



Safety Data Sheet

Issuing Date: December 26, 2014

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Revision Number: 1

1. Identification of the Substance/Preparation and the Company Undertaking

GHS Product Identifier

Product Name High Purity Nuclear Grade Fine Tip stainless Steel Marker

Other Means of Identification

Part Number 33916

Color Yellow

Formula Code Solvent Based marker

Temperature Range -20 to 150°F

Synonyms none

Recommended use of the chemical and restrictions on use

Recommended Use Marker

Uses Advised Against No information available

Supplier's Details

Supplier Address

SKM Industries Inc.

1012 Underwood Road

Olyphant, Pa 18447

Telephone: 570-383-3062

Emergency Telephone Number

Chemtrec US 800-424-9300 International 703-527-3887

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous according to the OSHA Hazard Communications Standard 2012 (29 CFR 1910.1200)

Flammable Liquid Category 3

Skin Corrosion/Irritation Category 2

Serious eye damage/Eye Irritation Category 2A

Acute Toxicity Inhalation Category 4

Acute Toxicity Skin Category 4

Aspiration Hazard Category 1

Carcinogenicity Inhalation Category 2

Specific target Organ Toxicity (single Exposure) respiratory tract irritation Category 3

Specific target Organ Toxicity (repeated Exposure) Inhalation Category 2

GHS Label Elements, including precautionary statements

Emergency Overview

Signal Word – Danger

Hazard Statements –

Causes skin irritation.

Causes serious eye irritation.

May cause respiratory irritation.

Harmful if inhaled.

Harmful in contact with skin.

May be fatal if swallowed and enters airways.

May cause damage to organs through prolonged or repeated exposure by inhalation.

Suspected of causing cancer if inhaled.

Flammable liquid and vapor.



Appearance – Opaque, varies white and colored

Physical state- Thin viscosity liquid

Odor – Petroleum Odor

Precautionary Statements

Prevention

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

Obtain special instructions before use

Keep container tightly closed

Use only in a well ventilated area

Do not breathe dust/vapors/fumes

Wash face and hands and any exposed skin thoroughly after handling

Wear protective gloves/clothing/eye protection/face protection

Keep away from heat/sparks/flame hot surfaces – no smoking

Use explosion proof electrical/ventilating/lighting equipment

Ground/bond container and receiving equipment.

Use non sparking tools

Take precautionary measures against static discharge

Response:

If exposed or concerned: get medical attention/advice.

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): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention.

If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.

If swallowed: Immediately call a poison center/doctor. Do not induce vomiting.

In case of fire: Use CO₂, dry chemical, foam or water spray to extinguish.

Storage:

Store in a well-ventilated place.

Keep cool.

Store locked up.

Keep container tightly closed.

Disposal

Dispose of contents/container in approved waste disposal plant.

General Advice

If exposed or concerned: get medical attention/advice

ACUTE HAZARD: At high concentration, dizziness and unconsciousness may occur.

CAUTION: Contains xylene. Harmful or fatal if swallowed. Avoid inhalation. Direct contact may cause skin or eye irritation.

KEEP OUT OF REACH OF CHILDREN.

Fire

Use CO2, dry chemical, foam, or water spray

Spills and Leaks

Contain and collect spillage

Hazard not Otherwise Classified (HNOC)

IARC (International Agency for Research of Cancer) has classified Titanium Dioxide as a possible human carcinogen (2B).

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS -No	Weight %	Trade Secret
Aromatic Hydrocarbon	64742-95-6	26-36	*
Titanium Dioxide	13463-67-7	32-42	
Rosin Based Resin	68152-57-8	15-25	
Xylene	1330-20-7	1-5	*
1,2,4 Trimethyl Benzene	95-63-6	1-5	
C.I. Solvent yellow	56 2481-94-9	1-5	*

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

4. FIRST AID MEASURES

Description of necessary first-aid measures

- General Advice** In case of doubt, or when symptoms persist, seek medical attention. Do not leave victim unattended.
- Eye Contact** Immediately flush eyes with plenty of water for at least fifteen (15) minutes. Remove contact lenses. Get medical attention immediately.
- Skin Contact** Flush skin with plenty of water. Remove contaminated clothing. Wash skin thoroughly with soap and water or use a proprietary skin cleanser.
- Inhalation:** Remove to fresh air, keep patient warm and at rest. If breathing is irregular seek medical advice. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention immediately.
- Ingestion** Seek medical attention immediately. Do not induce vomiting. Never give anything by mouth to an unconscious person.

Protection of First Aiders Use personal protection equipment.

Most important symptoms/effects, acute and delayed

Most important symptoms/effects Drowsiness, blurred vision if concentrated and inhaled.

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

Note to physician Treat symptomatically

5. FIRE-FIGHTING MEASURES

FLASH POINT: 108°F (TCC) ASTM D56 Note: Minimum

FLAMMABLE LIMITS: LEL 0.9 UEL 6.0 @ 77°F Note: Approximate

Suitable Extinguishing Media

Dry chemical, carbon dioxide, alcohol resistant foam. For large fires, use foam. Shut off flow and allow to burn out.

Unsuitable extinguishing media High volume water jet

Specific Hazards arising from the chemical Vapors explosive if collected. Vapors are heavier than air and may travel along ground, or be moved by ventilation and be ignited by ignition source. Do not allow run off from fire-fighting to run into drains or water courses. If run-off occurs, notify proper authorities.

Protective Equipment and Precautions for Firefighters

Wear appropriate self-contained breathing apparatus MSHA/NIOSH (approved or equivalent) and full protective gear. Cool closed containers exposed to fire with water spray. Avoid inhalation of material or combustion by-products; stay upwind.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Avoid breathing vapours. Evacuate personnel to safe areas. Ensure adequate ventilation. Use personal protective equipment.

