

# **SAFETY DATA SHEET**

Published Date May-15-2019 Revision Date May-15-2019 Revision Number 2.5

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

Product identifier Product code Product name Product category

5184 Maroon Toner 5100 Series SV Screen Ink

Other means of identification Synonyms

Recommended use of the chemical and restrictions on useRecommended usePrinting operations

None

#### Details of the supplier of the safety data sheet

UNITED STATES Nazdar Company 8501 Hedge Lane Terrace Shawnee, KS 66227 Tel: +001-913-422-1888 Tel: +001-800-677-4657 Fax: +001-913-422-2294 www.nazdar.com UNITED KINGDOM Nazdar Limited Barton Road Heaton Mersey Stockport, England SK4 3EG Tel: +44 161 442 2111

#### 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 Corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 1 - (H318)
Skin sensitization	Category 1 - (H317)
Carcinogenicity	Category 1B - (H350)
Flammable liquids	Category 3 - (H226)

#### Label elements



Danger

#### **Hazard Statements**

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage

#### H226 - Flammable liquid and vapor

#### **Precautionary Statements**

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

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

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

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

P202 - Do not handle until all safety precautions have been read and understood

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

P308 + P313 - IF exposed or concerned: Get medical advice/attention

P233 - Keep container tightly closed

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)

No information available.

### **3. COMPOSITION/INFORMATION ON INGREDIENTS**

#### Mixture

Component	CAS-No	Weight %	Trade Secret	Note
Resin	Trade Secret	10 - 30	*	
Resin	Trade Secret	10 - 30	*	
1-Butanol	71-36-3	10 - 30	*	
Dipropylene glycol monomethyl ether	34590-94-8	5 - 10	*	
Ethylene glycol monopropyl ether	2807-30-9	5 - 10	*	
2-Butoxyethanol	111-76-2	5 - 10	*	
Silicon dioxide, amorphous	7631-86-9	1 - 5	*	
Formaldehyde	50-00-0	< 0.5	*	
Naphthenic acid	1338-24-5	< 0.5	*	

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

#### 4. FIRST AID MEASURES

#### Description of first aid measures

General Advice Eye Contact	Show this safety data sheet to the doctor in attendance. 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, includ	ing 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	
1-Butanol	TWA: 20 ppm	
71-36-3		
Dipropylene glycol monomethyl ether	TWA: 100 ppm	
34590-94-8	STEL: 150 ppm	
	Skin	
2-Butoxyethanol	TWA: 20 ppm	
111-76-2		
Formaldehyde	TWA: 0.1 ppm	
50-00-0	STEL: 0.3 ppm	
Component	OSHA PEL	

1-Butanol	TWA: 100 ppm
71-36-3	TWA: 300 mg/m <sup>3</sup>
Dipropylene glycol monomethyl ether 34590-94-8	TWA: 100 ppm TWA: 600 mg/m <sup>3</sup> Skin
2-Butoxyethanol 111-76-2	TWA: 50 ppm TWA: 240 mg/m³ Skin
Formaldehyde	TWA: 0.75 ppm
50-00-0	STEL: 2 ppm

Component	OSHA PEL (vacated)	
1-Butanol	Ceiling: 50 ppm	
71-36-3	Ceiling: 150 mg/m <sup>3</sup>	
	Skin	
Dipropylene glycol monomethyl ether	TWA: 100 ppm	
34590-94-8	TWA: 600 mg/m <sup>3</sup>	
	STEL: 150 ppm	
	STEL: 900 mg/m <sup>3</sup>	
	Skin	
2-Butoxyethanol	TWA: 25 ppm	
111-76-2	TWA: 120 mg/m <sup>3</sup>	
	Skin	
Silicon dioxide, amorphous	TWA: 6 mg/m <sup>3</sup>	
7631-86-9		
Formaldehyde	Ceiling: 5 ppm	
50-00-0	TWA: 3 ppm	
	STEL: 10 ppm	

