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

**Product identifier**

**Product code** 59612  
**Product name** Transparent Medium Yellow  
**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
8501 Hedge Lane Terrace	Barton Road
Shawnee, KS 66227	Heaton Mersey
Tel: +001-913-422-1888	Stockport, England SK4 3EG
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

**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	*	
Naphtha, petroleum, hydrotreated heavy	64742-48-9	1 - 5	*	
Xylenes (o-, m-, p- isomers)	1330-20-7	1 - 5	*	
2-Butanone, oxime	96-29-7	< 1	*	
Ethyl benzene (constituent)	100-41-4	< 0.5	*	1
Cobalt Compounds	Trade Secret	< 0.5	*	
Calcium 2-ethylhexanoate	136-51-6	< 0.5	*	
Hexanoic acid, 2-ethyl, zinc salt	136-53-8	< 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 (CO<sub>2</sub>). 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 8052-41-3	TWA: 100 ppm
Xylenes (o-, m-, p- isomers) 1330-20-7	TWA: 100 ppm STEL: 150 ppm
Ethyl benzene (constituent) 100-41-4	TWA: 20 ppm

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

Component	OSHA PEL (vacated)
Stoddard solvent 8052-41-3	TWA: 100 ppm TWA: 525 mg/m <sup>3</sup>
Xylenes (o-, m-, p- isomers) 1330-20-7	TWA: 100 ppm TWA: 435 mg/m <sup>3</sup> STEL: 150 ppm STEL: 655 mg/m <sup>3</sup>
Ethyl benzene (constituent) 100-41-4	TWA: 100 ppm TWA: 435 mg/m <sup>3</sup> STEL: 125 ppm STEL: 545 mg/m <sup>3</sup>

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

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

### **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

<b>Physical State</b>	Liquid	<b>Appearance</b>	Colored Liquid
<b>Odor</b>	Characteristic	<b>Odor Threshold</b>	No information available
<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>	
pH		No data available	
Melting Point / Freezing Point		No data available	
Boiling Point / Boiling Range	> 149 °C / 300 °F		
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	0.97		
Water Solubility		No data available	
Solubility in other solvents		No data available	
Partition coefficient: n-octanol/water		No data available	
Autoignition Temperature		No data available	
Decomposition temperature		No data available	
Kinematic viscosity		No data available	
Dynamic viscosity		No data available	
<b>Explosive Properties</b>	No data available		
<b>Oxidizing Properties</b>	No data available		

### Other Information

Photochemically Reactive      No  
 Weight Per Gallon (lbs/gal)      8.05

VOC by weight % (less water)	VOC by volume % (less water)	VOC lbs/gal (less water)	VOC grams/liter (less water)
37.88	No information available	3.05	365.47

## 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 (CO<sub>2</sub>). Carbon monoxide.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

<b>Inhalation</b>	Specific test data for the substance or mixture is not available.
<b>Eye Contact</b>	Specific test data for the substance or mixture is not available.
<b>Skin Contact</b>	Specific test data for the substance or mixture is not available.
<b>Ingestion</b>	Specific test data for the substance or mixture is not available.

Component	Oral LD50
Naphtha, petroleum, hydrotreated heavy 64742-48-9	> 6000 mg/kg ( Rat )
Xylenes (o-, m-, p- isomers) 1330-20-7	= 3500 mg/kg ( Rat )
2-Butanone, oxime 96-29-7	= 930 mg/kg ( Rat )
Ethyl benzene (constituent) 100-41-4	= 3500 mg/kg ( Rat )
Calcium 2-ethylhexanoate 136-51-6	> 5000 mg/kg ( Rat )
Hexanoic acid, 2-ethyl, zinc salt 136-53-8	= 3550 mg/kg ( Rat ) = 3700 mg/kg ( Rat )

Component	Dermal LD50
Naphtha, petroleum, hydrotreated heavy 64742-48-9	> 3160 mg/kg ( Rabbit )
Xylenes (o-, m-, p- isomers) 1330-20-7	> 4350 mg/kg ( Rabbit )
2-Butanone, oxime 96-29-7	1000 - 1800 mg/kg ( Rabbit )
Ethyl benzene (constituent) 100-41-4	= 15400 mg/kg ( Rabbit )
Cobalt Compounds	> 5000 mg/kg ( Rabbit )
Hexanoic acid, 2-ethyl, zinc salt 136-53-8	> 5000 mg/kg ( Rabbit )

Component	Inhalation LC50
Naphtha, petroleum, hydrotreated heavy 64742-48-9	> 8500 mg/m <sup>3</sup> ( Rat ) 4 h
Xylenes (o-, m-, p- isomers) 1330-20-7	= 29.08 mg/L ( 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
Calcium 2-ethylhexanoate 136-51-6	> 4.8 mg/L ( Rat ) 1 h
Hexanoic acid, 2-ethyl, zinc salt 136-53-8	> 23.2 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/irritation** Specific test data for the substance or mixture is not available.  
**Eye damage/irritation** Specific test data for the substance or mixture is not available.

