

SAFETY DATA SHEET

Published DateRevision DateRevision NumberMay-15-2019May-15-20192.5

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product code 59628

Product name Transparent Gold

Product category 59000 Series SV Enamel Screen Ink

Other means of identification

Synonyms None

Recommended use of the chemical and restrictions on use
Recommended use Printing operations

Details of the supplier of the safety data sheet

UNITED STATES
UNITED KINGDOM
Nazdar Company
Nazdar Limited
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Tel: +001-800-677-4657 Tel: +44 161 442 2111

Fax: +001-913-422-2294 www.nazdar.com

Emergency telephone number

USA: Chemtrec: +001-800-424-9300 Outside USA: Chemtrec: +001-703-527-3887

24 Hour Emergency Phone Number

2. HAZARDS IDENTIFICATION

Classification

Skin sensitization	Category 1A - (H317)
Specific target organ toxicity (repeated exposure)	Category 1 - (H372)
Aspiration toxicity	Category 1 - (H304)
Flammable liquids	Category 3 - (H226)

Label elements







Signal Word Danger

Hazard Statements

H304 - May be fatal if swallowed and enters airways

H317 - May cause an allergic skin reaction

H372 - Causes damage to organs through prolonged or repeated exposure

H226 - Flammable liquid and vapor

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Precautionary Statements

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

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention

P264 - Wash face, hands and any exposed skin thoroughly after handling

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

P314 - Get medical advice/attention if you feel unwell

P331 - Do NOT induce vomiting

P233 - Keep container tightly closed

P280 - Wear protective gloves/protective clothing/eye protection/face protection

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

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

Hazards not otherwise classified (HNOC)

Causes mild skin irritation.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Component	CAS-No	Weight %	Trade Secret	Note
Stoddard solvent	8052-41-3	30 - 60	*	
Xylenes (o-, m-, p- isomers)	1330-20-7	1 - 5	*	
Naphtha, petroleum, hydrotreated heavy	64742-48-9	1 - 5	*	
2-Butanone, oxime	96-29-7	< 0.5	*	
Ethyl benzene (constituent)	100-41-4	< 0.5	*	1
Cobalt Compounds	Trade Secret	< 0.5	*	

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

Note 1. Type of chemical: Constituent

4. FIRST AID MEASURES

Description of first aid measures

General Advice Show this safety data sheet to the doctor in attendance.

Eye Contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and

continue flushing for at least 15 minutes. Get medical attention if irritation develops and

persists.

Skin Contact Wash off immediately with soap and plenty of water for at least 15 minutes. Remove

contaminated clothing. If irritation (redness, rash, blistering) develops, get medical attention.

Inhalation Remove person to fresh air and keep comfortable for breathing. If breathing is irregular or

stopped, administer artificial respiration. Get medical attention immediately.

Ingestion Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a

physician or poison control center immediately.

Most important symptoms and effects, both acute and delayed

None under normal use conditions.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Foam. Carbon dioxide (CO2). Dry chemical. Water spray. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

No information available.

Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating gases and vapors. May emit toxic fumes under fire conditions.

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. Cool containers / tanks with water spray. Sealed containers may rupture when heated.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Remove all sources of ignition. Ventilate the area. Avoid contact with eyes, skin and

clothing. Avoid breathing dust or vapor. Evacuate personnel to safe areas. Keep people

away from and upwind of spill/leak.

Environmental precautions

Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. Keep out of drains, sewers, ditches and waterways. Local authorities should be advised if significant spillages cannot be contained.

Methods and material for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Use clean non-sparking tools to collect absorbed material.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Use personal protective equipment as required. Do not eat, drink or smoke when using this

product. Ensure adequate ventilation.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from

open flames, hot surfaces and sources of ignition. Keep container closed when not in use.

Keep out of the reach of children.

