10 - 30	*
Propane	74-98-6	10 - 30	*
Aliphatic Hydrocarbon	64742-49-0	10 - 30	*
Graphite	7782-42-5	10 - 30	*
Butane	106-97-8	7 - 13	*
Methyl Ethyl Ketone	78-93-3	3 - 7	*
Solvent Naphtha, Light Aliphatic	64742-89-8	3 - 7	*
Crystalline Silica	14808-60-7	0.1 - 1	*

<sup>\*</sup>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.

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Eye contact 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. Call a physician immediately. Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and

upper eyelids. Consult a physician. If symptoms persist, call a physician.

**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** Immediate medical attention is required. Remove to fresh air. If not breathing, give artificial

respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a

physician.

Ingestion Do NOT induce vomiting. Call a physician or poison control center immediately. Never give

anything by mouth to an unconscious person. Clean mouth with water and drink afterwards

plenty of water. 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

No information available.

**Explosion data** 

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

### Protective equipment and precautions for firefighters

In the event of fire and/or explosion do not breathe fumes.

### 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. Cover powder spill with plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal.

Methods for cleaning up

Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labeled containers. 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. Avoid contact with eyes. Avoid breathing vapors or mists. Contents under pressure. Do not puncture or incinerate cans. Do not stick pin or any other sharp object into opening on top of can.

### Conditions for safe storage, including 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.

**Incompatible materials** Strong acids. Strong oxidizing agents. Chlorinated compounds.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control parameters

**Exposure Guidelines** 

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Acetone	STEL: 500 ppm	TWA: 1000 ppm	IDLH: 2500 ppm
67-64-1	TWA: 250 ppm	TWA: 2400 mg/m <sup>3</sup>	TWA: 250 ppm
		(vacated) TWA: 750 ppm	TWA: 590 mg/m <sup>3</sup>
		(vacated) TWA: 1800 mg/m <sup>3</sup>	
		(vacated) STEL: 2400 mg/m <sup>3</sup> The	
		acetone STEL does not apply to the	
		cellulose acetate fiber industry. It is	
		in effect for all other sectors	
		(vacated) STEL: 1000 ppm	
Propane	: See Appendix F: Minimal	TWA: 1000 ppm	IDLH: 2100 ppm
74-98-6	Oxygen Content	TWA: 1800 mg/m <sup>3</sup>	TWA: 1000 ppm
		(vacated) TWA: 1000 ppm	TWA: 1800 mg/m <sup>3</sup>
		(vacated) TWA: 1800 mg/m <sup>3</sup>	
Graphite	TWA: 2 mg/m³ respirable fraction	TWA: 15 mg/m3 total dust synthetic	IDLH: 1250 mg/m <sup>3</sup>
7782-42-5	all forms except graphite fibers	TWA: 5 mg/m³ respirable fraction	TWA: 2.5 mg/m³ natural respirable
		synthetic	dust
		(vacated) TWA: 2.5 mg/m <sup>3</sup>	
		respirable dust natural	
		(vacated) TWA: 10 mg/m <sup>3</sup> total dust	
		synthetic	
		(vacated) TWA: 5 mg/m³ respirable	
		fraction synthetic	
		TWA: 15 mppcf natural	
Butane	STEL: 1000 ppm	(vacated) TWA: 800 ppm	TWA: 800 ppm
106-97-8		(vacated) TWA: 1900 mg/m <sup>3</sup>	TWA: 1900 mg/m <sup>3</sup>
Methyl Ethyl Ketone	STEL: 300 ppm	TWA: 200 ppm	IDLH: 3000 ppm
78-93-3	TWA: 200 ppm	TWA: 590 mg/m <sup>3</sup>	TWA: 200 ppm
		(vacated) TWA: 200 ppm	TWA: 590 mg/m <sup>3</sup>
		(vacated) TWA: 590 mg/m <sup>3</sup>	STEL: 300 ppm
		(vacated) STEL: 300 ppm	STEL: 885 mg/m <sup>3</sup>
		(vacated) STEL: 885 mg/m <sup>3</sup>	

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Crystalline Silica 14808-60-7	TWA: 0.025 mg/m³ respirable fraction	(vacated) TWA: 0.1 mg/m³ respirable dust : (30)/(%SiO2 + 2) mg/m³ TWA total dust : (250)/(%SiO2 + 5) mppcf TWA	IDLH: 50 mg/m³ respirable dust TWA: 0.05 mg/m³ respirable dust
		respirable fraction : (10)/(%SiO2 + 2) mg/m³ TWA respirable fraction	

