43211-4172

SAFETY DATA SHEET

Published Date Nov-13-2023

Revision Date Nov-13-2023 Revision Number 2.7

1. IDENTIFICATION

Product identifier Product code Product name Product category

59LF130 Primrose Yellow 59000 Series SV Enamel Screen Ink

Other means of identification Synonyms

NAZDAR

INK TECHNOLOGIES

 Recommended use of the chemical and restrictions on use

 Recommended use
 Industrial Printing Operations

None

Details of the supplier of the safety data sheetUNITED STATESUNITED KINGDOMNazdar CompanyNazdar Limited8501 Hedge Lane TerraceBarton RoadShawnee, KS66227Heaton MerseyTel: +001-913-422-1888Stockport, England SK4 3EGTel: +001-800-677-4657Tel: +44 161 442 2111Fax: +001-913-422-2294www.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 1 - (H317) |
|----------------------------------------------------|----------------------|
| Carcinogenicity | Category 1B - (H350) |
| Specific target organ toxicity (repeated exposure) | Category 1 - (H372) |
| Aspiration hazard | Category 1 - (H304) |
| Chronic aquatic toxicity | Category 3 - (H412) |
| Flammable liquids | Category 3 - (H226) |

Label elements



Danger

Hazard statements

H226 - Flammable liquid and vapor H304 - May be fatal if swallowed and enters airways

Item Numbers: 43211-4172

Page 1/13

Page 2 of 13

H317 - May cause an allergic skin reaction

- H350 May cause cancer
- H372 Causes damage to organs through prolonged or repeated exposure
- H412 Harmful to aquatic life with long lasting effects

Precautionary Statements

P201 - Obtain special instructions before use

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
- P260 Do not breathe dust/fume/gas/mist/vapors/spray

P280 - Wear protective gloves/protective clothing/eye protection/face protection P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor

- P308 + P313 IF exposed or concerned: Get medical advice/attention
- P331 Do NOT induce vomiting

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

<u>Hazards not otherwise classified (HNOC)</u> Causes mild skin irritation. Harmful to aquatic life.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

| Chemical name | CAS No. | Weight-% | Trade secret | Note |
|--------------------------------------------|---------------|-----------|-----------------|------|
| Stoddard solvent | 8052-41-3 | 10 - 30 | * | |
| Barium sulfate | 7727-43-7 | 10 - 30 | * | |
| Titanium Dioxide | 13463-67-7 | 5 - 10 | * | |
| Solvent naphtha, petroleum, heavy aromatic | 64742-94-5 | 1 - 5 | * | |
| Xylenes (o-, m-, p- isomers) | 1330-20-7 | 1 - 5 | * | |
| 2-Butanone, oxime | 96-29-7 | 0.1 - < 1 | * | |
| Naphthalene (constituent) | 91-20-3 | 0.1 - < 1 | * | 1 |
| Ethyl benzene (constituent) | 100-41-4 | 0.1 - < 1 | * | 1 |
| Cobalt Compounds | Not Available | 0.1 - < 1 | * | |

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

Note

1. Hazardous Constituent contained in Complex Substance(s) required for disclosure

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

Page 2/13

Revision Date Nov-13-2023

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

StorageKeep 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

| Chemical name | ACGIH TLV |
|---------------|--------------|
| | TWA: 100 ppm |
| 8052-41-3 | |