Incompatible Products Strong acids. Strong bases. Strong oxidizing agents. Reducing agent.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits

Component	ACGIH TLV
Stoddard solvent	TWA: 100 ppm
8052-41-3	
Xylenes (o-, m-, p- isomers)	TWA: 100 ppm
1330-20-7	STEL: 150 ppm
Ethyl benzene (constituent)	TWA: 20 ppm
100-41-4	

Component	OSHA PEL
Stoddard solvent	TWA: 500 ppm
8052-41-3	TWA: 2900 mg/m ³
Xylenes (o-, m-, p- isomers)	TWA: 100 ppm
1330-20-7	TWA: 435 mg/m ³
Ethyl benzene (constituent)	TWA: 100 ppm
100-41-4	TWA: 435 mg/m ³

Component	OSHA PEL (vacated)

	TWA: 100 ppm TWA: 525 mg/m ³
1330-20-7	TWA: 100 ppm TWA: 435 mg/m³ STEL: 150 ppm STEL: 655 mg/m³
100-41-4	TWA: 100 ppm TWA: 435 mg/m³ STEL: 125 ppm STEL: 545 mg/m³

Component	Ontario TWAEV
Stoddard solvent	TWA: 525 mg/m ³
8052-41-3	
Xylenes (o-, m-, p- isomers)	TWA: 100 ppm
1330-20-7	STEL: 150 ppm
Ethyl benzene (constituent)	TWA: 20 ppm
100-41-4	

Component	Mexico OEL (TWA)
Stoddard solvent	TWA/VLE-PPT: 100 ppm
8052-41-3	TWA/VLE-PPT: 523 mg/m ³
	STEL/PPT-CT: 200 ppm
	STEL/PPT-CT: 1050 mg/m ³
Xylenes (o-, m-, p- isomers)	TWA/VLE-PPT: 100 ppm
1330-20-7	TWA/VLE-PPT: 435 mg/m ³
	STEL/PPT-CT: 150 ppm
	STEL/PPT-CT: 655 mg/m ³
Ethyl benzene (constituent)	TWA/VLE-PPT: 100 ppm
100-41-4	TWA/VLE-PPT: 435 mg/m ³
	STEL/PPT-CT: 125 ppm
	STEL/PPT-CT: 545 mg/m ³

Appropriate engineering controls

Engineering Measures

Provide a good standard of general ventilation. Natural ventilation is from doors, windows etc. Controlled ventilation means air is supplied or removed by a powered fan. Users are advised to consider national Occupational Exposure Limits or other equivalent values. In case of insufficient ventilation, wear suitable respiratory equipment.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Wear safety glasses with side shields (or goggles). If splashes are likely to occur:. Wear

suitable face shield. Ensure that eyewash stations and safety showers are close to the

workstation location.

Skin Protection Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls,

as appropriate, to prevent skin contact.

Hand Protection Chemical resistant protective gloves.

Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding >480 minutes of permeation time): eg. nitrile rubber (0.4 mm), chloroprene

rubber (0.5 mm), polyvinylchloride (0.7 mm) and other

Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers. Taking into account the varying conditions, the practical usage of a

chemical-protective glove in practice may be much shorter than the permeation time

determined through testing.

Due to different glove types, the manufacturer's directions for use should be observed. Replace gloves immediately when torn or any change in appearance is noticed such as

dimension, color, flexibility.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations. Selection of air-purifying or positive-pressure supplied-air will depend on the specific operation and the potential airborne concentration of

the material.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice. Wash hands before eating, drinking or smoking. Wash contaminated clothing before reuse. Avoid contact with eyes, skin and clothing. Wear suitable gloves and eye/face protection. Regular cleaning of equipment, work area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State Liquid **Appearance** Colored Liquid

Odor Characteristic **Odor Threshold** No information available

Property Values Remarks • Method

No data available Hq

Melting Point / Freezing Point No data available

> 149 °C / 300 °F **Boiling Point / Boiling Range**

Flash Point 46 °C / 115 °F Setaflash closed cup

Evaporation rate No data available

Flammability Limit in Air

Upper flammability limit No data available Lower flammability limit No data available **Vapor Pressure** No data available