Component	Ontario TWAEV	
1-Butanol	TWA: 20 ppm	
71-36-3		
Dipropylene glycol monomethyl ether	TWA: 100 ppm	
34590-94-8	STEL: 150 ppm	
	Skin	
Ethylene glycol monopropyl ether	TWA: 25 ppm	
2807-30-9	TWA: 110 mg/m <sup>3</sup>	
	Skin	
2-Butoxyethanol	TWA: 20 ppm	
111-76-2		
Formaldehyde	STEL: 1 ppm	
50-00-0	Ceiling: 1.5 ppm	

Component	Mexico OEL (TWA)
1-Butanol	Ceiling: 50 ppm
71-36-3	Ceiling: 150 mg/m <sup>3</sup>
Dipropylene glycol monomethyl ether	TWA/VLE-PPT: 100 ppm
34590-94-8	TWA/VLE-PPT: 60 mg/m <sup>3</sup>
	STEL/PPT-CT: 150 ppm
	STEL/PPT-CT: 900 mg/m <sup>3</sup>
2-Butoxyethanol	TWA/VLE-PPT: 26 ppm
111-76-2	TWA/VLE-PPT: 120 mg/m <sup>3</sup>
	STEL/PPT-CT: 75 ppm
	STEL/PPT-CT: 360 mg/m <sup>3</sup>
Formaldehyde	Ceiling: 2 ppm
50-00-0	Ceiling: 3 mg/m <sup>3</sup>

#### Appropriate engineering controls

Engineering MeasuresProvide a good standard of general ventilation. Natural ventilation is from doors, windows<br/>etc. Controlled ventilation means air is supplied or removed by a powered fan. Users are<br/>advised to consider national Occupational Exposure Limits or other equivalent values. In<br/>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 Consideration	<b>s</b> 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			
Physical State	Liquid	Appearance	Colored Liquid
Odor	Characteristic	Odor Threshold	No information available
Property_	Values	Remarks • Method	
pH		No data available	
Melting Point / Freezing Point		No data available	
Boiling Point / Boiling Range	> 149 °C / 300 °F		
Flash Point	39 °C / 102 °F	Pensky Martens Close	ed Cup (PMCC)
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	1.05		
Water Solubility		No data available	
Solubility in other solvents		No data available	
Partition coefficient: n-octanol/wa	ter	No data available	
Autoignition Temperature		No data available	
Decomposition temperature		No data available	
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)	8.72		

VOC by weight %	VOC by volume %	VOC lbs/gal	VOC grams/liter
(less water)	(less water)	(less water)	(less water)
44.15	46.86	3.85	461.58

### **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

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

Component	Oral LD50
1-Butanol 71-36-3	= 700 mg/kg (Rat)
Dipropylene glycol monomethyl ether 34590-94-8	= 5.35 g/kg (Rat)
Ethylene glycol monopropyl ether 2807-30-9	= 3089 mg/kg (Rat)
2-Butoxyethanol 111-76-2	= 470 mg/kg (Rat)
Silicon dioxide, amorphous 7631-86-9	= 7900 mg/kg (Rat)
Formaldehyde 50-00-0	= 100 mg/kg (Rat)
Naphthenic acid 1338-24-5	= 3000 mg/kg (Rat)

Component	Dermal LD50
1-Butanol	= 3402 mg/kg (Rabbit)
71-36-3	
Dipropylene glycol monomethyl ether	= 9500 mg/kg (Rabbit)
34590-94-8	
Ethylene glycol monopropyl ether	= 870 mg/kg (Rabbit)
2807-30-9	
2-Butoxyethanol	= 435 mg/kg (Rabbit)
111-76-2	
Silicon dioxide, amorphous	> 2000 mg/kg (Rabbit)
7631-86-9	
Formaldehyde	= 270 mg/kg (Rabbit)
50-00-0	
Naphthenic acid	> 20000 mg/kg (Rabbit)
1338-24-5	