<b>Irritation</b>	Specific test data for the substance or mixture is not available.
<b>Corrosivity</b>	Specific test data for the substance or mixture is not available.
<b>Sensitization</b>	Specific test data for the substance or mixture is not available. May cause an allergic skin reaction. (based on components).
<b>Mutagenic Effects</b>	Specific test data for the substance or mixture is not available.
<b>Carcinogenic effects</b>	Specific test data for the substance or mixture is not available.
<b>Reproductive Effects</b>	Specific test data for the substance or mixture is not available.
<b>STOT - single exposure</b>	Specific test data for the substance or mixture is not available.
<b>STOT - repeated exposure</b>	Specific test data for the substance or mixture is not available. Causes damage to organs through prolonged or repeated exposure. (based on components).
<b>Chronic Toxicity</b>	Specific test data for the substance or mixture is not available
<b>Aspiration hazard</b>	Specific test data for the substance or mixture is not available. May be fatal if swallowed and enters airways. (based on components).
<b>Carcinogenicity</b>	The table below indicates whether each agency has listed any ingredient as a carcinogen.

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

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

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

<b>ATEmix (dermal)</b>	68,391.00 mg/kg
<b>ATEmix (inhalation-dust/mist)</b>	93.30 mg/l
<b>ATEmix (inhalation-vapor)</b>	684.00 mg/l

## 12. ECOLOGICAL INFORMATION

#### Ecotoxicity

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

0.28 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Component	Algae/aquatic plants
2-Butanone, oxime 96-29-7	72h EC50 Desmodesmus subspicatus: = 83 mg/L
Ethyl benzene (constituent) 100-41-4	96h EC50 Pseudokirchneriella subcapitata: > 438 mg/L 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
Naphtha, petroleum, hydrotreated heavy 64742-48-9	96h LC50 Pimephales promelas: = 2200 mg/L
Xylenes (o-, m-, p- isomers) 1330-20-7	96h LC50 Oncorhynchus mykiss: 2.661 - 4.093 mg/L (static) 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)
2-Butanone, oxime 96-29-7	96h LC50 Pimephales promelas: 777 - 914 mg/L (flow-through) 96h LC50 Poecilia reticulata: = 760 mg/L (static)
Ethyl benzene (constituent) 100-41-4	96h LC50 Pimephales promelas: 7.55 - 11 mg/L (flow-through) 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) 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) 100-41-4	48h EC50 Daphnia magna: 1.8 - 2.4 mg/L

**Persistence and Degradability**

No information available.

**Bioaccumulation**

No information available

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

**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****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 Act:

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**

Component	Massachusetts Right To Know
Stoddard solvent 8052-41-3	X
Xylenes (o-, m-, p- isomers) 1330-20-7	X
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 8052-41-3	X
Xylenes (o-, m-, p- isomers) 1330-20-7	X

Ethyl benzene (constituent) 100-41-4	X
Cobalt Compounds	X
Hexanoic acid, 2-ethyl, zinc salt 136-53-8	X

Component	Pennsylvania Right To Know
Stoddard solvent 8052-41-3	X
Xylenes (o-, m-, p- isomers) 1330-20-7	X
Ethyl benzene (constituent) 100-41-4	X
Cobalt Compounds	X
Hexanoic acid, 2-ethyl, zinc salt 136-53-8	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
Naphtha, petroleum, hydrotreated heavy 64742-48-9	Part 5, Other Groups and Mixtures
Xylenes (o-, m-, p- isomers) 1330-20-7	Part 5, Isomer Groups; Part 4 Substance
Ethyl benzene (constituent) 100-41-4	Part 1, Group A Substance; Part 4 Substance
Cobalt Compounds	Part 1, Group B Substance
Hexanoic acid, 2-ethyl, zinc salt 136-53-8	Part 1, Group A Substance

<b>16. OTHER INFORMATION</b>
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<b>HMIS:</b>	<b>Health</b>	<b>Flammability</b>	<b>Reactivity</b>	<b>Personal Protection</b>
	1 *	2	0	X

**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

**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**