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 Aerosol

AppearanceNo information availableOdorNo information availableColorNo information availableOdor thresholdNo information available

Property Values Remarks • Method

PH
No information available
>= -42 °C / -44 °F
-104 °C / -155 °F
Evaporation rate
No information available
No information available

Flammability Limit in Air

Upper flammability limit:
Lower flammability limit:
Vapor pressure
Vapor density

No information available
No information available
No information available

Specific Gravity 0.77

Water solubility
Solubility in other solvents
Partition coefficient
Autoignition temperature
Decomposition temperature
Kinematic viscosity
No information available

Kinematic viscosity

Dynamic viscosity

Explosive properties

Oxidizing properties

No information available
No information available
No information available

#### **Other Information**

Softening pointNo information availableMolecular weightNo information availableVOC Content (%)No information available

**Density** 6.38 lbs/gal

Bulk density

No information available

Percent solids by weight 23.1% Percent volatile by weight 57.4% Percent solids by volume 11.9% Actual VOC (lbs/gal) 3.7 Actual VOC (grams/liter) 438.9 EPA VOC (lbs/gal) 4.5 EPA VOC (grams/liter) 540.7 EPA VOC (lb/gal solids) 30.8

# 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**

Strong acids. Strong oxidizing agents. Chlorinated compounds.

# **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
Acetone 67-64-1	3 3 ( /		= 50100 mg/m <sup>3</sup> ( Rat ) 8 h
Propane 74-98-6	-	-	= 658 mg/L (Rat)4 h
Aliphatic Hydrocarbon 64742-49-0	> 5000 mg/kg (Rat)	> 3160 mg/kg (Rabbit)	= 73680 ppm (Rat) 4 h
Butane 106-97-8	-	-	= 658 g/m³ (Rat) 4 h
Methyl Ethyl Ketone 78-93-3	= 2483 mg/kg (Rat) = 2737 mg/kg (Rat)	= 5000 mg/kg (Rabbit) = 6480 mg/kg (Rabbit)	= 11700 ppm (Rat) 4 h

Solvent Naphtha, Light Aliphatic 64742-89-8	-	= 3000 mg/kg ( Rabbit )	-
Crystalline Silica 14808-60-7	= 500 mg/kg(Rat)	-	-

### Information on toxicological effects

**Symptoms** No information available.

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

SensitizationNo information available.Germ cell mutagenicityNo information available.CarcinogenicityNo information available.

Chemical Name	ACGIH	IARC	NTP	OSHA
Crystalline Silica	A2	Group 1	Known	X
14808-60-7				

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 3 - Not classifiable as a human carcinogen

NTP (National Toxicology Program)

Known - Known Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity
STOT - single exposure
STOT - repeated exposure
Chronic toxicity
No information available.
No information available.
Avoid repeated exposure.

Target Organ Effects Central nervous system, Central Vascular System (CVS), Eyes, Respiratory system, Skin.

**Aspiration hazard** No information available.

#### Numerical measures of toxicity - Product Information

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

# 12. ECOLOGICAL INFORMATION

#### **Ecotoxicity**

66.24% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Acetone 67-64-1	-	4.74 - 6.33: 96 h Oncorhynchus mykiss mL/L LC50 6210 - 8120: 96 h Pimephales promelas mg/L LC50 static 8300: 96 h Lepomis macrochirus mg/L LC50	10294 - 17704: 48 h Daphnia magna mg/L EC50 Static 12600 - 12700: 48 h Daphnia magna mg/L EC50
Aliphatic Hydrocarbon 64742-49-0	-	-	2.6: 96 h Chaetogammarus marinus mg/L LC50
Methyl Ethyl Ketone 78-93-3	-	3130 - 3320: 96 h Pimephales promelas mg/L LC50 flow-through	520: 48 h Daphnia magna mg/L EC50 5091: 48 h Daphnia magna mg/L EC50 4025 - 6440: 48 h Daphnia magna mg/L EC50 Static
Solvent Naphtha, Light Aliphatic 64742-89-8	4700: 72 h Pseudokirchneriella subcapitata mg/L EC50	-	-

#### Persistence and degradability

No information available.

### **Bioaccumulation**

No information available.

Chemical Name Partition coefficient
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Acetone 67-64-1	-0.24
Propane 74-98-6	2.3
Butane 106-97-8	2.89
Methyl Ethyl Ketone 78-93-3	0.29

Other adverse effects No information available

# 13. DISPOSAL CONSIDERATIONS

#### Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated packaging Do not reuse container.