Environmental Precautions Avoid release into the environment. Do not allow to enter drains or watercourses. If the product contaminates rivers, lakes or drains, inform respective authorities.

Methods and materials for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Contain the spillage with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth to soak up the product and place in a suitable container for disposal in accordance with the waste regulations

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Avoid skin and eye contact. Avoid the inhalation of vapor and mist. Keep away from open flame and sources of ignition.

Conditions for safe storage, including any incompatibilities

Storage Keep away for open flame, hot surfaces and sources of ignition. Keep containers tightly closed. Observe label precautions. Store between 5-25° C in a dry, well ventilated place. Prevent unauthorized access.

Information on this Material Safety Data Sheets refers to ink used in pens and markers; however, it applies to these inks in bulk. The inks are contained in capillary or valve reservoirs and will not spill or leak under normal conditions

Incompatible products Strong oxidizing and reducing agents, strong alkalis and strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

Ingredient	CAS No.	OSHA PEL	ACGIH-TLV	Recommended
Aromatic Hydrocarbon	64742-95-6	TWA 100 ppm	TWA 100 ppm	No Data
Titanium Dioxide	13463-67-7	TWA 10mg/m3	TWA 10mg/m3	Nuisance dust
Rosin Based Resin	68152-57-8	TWA 15mg/m3	TWA 10mg/m3	Nuisance dust
Xylene	1330-20-7	TWA 100 ppm	TWA 100 ppm	No Data
1,2,4,Trimethyl Benzene	95-63-6	TWA 100 ppm	TWA 100 ppm	No Data
C.I. Solvent Yellow	56 2481-94-9	No Data	No Data	Nuisance dust

*Nuisance dust as free dust only, not as bound in paint or ink.

Appropriate engineering controls

Engineering Measures Showers, eyewash stations, ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face protection None under normal use conditions. Avoid eye contact. Wear chemical splash goggles in compliance with OSHA regulation if splashing is possible

Skin and body Protection None under normal use conditions. Avoid repeated or prolonged contact with skin. Wear impervious gloves if needed to prevent possible skin irritation.

Respiratory Protection None under normal use conditions. Use with adequate ventilation. If irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn

Hygiene Measures Use in a well-ventilated area. When using do not eat, drink, or smoke. Provide regular cleaning of equipment, work areas and clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<u>Property</u>	<u>Value</u>
Boiling Point:	318-338°F
Specific Gravity (H2O = 1)	0.87@60°F
Vapor Pressure:	2.09@68°F
Melting Point:	7°F
Vapor Density (Air=1)	>1
Evaporation (BA=1)	0.3
Solubility in Water:	0.02@77°F
Appearance and Order:	Viscous liquid
Order	Aromatic odor

10. STABILITY AND REACTIVITY

Reactivity No data available

Chemical Stability Stable under normal storage and handling conditions

Possibility of Hazardous reactions None under normal use

Hazardous Polymerization Will not occur

Conditions to Avoid Heat, open flame, sparks, and sources of ignition

Incompatible Materials Strong oxidizing and reducing agents, strong alkalis and strong acids

Hazardous Decomposition Products No decomposition if stored and applied as directed.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information There is no data available on the product itself.

Chemical	CAS No	LD50 oral	LD50 Dermal	LD50 Inhalation
Xylene	1330-20-7	3500 mg/kg rat	4350 mg/kg rabbit	29.08 mg/l rat
Titanium dioxide	13463-67-7	1000 mg/kg rat	-	-
1,2,4 Trimethyl Benzene	95-63-6	3280 mg/kg rat	>3160 mg/kg rabbit	18 g/m3 rat 4 hr

12. ECOLOGICAL INFORMATION

Ecotoxicity There is no data available on the product itself

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods Dispose of in accordance with all applicable local, state and federal regulations. Do not allow to enter into drains, water courses or the soil.

Contaminated Packaging Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOMESTIC HIGHWAY (Containers < 1 Quart are ORM-D)
 PROPER SHIPPING NAME: Ink/Paint
 HAZARD CLASS/SUBSIDIARY HAZARD: 3
 UN/NA NO. UN1263
 PACKING GROUP: III
 LABEL REQUIRED: Combustible Liquid
 DOMESTIC AIR SHIPMENTS (PENS)

15. Regulatory Information

U.S. FEDERAL REGULATIONS:

OSHA: Hazardous by definition of Hazard Communications Standard (29 CFR 1910.1200)

SECTION 313 REPORTING REQUIREMENTS:

Section 313 or Title III of SARA. This product contains a chemical which is subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations Part 372.

Xylene 1330-20-7 5-10% wt SARA 313 threshold value 1.0 %
1,2,4 Tri Methyl Benzene 95-63-6 1-5 % wt SARA 313 threshold value 1.0 %

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

INTERNATIONAL REGULATIONS:

CANADIAN WHMIS: Not WHMIS controlled (pens)

STATE REGULATIONS:

CALIFORNIA PROPOSITION 65: WARNING: This product contains a chemical known to the State of California to cause cancer. Titanium Dioxide 13463-67-7 carcinogen

US State Right to Know Regulations

Chemical	New Jersey	Mass	Penn	Illinoise	Rhode Island
Titanium Dioxide		Listed			
1,2,4 Tri Methyl Benzene	Listed	Listed	Listed	Listed	Listed
Xylene	Listed	Listed	Listed	Listed	Listed

TSCA All components of this product comply with the US toxic substance control act (TSCA).

OTHERS This product does not contain chemicals known to deplete the ozone layer.

16. OTHER INFORMATION

Health Hazard 1 Flammability 2 Reactivity 0 Personal Protection B

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End of Safety Data Sheet