Revision Date Nov-13-2023

| Barium sulfate | TWA: 5 mg/m ³ inhalable particulate matter, particulate matter |
|-------------------------------------------|---------------------------------------------------------------------------|
| 7727-43-7 | containing no asbestos and <1% crystalline silica |
| Titanium Dioxide | TWA: 0.2 mg/m ³ nanoscale respirable particulate matter |
| 13463-67-7 | TWA: 2.5 mg/m ³ finescale respirable particulate matter |
| Xylenes (o-, m-, p- isomers) 1330-20-7 | TWA: 20 ppm |
| Naphthalene (constituent) | TWA: 10 ppm |
| 91-20-3 | Skin |
| Ethyl benzene (constituent) 100-41-4 | TWA: 20 ppm |
| Chemical name | OSHA PEL |
| Stoddard solvent | TWA: 500 ppm |
| 8052-41-3 | TWA: 2900 mg/m ³ |
| Barium sulfate | TWA: 15 mg/m ³ total dust |
| 7727-43-7 | TWA: 5 mg/m ³ respirable fraction |
| Titanium Dioxide 13463-67-7 | TWA: 15 mg/m ³ total dust |
| Xylenes (o-, m-, p- isomers) | TWA: 100 ppm |
| 1330-20-7 | TWA: 435 mg/m ³ |
| Naphthalene (constituent) | TWA: 10 ppm |
| 91-20-3 | TWA: 50 mg/m ³ |
| Ethyl benzene (constituent) 100-41-4 | TWA: 100 ppm TWA: 435 mg/m³ |
| 100-41-4 | [1 ₩A. 435 mg/m² |
| Chemical name | OSHA PEL (vacated) |
| Stoddard solvent | TWA: 100 ppm |
| 8052-41-3 | TWA: 100 ppm TWA: 525 mg/m ³ |
| Barium sulfate | TWA: 325 mg/m ³ total dust |
| 7727-43-7 | TWA: 5 mg/m ³ respirable fraction |
| Titanium Dioxide | TWA: 10 mg/m ³ total dust |
| 13463-67-7 | |
| Xylenes (o-, m-, p- isomers) | TWA: 100 ppm |
| 1330-20-7 | TWA: 435 mg/m ³ |
| | STEL: 150 ppm |
| | STEL: 655 mg/m ³ |
| Naphthalene (constituent) | TWA: 10 ppm |
| 91-20-3 | TWA: 50 mg/m ³ |
| | STEL: 15 ppm |
| Ethyl benzene (constituent) | STEL: 75 mg/m ³ TWA: 100 ppm |
| 100-41-4 | TWA: 100 ppm TWA: 435 mg/m ³ |
| 100-41-4 | STEL: 125 ppm |
| | STEL: 545 mg/m ³ |
| | |
| Chemical name | Ontario TWAEV |
| Stoddard solvent | TWA: 525 mg/m ³ |
| 8052-41-3 | |
| Barium sulfate | TWA: 5 mg/m ³ inhalable particulate matter |
| 7727-43-7 | |
| Titanium Dioxide | TWA: 10 mg/m ³ |
| 13463-67-7 | |
| Xylenes (o-, m-, p- isomers) | TWA: 100 ppm |
| 1330-20-7 | STEL: 150 ppm |
| Naphthalene (constituent) | TWA: 10 ppm |
| 91-20-3 | Skin |
| Ethyl benzene (constituent) 100-41-4 | TWA: 20 ppm |
| Chemical name | Mexico OEL (TWA) |
| Stoddard solvent | TWA/VLE-PPT: 100 ppm |
| 8052-41-3 | |
| Barium sulfate | TWA/VLE-PPT: 10 mg/m ³ |
| 7727-43-7 | |
| Titanium Dioxide | TWA/VLE-PPT: 10 mg/m ³ |
| | |

| 40400 07 7 | | | | |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 13463-67-7 Xylenes (o-, m-, p- isomers) | | TWA/VLE-PPT: 100 ppm | | |
| 1330-20-7 | | STEL/PPT-CT: 150 ppm | | |
| Naphthalene (constituent) | | TWA/VLE-PPT: 10 ppm | | |
| 91-20-3 | | STEL/PPT-CT: 15 ppm | | |
| Ethyl benzene (constituent) 100-41-4 | | | TWA/VLE-PPT: 20 ppm | |
| 100-41-4 | | | | |
| Appropriate engineering control | <u>s</u> | | | |
| 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 eq | quipment | | |
| 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 | corresponding >480 minutes rubber (0.5 mm), polyvinylch Supplementary note: The sp of glove manufacturers. Ta chemical-protective glove in determined through testing. Due to different glove types. | prolonged, direct contact (Recom s of permeation time): eg. nitrile ru | bber (0.4 mm), chloroprene derature data and information ditions, the practical usage of a an the permeation time use should be observed. | |
| 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 Considerati | eating, drinking or smoking. | good industrial hygiene and safety Wash contaminated clothing befo ar suitable gloves and eye/face pr lothing is recommended. | re reuse. Avoid contact with | |
| | 9. PHYSICAL AND CHE | MICAL PROPERTIES | | |
| nformation on basic physical an | d chemical properties | | | |
| Physical state | Liquid | Appearance | Colored | |
| Ddor | Characteristic | Odor Threshold | No information available | |
| Property | Values | Remarks • Method | - | |
| oH Melting Point / Freezing Point | No information available | No data available | | |
| Boiling Point / Boiling Range | > 149 °C / 300 °F | | | |