Vapor Density No data available

Specific Gravity 0.94

Water Solubility No data available Solubility in other solvents No data available Partition coefficient: n-octanol/water No data available

No data available **Autoignition Temperature** No data available **Decomposition temperature** Kinematic viscosity No data available

Dynamic viscosity No data available

Explosive Properties No data available **Oxidizing Properties** No data available

Other Information

Photochemically Reactive No Weight Per Gallon (lbs/gal) 7.88

VOC by weight %	VOC by volume %	VOC lbs/gal	VOC grams/liter
(less water)	(less water)	(less water)	(less water)
39.81	No information available	3.14	375.81

10. STABILITY AND REACTIVITY

Reactivity

No information available.

Chemical stability

Stable under normal conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Keep away from open flames, hot surfaces and sources of ignition.

Incompatible materials

Strong acids. Strong bases. Strong oxidizing agents. Reducing agent.

Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating gases and vapors. Carbon dioxide (CO2). Carbon monoxide.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

InhalationSpecific test data for the substance or mixture is not available.Eye ContactSpecific test data for the substance or mixture is not available.Skin ContactSpecific test data for the substance or mixture is not available.IngestionSpecific test data for the substance or mixture is not available.

Component	Oral LD50	
Xylenes (o-, m-, p- isomers) 1330-20-7	= 3500 mg/kg (Rat)	
Naphtha, petroleum, hydrotreated heavy 64742-48-9	> 6000 mg/kg (Rat)	
2-Butanone, oxime 96-29-7	= 930 mg/kg (Rat)	
Ethyl benzene (constituent) 100-41-4	= 3500 mg/kg (Rat)	

Component	Dermal LD50
Xylenes (o-, m-, p- isomers)	> 4350 mg/kg (Rabbit)
1330-20-7	
Naphtha, petroleum, hydrotreated heavy	> 3160 mg/kg (Rabbit)
64742-48-9	
2-Butanone, oxime	1000 - 1800 mg/kg (Rabbit)
96-29-7	
Ethyl benzene (constituent)	= 15400 mg/kg (Rabbit)
100-41-4	
Cobalt Compounds	> 5000 mg/kg (Rabbit)
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Component	Inhalation LC50
Xylenes (o-, m-, p- isomers) 1330-20-7	= 29.08 mg/L (Rat) 4 h
Naphtha, petroleum, hydrotreated heavy 64742-48-9	> 8500 mg/m³ (Rat) 4 h
2-Butanone, oxime 96-29-7	> 4.83 mg/L (Rat)4 h
Ethyl benzene (constituent) 100-41-4	= 17.4 mg/L (Rat)4 h
Cobalt Compounds	> 10 mg/L (Rat) 1 h

Information on toxicological effects

Symptoms Specific test data for the substance or mixture is not available.

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

Skin corrosion/irritationSpecific test data for the substance or mixture is not available.Eye damage/irritationSpecific test data for the substance or mixture is not available.IrritationSpecific test data for the substance or mixture is not available.CorrosivitySpecific test data for the substance or mixture is not available.

Sensitization Specific test data for the substance or mixture is not available. May cause an allergic skin

reaction. (based on components).

Mutagenic EffectsSpecific test data for the substance or mixture is not available.Carcinogenic effectsSpecific test data for the substance or mixture is not available.Reproductive EffectsSpecific test data for the substance or mixture is not available.STOT - single exposureSpecific test data for the substance or mixture is not available.

STOT - repeated exposure Specific test data for the substance or mixture is not available. Causes damage to organs

through prolonged or repeated exposure. (based on components).

Chronic Toxicity Specific test data for the substance or mixture is not available

Aspiration hazard Specific test data for the substance or mixture is not available. May be fatal if swallowed and enters airways. (based on components).