Component	Inhalation LC50	
1-Butanol	> 8000 ppm (Rat)4 h	
71-36-3		
Ethylene glycol monopropyl ether	= 1530 ppm (Rat)7 h	
2807-30-9		
2-Butoxyethanol	= 450 ppm (Rat)4 h	
111-76-2	= 486 ppm (Rat) 4 h	
Silicon dioxide, amorphous	> 2.2 mg/L (Rat)1 h	
7631-86-9		
Formaldehyde	= 0.578 mg/L (Rat)4 h	
50-00-0		

#### Information on toxicological effects

Symptoms	Specific test data for the substance or mixture is not available.			
Delayed and immediate effects as	s well as chronic effects from sho	rt and long-term exposure		
Skin corrosion/irritation	Specific test data for the substance or mixture is not available. Causes skin irritation (pain, redness and swelling). (based on components).			
Eye damage/irritation		nce or mixture is not available. Causes serious eye		
Irritation	Specific test data for the substar			
Corrosivity	Specific test data for the substar	nce or mixture is not available.		
Sensitization	Specific test data for the substar reaction. (based on components	nce or mixture is not available. May cause an allergic skin		
Mutagenic Effects	Specific test data for the substar	nce or mixture is not available.		
Carcinogenic effects	Specific test data for the substance or mixture is not available. May cause cancer. (based on components).			
Reproductive Effects	Specific test data for the substance or mixture is not available.			
STOT - single exposure	Specific test data for the substar			
STOT - repeated exposure	Specific test data for the substar			
Chronic Toxicity	Specific test data for the substar			
Aspiration hazard	Specific test data for the substar			
Carcinogenicity		er each agency has listed any ingredient as a carcinogen.		
Component		ACGIH		
2-Butoxyethanol 111-76-2		A3		
Formaldehyde		A1		
50-00-0				
Component		IARC		
Formaldehyde		Group 1		
50-00-0		·		
Component		NTP		
Formaldehyde		Known		
50-00-0				
Component		OSHA		
Formaldehyde	Х			
50-00-0				

### 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

ATEmix (oral)	2,181.00 mg/kg
ATEmix (dermal)	6,549.00 mg/kg
ATEmix (inhalation-dust/mist)	17.50 mg/l
ATEmix (inhalation-vapor)	126.00 mg/l

### **12. ECOLOGICAL INFORMATION**

#### **Ecotoxicity**

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

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

Component	Algae/aquatic plants
1-Butanol	96h EC50 Desmodesmus subspicatus: > 500 mg/L
71-36-3	72h EC50 Desmodesmus subspicatus: > 500 mg/L
Silicon dioxide, amorphous	72h EC50 Pseudokirchneriella subcapitata: = 440 mg/L
7631-86-9	

Component	Fish	
1-Butanol	96h LC50 Pimephales promelas: 1730 - 1910 mg/L (static)	
71-36-3	96h LC50 Pimephales promelas: = 1740 mg/L (flow-through)	
	96h LC50 Lepomis macrochirus: 100000 - 500000 µg/L (static)	
	96h LC50 Pimephales promelas: = 1910000 µg/L (static)	
Dipropylene glycol monomethyl ether	96h LC50 Pimephales promelas: > 10000 mg/L (static)	
34590-94-8		
2-Butoxyethanol	96h LC50 Lepomis macrochirus: = 2950 mg/L	
111-76-2	96h LC50 Lepomis macrochirus: = 1490 mg/L (static)	
Silicon dioxide, amorphous	96h LC50 Brachydanio rerio: = 5000 mg/L (static)	
7631-86-9		
Formaldehyde	96h LC50 Oncorhynchus mykiss: 0.032 - 0.226 mL/L	
50-00-0	(flow-through)	
	96h LC50 Lepomis macrochirus: = 1510 µg/L (static)	
	96h LC50 Brachydanio rerio: = 41 mg/L (static)	
	96h LC50 Pimephales promelas: 22.6 - 25.7 mg/L (flow-through)	
	96h LC50 Pimephales promelas: 23.2 - 29.7 mg/L (static)	
	96h LC50 Oncorhynchus mykiss: 100 - 136 mg/L (static)	
Naphthenic acid	96h LC50 Lepomis macrochirus: = 5.6 mg/L (static)	
1338-24-5		