Boiling Point / Boiling Range Flash Point Evaporation rate Flammability Limit in Air

> 149 °C / 300 °F 46 °C / 115 °F

Setaflash closed cup No data available

Page 5/13

Revision Date Nov-13-2023

No information available

| VOC lbs/gal | VOC grams/liter |
|--------------|-----------------|
| (less water) | (less water) |
| 2.99 | 358.54 |

10. STABILITY AND REACTIVITY

Reactivity

No information available.

Chemical stability

Stable under normal conditions.

29.53

Possibility of hazardous reactions

None under normal processing.

<u>Conditions to avoid</u> 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. |
| - | |

| Oral LD50 |
|-----------------------|
| = 307000 mg/kg (Rat) |
| (10000 mm/km (Dat) |
| > 10000 mg/kg (Rat) |
| > 5000 mg/kg (Rat) |
| |

Page 7 of 13

| = 3500 mg/kg (Rat) | |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| = 930 mg/kg (Rat) | |
| | |
| = 1110 mg/kg (Rat) | |
| = 3500 mg/kg (Rat) | |
| | |
| | |
| | |
| > 3000 mg/kg (Rabbit) | |
| > 2000 mg/kg (Rabbit) | |
| > 4350 mg/kg (Rabbit) | |
| 1000 - 1800 mg/kg (Rabbit) | |
| = 1120 mg/kg (Rabbit) | |
| = 15400 mg/kg (Rabbit) | |
| > 5000 mg/kg (Rabbit) | |
| Inhalation LC50 | |
| > 5.5 mg/L (Rat)4 h | |
| = 5.09 mg/L (Rat)4 h | |
| > 590 mg/m³ (Rat)4 h | |
| = 29.08 mg/L (Rat)4 h | |
| > 4.83 mg/L (Rat)4 h | |
| > 0.4 mg/L (Rat)4 h | |
| = 17.4 mg/L (Rat)4 h | |
| > 10 mg/L (Rat)1 h | |
| | = 1110 mg/kg (Rat) = 3500 mg/kg (Rat) = 3500 mg/kg (Rabbit) > 3000 mg/kg (Rabbit) > 2000 mg/kg (Rabbit) > 4350 mg/kg (Rabbit) 1000 - 1800 mg/kg (Rabbit) = 1120 mg/kg (Rabbit) = 1120 mg/kg (Rabbit) = 15400 mg/kg (Rabbit) = 5000 mg/kg (Rabbit) > 5000 mg/kg (Rabbit) > 5000 mg/kg (Rabbit) > 5000 mg/kg (Rabbit) = 15400 mg/kg (Rabbit) = 17.4 mg/L (Rat) 4 h = 17.4 mg/L (Rat) 4 h |

Symptoms related to the physical, chemical and toxicological characteristics

| Symptom | s |
|---------|---|
|---------|---|

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 Eye damage/irritation | Specific test data for the substance or mixture is not available. Specific test data for the substance or mixture is not available. |
|----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Irritation | Specific test data for the substance or mixture is not available. |
| Corrosivity | Specific 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 Effects | Specific test data for the substance 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 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). |