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	ACGIH
Ethyl benzene (constituent)	A3
100-41-4	

Component	IARC
Ethyl benzene (constituent)	Group 2B
100-41-4	
Cobalt Compounds	Group 2B

Component	OSHA
Ethyl benzene (constituent)	X
100-41-4	
Cobalt Compounds	X

Numerical measures of toxicity - Product Information

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

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

ATEmix (dermal) 58,333.00 mg/kg ATEmix (inhalation-dust/mist) 79.50 mg/l ATEmix (inhalation-vapor) 583.00 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Specific test data for the substance or mixture is not available.

 $0.33\ \%$ of the mixture consists of component(s) of unknown hazards to the aquatic environment

Component	Algae/aquatic plants
2-Butanone, oxime	72h EC50 Desmodesmus subspicatus: = 83 mg/L
96-29-7	
Ethyl benzene (constituent)	96h EC50 Pseudokirchneriella subcapitata: > 438 mg/L
100-41-4	96h EC50 Pseudokirchneriella subcapitata: 1.7 - 7.6 mg/L static
	72h EC50 Pseudokirchneriella subcapitata: = 4.6 mg/L
	72h EC50 Pseudokirchneriella subcapitata: 2.6 - 11.3 mg/L static

Component	Fish
Xylenes (o-, m-, p- isomers)	96h LC50 Oncorhynchus mykiss: 2.661 - 4.093 mg/L (static)
1330-20-7	96h LC50 Lepomis macrochirus: 7.711 - 9.591 mg/L (static)
	96h LC50 Lepomis macrochirus: 13.1 - 16.5 mg/L (flow-through)
	96h LC50 Poecilia reticulata: 30.26 - 40.75 mg/L (static)
	96h LC50 Oncorhynchus mykiss: 13.5 - 17.3 mg/L
	96h LC50 Lepomis macrochirus: = 19 mg/L
	96h LC50 Cyprinus carpio: = 780 mg/L (semi-static)
	96h LC50 Cyprinus carpio: > 780 mg/L
	96h LC50 Pimephales promelas: = 13.4 mg/L (flow-through)
	96h LC50 Pimephales promelas: 23.53 - 29.97 mg/L (static)
Naphtha, petroleum, hydrotreated heavy	96h LC50 Pimephales promelas: = 2200 mg/L
64742-48-9	
2-Butanone, oxime	96h LC50 Pimephales promelas: 777 - 914 mg/L (flow-through)
96-29-7	96h LC50 Poecilia reticulata: = 760 mg/L (static)
Ethyl benzene (constituent)	96h LC50 Pimephales promelas: 7.55 - 11 mg/L (flow-through)
100-41-4	96h LC50 Poecilia reticulata: = 9.6 mg/L (static)
	96h LC50 Oncorhynchus mykiss: 11.0 - 18.0 mg/L (static)
	96h LC50 Pimephales promelas: 9.1 - 15.6 mg/L (static)
	96h LC50 Oncorhynchus mykiss: = 4.2 mg/L (semi-static)

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	96h LC50 Lepomis macrochirus: = 32 mg/L (static)
Component	Crustacea
Xylenes (o-, m-, p- isomers) 1330-20-7	48h EC50 water flea: = 3.82 mg/L 48h LC50 Gammarus lacustris: = 0.6 mg/L
2-Butanone, oxime 96-29-7	48h EC50 Daphnia magna: = 750 mg/L
Ethyl benzene (constituent)	48h FC50 Daphnia magna: 1.8 - 2.4 mg/l

Persistence and Degradability

No information available.

Bioaccumulation

100-41-4

No information available

Component	Partition coefficient
Xylenes (o-, m-, p- isomers)	2.77 - 3.15
1330-20-7	
2-Butanone, oxime	0.65
96-29-7	
Ethyl benzene (constituent)	3.2
100-41-4	

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Disposal Methods Contain and dispose of waste according to local regulations.