Component	Crustacea
1-Butanol	48h EC50 Daphnia magna: 1897 - 2072 mg/L Static
71-36-3	48h EC50 Daphnia magna: = 1983 mg/L
Dipropylene glycol monomethyl ether 34590-94-8	48h LC50 Daphnia magna: = 1919 mg/L
2-Butoxyethanol 111-76-2	48h EC50 Daphnia magna: > 1000 mg/L
Silicon dioxide, amorphous 7631-86-9	48h EC50 Ceriodaphnia dubia: = 7600 mg/L
Formaldehyde 50-00-0	48h LC50 Daphnia magna: = 2 mg/L 48h EC50 Daphnia magna:  11.3 - 18 mg/L Static

#### Persistence and Degradability

No information available.

#### **Bioaccumulation**

No information available

Component	Partition coefficient
1-Butanol	0.785
71-36-3	
Dipropylene glycol monomethyl ether	-0.064
34590-94-8	
2-Butoxyethanol	0.81
111-76-2	
Formaldehyde	0.35
50-00-0	

#### 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 UN/ID no. Proper Shipping Name Hazard Class Packing Group	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]. UN1210 Printing Ink 3 III		
ICAO / IATA / IMDG / IMO UN/ID no. Proper Shipping Name Hazard Class Packing Group	UN1210 Printing Ink 3 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
1-Butanol	71-36-3	10 - 30	1.0
Ethylene glycol monopropyl ether	2807-30-9	5 - 10	1.0
2-Butoxyethanol	111-76-2	5 - 10	1.0
Formaldehyde	50-00-0	< 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 %
Ethylene glycol monopropyl ether	2807-30-9	5 - 10
Formaldehyde	50-00-0	< 0.5

### U.S. State Regulations

Component	Massachusetts Right To Know
1-Butanol 71-36-3	X
Dipropylene glycol monomethyl ether 34590-94-8	X
2-Butoxyethanol 111-76-2	X
Silicon dioxide, amorphous 7631-86-9	X
Formaldehyde 50-00-0	X
Naphthenic acid 1338-24-5	X

	Minnesota Right To Know
1-Butanol 71-36-3	X
Dipropylene glycol monomethyl ether 34590-94-8	X
2-Butoxyethanol 111-76-2	X
Silicon dioxide, amorphous 7631-86-9	X
Formaldehyde 50-00-0	X

Component	New Jersey Right To Know
1-Butanol 71-36-3	X
Dipropylene glycol monomethyl ether 34590-94-8	X
Ethylene glycol monopropyl ether 2807-30-9	X
2-Butoxyethanol 111-76-2	X
Formaldehyde 50-00-0	X
Naphthenic acid 1338-24-5	X

Component	Pennsylvania Right To Know
1-Butanol	X
71-36-3	
Dipropylene glycol monomethyl ether	Х
34590-94-8	
Ethylene glycol monopropyl ether	Х
2807-30-9	
2-Butoxyethanol	Х
111-76-2	
Silicon dioxide, amorphous	Х
7631-86-9	
Formaldehyde	Х
50-00-0	
Naphthenic acid	Х
1338-24-5	

<u>California Prop. 65</u> 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
Formaldehyde	Carcinogen

### <u>Canada</u>

Component	NPRI - National Pollutant Release Inventory
1-Butanol	Part 1, Group A Substance; Part 4 Substance
71-36-3	
Dipropylene glycol monomethyl ether	Part 5, Other Groups and Mixtures; Part 4 Substance
34590-94-8	
Ethylene glycol monopropyl ether	Part 5, Other Groups and Mixtures; Part 4 Substance
2807-30-9	
2-Butoxyethanol	Part 5, Individual Substances; Part 4 Substance
111-76-2	
Formaldehyde	Part 5, Individual Substances; Part 4 Substance
50-00-0	

### **16. OTHER INFORMATION**

HMIS:	Health	Flammability	Reactivity	Personal Protection
	2 *	2	0	Х

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

Legend - Section 8: EXPOSURE CO	NTROLS/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