Revision Date Nov-13-2023

| 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. | |
| Chemical name | | ACGIH |
| Titanium Dioxide 13463-67-7 | | A3 |
| Naphthalene (constituent) 91-20-3 | | A3 |
| Ethyl benzene (constituent) 100-41-4 | | A3 |
| | | |
| Chemical name | | IARC |
| Titanium Dioxide 13463-67-7 | | Group 2B |
| Naphthalene (constituent) | | Group 2B |
| 91-20-3 | | |
| Ethyl benzene (constituent) | | Group 2B |
| 100-41-4 | | |
| Cobalt Compounds | | Group 2B |
| | | |
| Chemical name | | INTP |
| Naphthalene (constituent) | | Reasonably Anticipated |
| 91-20-3 | | |
| Chemical name | | OSHA |
| Titanium Dioxide | | |
| 13463-67-7 | | ^ |
| Naphthalene (constituent) | | x |
| 91-20-3 | | |
| Ethyl benzene (constituent) | | X |
| 100-41-4 | | |

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)20,833.30mg/kgATEmix (dermal)94,001.00mg/kg

940.00 mg/l

| AT | Em | ix (| (ora | I) |
|----|----|------|------|----|
| | | | | |

99,999.00 128.20 mg/l

ATEmix (inhalation-dust/mist) ATEmix (inhalation-vapor)

ATEmix (inhalation-gas)

12. ECOLOGICAL INFORMATION

Ecotoxicity

Specific test data for the substance or mixture is not available. Harmful to aquatic life with long lasting effects. (based on components).

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

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

Revision Date Nov-13-2023

| Chemical name | Fish |
|--------------------------------------------|---------------------------------------------------------------|
| Solvent naphtha, petroleum, heavy aromatic | 96h LC50 Pimephales promelas: = 19 mg/L (static) |
| 64742-94-5 | 96h LC50 Oncorhynchus mykiss: = 2.34 mg/L |
| 01112 01 0 | 96h LC50 Lepomis macrochirus: = 1740 mg/L (static) |
| | 96h LC50 Pimephales promelas: = 45 mg/L (flow-through) |
| | 96h LC50 Pimephales promelas: = 41 mg/L |
| Xylenes (o-, m-, p- isomers) | 96h LC50 Pimephales promelas: = 13.4 mg/L (flow-through) |
| 1330-20-7 | 96h LC50 Oncorhynchus mykiss: 2.661 - 4.093 mg/L (static) |
| 1000 20 1 | 96h LC50 Oncorhynchus mykiss: 13.5 - 17.3 mg/L |
| | 96h LC50 Poecilia reticulata: 30.26 - 40.75 mg/L (static) |
| | 96h LC50 Lepomis macrochirus: 13.1 - 16.5 mg/L (flow-through) |
| | 96h LC50 Lepomis macrochirus: = 19 mg/L |
| | 96h LC50 Lepomis macrochirus: 7.711 - 9.591 mg/L (static) |
| | 96h LC50 Pimephales promelas: 23.53 - 29.97 mg/L (static) |
| | 96h LC50 Cyprinus carpio: = 780 mg/L (semi-static) |
| | 96h LC50 Cyprinus carpio: > 780 mg/L |
| 2-Butanone, oxime | 96h LC50 Pimephales promelas: 777 - 914 mg/L (flow-through) |
| 96-29-7 | 96h LC50 Poecilia reticulata: = 760 mg/L (static) |
| Naphthalene (constituent) | 96h LC50 Oncorhynchus mykiss: = 1.6 mg/L (flow-through) |
| 91-20-3 | 96h LC50 Oncorhynchus mykiss: 0.91 - 2.82 mg/L (static) |
| 91-20-3 | 96h LC50 Pimephales promelas: = 1.99 mg/L (static) |
| | 96h LC50 Lepomis macrochirus: = 31.0265 mg/L (static) |
| | 96h LC50 Pimephales promelas: 5.74 - 6.44 mg/L (flow-through) |
| Ethyl benzene (constituent) | 96h LC50 Oncorhynchus mykiss: 11.0 - 18.0 mg/L (static) |
| 100-41-4 | 96h LC50 Oncorhynchus mykiss: = 4.2 mg/L (static) |
| 100-41-4 | 96h LC50 Pimephales promelas: 7.55 - 11 mg/L (flow-through) |
| | 96h LC50 Lepomis macrochirus: = 32 mg/L (static) |
| | 96h LC50 Pimephales promelas: 9.1 - 15.6 mg/L (static) |
| | 96h LC50 Poecilia reticulata: = 9.6 mg/L (static) |
| | 9011 LC50 Poecilia Teliculata. = 9.0 Hig/L (static) |
| Chemical name | Crustacea |
| Solvent naphtha, petroleum, heavy aromatic | 48h EC50 Daphnia magna: = 0.95 mg/L |
| 64742-94-5 | |
| Xylenes (o-, m-, p- isomers) | 48h EC50 water flea: = 3.82 mg/L |
| 1330-20-7 | 48h LC50 Gammarus lacustris: = 0.6 mg/L |
| 2-Butanone. oxime | 48h EC50 Daphnia magna: = 750 mg/L |
| 96-29-7 | 401 ECSO Daprinia magna. – 750 mg/E |
| Naphthalene (constituent) | 48h EC50 Daphnia magna: 1.09 - 3.4 mg/L Static |
| 91-20-3 | 48h EC50 Daphnia magna: = 1.96 mg/L Flow through |
| | 48h LC50 Daphnia magna: = 2.16 mg/L |
| Ethyl benzene (constituent) | 48h EC50 Daphnia magna: 1.8 - 2.4 mg/L |
| 100-41-4 | |