US EPA Waste Number U002 U159 U239

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Acetone	-	Included in waste stream:	-	U002
67-64-1		F039		
Methyl Ethyl Ketone	U159	Included in waste streams:	200.0 mg/L regulatory level	U159
78-93-3		F005, F039		

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

Chemical Name	California Hazardous Waste Status
Acetone 67-64-1	Ignitable
Methyl Ethyl Ketone 78-93-3	Toxic Ignitable

# 14. TRANSPORT INFORMATION

DOT

UN/ID no. UN1950
Proper shipping name Aerosols
Hazard Class 2.1

**Description** UN1950, Aerosols, 2.1

**Emergency Response Guide** 126

Number

**TDG** 

UN/ID no. UN1950
Proper shipping name Aerosols
Hazard Class 2.1

**Description** UN1950, Aerosols, 2.1

**MEX** 

UN/ID no. UN1950 Proper shipping name Aerosols

Hazard Class 2

**Description** UN1950, Aerosols, 2

ICAO (air)

**UN/ID no.** UN1950 **Proper shipping name** Aerosols

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Hazard Class 2.1

Special Provisions A145, A167

**Description** UN1950, Aerosols, 2.1

IATA

UN/ID no. UN1950

**Proper shipping name** Aerosols, flammable

Hazard Class 2.1 ERG Code 10L

Special Provisions A145, A167, A802

**Description** UN1950, Aerosols, flammable, 2.1

**IMDG** 

UN/ID no. UN1950
Proper shipping name Aerosols
Hazard Class 2
EmS-No. F-D, S-U

**Special Provisions** 63,190, 277, 327, 344, 959

**Description** UN1950, Aerosols, 2

RID

UN/ID no. UN1950
Proper shipping name Aerosols
Hazard Class 2.1
Classification code 5F

**Description** UN1950, Aerosols, 2.1

<u>ADR</u>

UN/ID no. UN1950
Proper shipping name Aerosols
Hazard Class 2.1
Classification code 5F
Tunnel restriction code (D)

**Special Provisions** 190, 327, 344, 625

**Description** UN1950, Aerosols, 2.1, (D)

Labels 2.1

ADN

Proper shipping name Aerosols
Hazard Class 2.1
Classification code 5F

**Special Provisions** 190, 327, 344, 625 **Description** UN1950, Aerosols, 2.1

Hazard label(s) 2.1 Limited quantity (LQ) 1 L

Ventilation VE01, VE04

# 15. REGULATORY INFORMATION

**International Inventories** 

**TSCA** Complies **DSL/NDSL** Complies \* **EINECS/ELINCS** Complies \* **ENCS** Does not comply \* **IECSC** Complies \* Complies \* **KECL PICCS** Does not comply \* Does not comply \* **AICS** 

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

<sup>\*</sup> This product contains an unknown chemical, therefore, this product's compliance to the inventory list is NOT DETERMINED

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 Yes
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)
Acetone 67-64-1	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final 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 contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65	
Crystalline Silica - 14808-60-7	Carcinogen	
Ethyl Benzene - 100-41-4	Carcinogen	

# U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Acetone 67-64-1	X	X	X
Propane 74-98-6	Χ	X	X
Graphite 7782-42-5	X	X	X
Butane 106-97-8	X	X	X
Methyl Ethyl Ketone 78-93-3	X	X	X
Ethylene Glycol Butyl Ether 111-76-2	X	X	X
Vinyl Toluene 25013-15-4	X	X	X
Propylene Glycol Methyl Ether 107-98-2	Х	Х	X
Crystalline Silica 14808-60-7	Х	Х	Х
Xylene 1330-20-7	Х	Х	X
Ethyl Benzene 100-41-4	Х	Х	Х

Cobalt neodecanoate 27253-31-2	X	-	Х
Neo C9-13 Acid, Cobalt Salts 68955-83-9	X	•	Х
Stoddard Solvent 8052-41-3	X	Х	X
Diethylene Glycol Methyl Ether 111-77-3	X	Х	Х

#### U.S. EPA Label Information

**EPA Pesticide Registration Number** Not applicable

# Hazardous air pollutants (HAPS) content

This product contains no reportable Hazardous Air Pollutants

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

NFPA Health hazards 2 Flammability 4 Instability 0 Physical and Chemical Properties \*

**HMIS** Health hazards 2 \* Flammability 4 Physical hazards 0 Personal protection X

Chronic Hazard Star Legend \*= Chronic Health Hazard

Revision Date 15-Jul-2015

**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**