Contaminated Packaging Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. TRANSPORT INFORMATION

Note: This information is not intended to convey all specific transportation requirements relating to

this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation information can be found in the specific regulations for your mode of transportation. It is the responsibility of the transporting organization to follow all applicable laws, regulations and

rules relating to the transportation of the material.

DOT In the U.S. and Canada, this material may be reclassified as a combustible liquid and is not

regulated, via surface transportation, in containers less than 119 gallons or 450 liters [per 49 CFR 173.150 (f)] [per Transportation of Dangerous Goods Regulations/Clear Language

Part 1.33].

UN/ID no. UN1210

Proper Shipping Name Printing Ink

Hazard Class 3
Packing Group III

ICAO / IATA / IMDG / IMO

UN/ID no. UN1210

Proper Shipping Name Printing Ink

Hazard Class 3 Packing Group III

15. REGULATORY INFORMATION

59628 Transparent Gold

International Inventories

All components are listed on the TSCA Inventory. For further information, please contact:. Supplier (manufacturer/importer/downstream user/distributor).

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Component	CAS-No	Weight %	SARA 313 - Threshold Values
Xylenes (o-, m-, p- isomers)	1330-20-7	1 - 5	1.0
Ethyl benzene (constituent)	100-41-4	< 0.5	0.1

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains the following substances which are listed hazardous air pollutants (HAPS) under Section 112 of the Clean Air

Component	CAS-No	Weight %
Xylenes (o-, m-, p- isomers)	1330-20-7	1 - 5
Ethyl benzene (constituent)	100-41-4	< 0.5
Cobalt Compounds	Trade Secret	< 0.5

U.S. State Regulations

	Massachusetts Right To Know
Stoddard solvent 8052-41-3	X
Xylenes (o-, m-, p- isomers) 1330-20-7	х
Ethyl benzene (constituent) 100-41-4	X

Component	Minnesota Right To Know
Stoddard solvent 8052-41-3	X
Xylenes (o-, m-, p- isomers) 1330-20-7	X
2-Butanone, oxime 96-29-7	X
Ethyl benzene (constituent) 100-41-4	X

Component	New Jersey Right To Know
Stoddard solvent	v
	 ^
8052-41-3	
Xylenes (o-, m-, p- isomers)	ĮΧ
1330-20-7	
Ethyl benzene (constituent)	X
100-41-4	
Cobalt Compounds	X
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Component	Pennsylvania
	Right To Know
Stoddard solvent	X
8052-41-3	
Xylenes (o-, m-, p- isomers)	X
1330-20-7	
Ethyl benzene (constituent)	X

100-41-4	
Cobalt Compounds	X

California Prop. 65

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm

Component	California Prop. 65
Ethyl benzene (constituent)	Carcinogen

Canada

Component	NPRI - National Pollutant Release Inventory		
Stoddard solvent 8052-41-3	Part 5, Other Groups and Mixtures		
Xylenes (o-, m-, p- isomers) 1330-20-7	Part 5, Isomer Groups; Part 4 Substance		
Naphtha, petroleum, hydrotreated heavy 64742-48-9	Part 5, Other Groups and Mixtures		
Ethyl benzene (constituent) 100-41-4	Part 1, Group A Substance; Part 4 Substance		
Cobalt Compounds	Part 1, Group B Substance		

16. OTHER INFORMATION					
HMIS:	Health 1 *	Flammability 2	Reactivity 0	Personal Protection	

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average)
STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value

ACGIH: (American Conference of Governmental Industrial Hygienists)

A1 - Known Human Carcinogen

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

IARC: (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans Group 2B - Possibly Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Human NTP: (National Toxicity Program)

Known - Known Carcinogen

Reasonably Anticipated to be a Human Carcinogen OSHA: (Occupational Safety & Health Administration)

X - Present

Revision Date May-15-2019

Pursuant to NOM-018-STPS-2015

This information within is considered correct but is not exhaustive and will be used for guidance only, which is based on the current knowledge of the substance or mixture and is applicable to the appropriate safety precautions for the product.

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.

End of Safety Data Sheet