Persistence and Degradability No information available.

Bioaccumulation

| Chemical name | Partition coefficient |
|----------------------------------------------------------|-----------------------|
| Solvent naphtha, petroleum, heavy aromatic 64742-94-5 | 2.9 - 6.1 |
| Xylenes (o-, m-, p- isomers) 1330-20-7 | 2.77 - 3.15 |
| 2-Butanone, oxime 96-29-7 | 0.65 |
| Naphthalene (constituent) 91-20-3 | 3.6 |
| Ethyl benzene (constituent) 100-41-4 | 3.2 |

13. DISPOSAL CONSIDERATIONS

Page 10 of 13

| 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 Transport hazard class(es) 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 Transport hazard class(es) Packing Group | UN1210 Printing Ink 3 III |

15. REGULATORY INFORMATION

International Inventories

All substances are listed as ACTIVE 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.

| | CAS No. | Weight-% | SARA 313 - Threshold Values % |
|------------------------------|-----------|-----------|----------------------------------|
| Xylenes (o-, m-, p- isomers) | 1330-20-7 | 1 - 5 | 1.0 |
| Naphthalene (constituent) | 91-20-3 | 0.1 - < 1 | 0.1 |
| Ethyl benzene (constituent) | 100-41-4 | 0.1 - < 1 | 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:

| Chemical name | CAS No. | Weight-% |
|------------------------------|---------------|-----------|
| Xylenes (o-, m-, p- isomers) | 1330-20-7 | 1 - 5 |
| Naphthalene (constituent) | 91-20-3 | 0.1 - < 1 |
| Ethyl benzene (constituent) | 100-41-4 | 0.1 - < 1 |
| Cobalt Compounds | Not Available | 0.1 - < 1 |

Revision Date Nov-13-2023

US State Regulations

| Chamical name | Massachusette |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| Chemical name Stoddard solvent | Massachusetts X |
| 8052-41-3 | |
| Barium sulfate 7727-43-7 | X |
| Titanium Dioxide 13463-67-7 | x |
| Xylenes (o-, m-, p- isomers) | x |
| 1330-20-7 Naphthalene (constituent) | x |
| 91-20-3 Ethyl benzene (constituent) | x |
| 100-41-4 | |
| Chemical name | Minnesota |
| | Right To Know |
| Stoddard solvent 8052-41-3 | X |
| Barium sulfate 7727-43-7 | x |
| Titanium Dioxide | x |
| 13463-67-7 Xylenes (o-, m-, p- isomers) | x |
| 1330-20-7 2-Butanone, oxime | x |
| 96-29-7 Naphthalene (constituent) | x |
| 91-20-3 | |
| Ethyl benzene (constituent) 100-41-4 | X |
| | |
| Chamical name | Now Jerson |
| Chemical name | New Jersey |
| Stoddard solvent 8052-41-3 | X |
| Stoddard solvent 8052-41-3 Barium sulfate 7727-43-7 | x x |
| Stoddard solvent 8052-41-3 Barium sulfate | X |
| Stoddard solvent 8052-41-3 Barium sulfate 7727-43-7 Titanium Dioxide 13463-67-7 Xylenes (o-, m-, p- isomers) | x x |
| Stoddard solvent 8052-41-3 Barium sulfate 7727-43-7 Titanium Dioxide 13463-67-7 Xylenes (o-, m-, p- isomers) 1330-20-7 Naphthalene (constituent) | x x x |
| Stoddard solvent 8052-41-3 Barium sulfate 7727-43-7 Titanium Dioxide 13463-67-7 Xylenes (o-, m-, p- isomers) 1330-20-7 Naphthalene (constituent) 91-20-3 Ethyl benzene (constituent) | x x x x |
| Stoddard solvent 8052-41-3 Barium sulfate 7727-43-7 Titanium Dioxide 13463-67-7 Xylenes (o-, m-, p- isomers) 1330-20-7 Naphthalene (constituent) 91-20-3 | x x x x x x |
| Stoddard solvent 8052-41-3 Barium sulfate 7727-43-7 Titanium Dioxide 13463-67-7 Xylenes (o-, m-, p- isomers) 1330-20-7 Naphthalene (constituent) 91-20-3 Ethyl benzene (constituent) 100-41-4 | x x x x x x x |
| Stoddard solvent 8052-41-3 Barium sulfate 7727-43-7 Titanium Dioxide 13463-67-7 Xylenes (o-, m-, p- isomers) 1330-20-7 Naphthalene (constituent) 91-20-3 Ethyl benzene (constituent) 100-41-4 Cobalt Compounds | X X X X X X X X X X X X X X X X X X X |
| Stoddard solvent 8052-41-3 Barium sulfate 7727-43-7 Titanium Dioxide 13463-67-7 Xylenes (o-, m-, p- isomers) 1330-20-7 Naphthalene (constituent) 91-20-3 Ethyl benzene (constituent) 100-41-4 Cobalt Compounds Chemical name Stoddard solvent | x x x x x x x |
| Stoddard solvent 8052-41-3 Barium sulfate 7727-43-7 Titanium Dioxide 13463-67-7 Xylenes (o-, m-, p- isomers) 1330-20-7 Naphthalene (constituent) 91-20-3 Ethyl benzene (constituent) 100-41-4 Cobalt Compounds Chemical name Stoddard solvent 8052-41-3 Barium sulfate | X X X X X X X X Pennsylvania |
| Stoddard solvent 8052-41-3 Barium sulfate 7727-43-7 Titanium Dioxide 13463-67-7 Xylenes (o-, m-, p- isomers) 1330-20-7 Naphthalene (constituent) 91-20-3 Ethyl benzene (constituent) 100-41-4 Cobalt Compounds Chemical name Stoddard solvent 8052-41-3 Barium sulfate 7727-43-7 Titanium Dioxide | X X X X X X X X Pennsylvania X |
| Stoddard solvent 8052-41-3 Barium sulfate 7727-43-7 Titanium Dioxide 13463-67-7 Xylenes (o-, m-, p- isomers) 1330-20-7 Naphthalene (constituent) 91-20-3 Ethyl benzene (constituent) 100-41-4 Cobalt Compounds Chemical name Stoddard solvent 8052-41-3 Barium sulfate 7727-43-7 | X X X X X X X X X X X X X X Pennsylvania X X X X X X X X X X X X X X X X X X X |
| Stoddard solvent 8052-41-3 Barium sulfate 7727-43-7 Titanium Dioxide 13463-67-7 Xylenes (o-, m-, p- isomers) 1330-20-7 Naphthalene (constituent) 91-20-3 Ethyl benzene (constituent) 100-41-4 Cobalt Compounds Chemical name Stoddard solvent 8052-41-3 Barium sulfate 7727-43-7 Titanium Dioxide 13463-67-7 Xylenes (o-, m-, p- isomers) 1330-20-7 | X X X X X X X X X X X X X X X X X X X |
| Stoddard solvent 8052-41-3 Barium sulfate 7727-43-7 Titanium Dioxide 13463-67-7 Xylenes (o-, m-, p- isomers) 1330-20-7 Naphthalene (constituent) 91-20-3 Ethyl benzene (constituent) 100-41-4 Cobalt Compounds Chemical name Stoddard solvent 8052-41-3 Barium sulfate 7727-43-7 Titanium Dioxide 13463-67-7 Xylenes (o-, m-, p- isomers) 1330-20-7 Naphthalene (constituent) 91-20-3 | X X X X X X X X X X X X X X X X X X X |
| Stoddard solvent 8052-41-3 Barium sulfate 7727-43-7 Titanium Dioxide 13463-67-7 Xylenes (o-, m-, p- isomers) 1330-20-7 Naphthalene (constituent) 91-20-3 Ethyl benzene (constituent) 100-41-4 Cobalt Compounds Chemical name Stoddard solvent 8052-41-3 Barium sulfate 7727-43-7 Titanium Dioxide 13463-67-7 Xylenes (o-, m-, p- isomers) 1330-20-7 Naphthalene (constituent) 91-20-3 Ethyl benzene (constituent) | X X X X X X X X X X X X X X X X X X X |
| Stoddard solvent 8052-41-3 Barium sulfate 7727-43-7 Titanium Dioxide 13463-67-7 Xylenes (or, mr, p- isomers) 1330-20-7 Naphthalene (constituent) 91-20-3 Ethyl benzene (constituent) 100-41-4 Cobalt Compounds Chemical name Stoddard solvent 8052-41-3 Barium sulfate 7727-43-7 Titanium Dioxide 13463-67-7 Xylenes (or, mr, p- isomers) 1330-20-7 Naphthalene (constituent) 91-20-3 Ethyl benzene (constituent) 91-20-3 Ethyl benzene (constituent) | X X X X X X X X X X X X X X X X X X X |

Page 12 of 13

California Proposition 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

| Chemical name | California Proposition 65 |
|-----------------------------|---------------------------|
| Titanium Dioxide | Carcinogen |
| Naphthalene (constituent) | Carcinogen |
| Ethyl benzene (constituent) | Carcinogen |

Canada

| Chemical name | NPRI - National Pollutant Release Inventory |
|--------------------------------------------|---------------------------------------------------------------|
| Stoddard solvent | Part 5 Substance - Volatile Organic Compounds with Additional |
| 8052-41-3 | Reporting Requirements |
| Solvent naphtha, petroleum, heavy aromatic | Part 5 Substance - Volatile Organic Compounds with Additional |
| 64742-94-5 | Reporting Requirements |
| | Part 4 Substance - Criteria Air Contaminants |
| Xylenes (o-, m-, p- isomers) | Part 1, Group A Substance |
| 1330-20-7 | Part 5 Substance - Volatile Organic Compounds with Additional |
| | Reporting Requirements |
| | Part 4 Substance - Criteria Air Contaminants |
| Naphthalene (constituent) | Part 1, Group A Substance |
| 91-20-3 | Part 4 Substance - Criteria Air Contaminants |
| Ethyl benzene (constituent) | Part 1, Group A Substance |
| 100-41-4 | Part 4 Substance - Criteria Air Contaminants |
| Cobalt Compounds | Part 1, Group B Substance |
| | |

16. OTHER INFORMATION

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 3 - Not Classifiable as to Carcinogenicity in Humans NTP: (National Toxicity Program)

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

Revision Date

Nov-13-2023

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

Page 13 of 13

Revision Date Nov-13-2023