

SAFETY DATA SHEET

SS100

Section 1. Identification

Product name : DUPLI-COLOR® Stainless Steel

Product code : SS100

Other means of identification : Not available.

Product type : Aerosol.

Relevant identified uses of the substance or mixture and uses advised against

Paint or paint related material.

Manufacturer : Dupli-Color Products Company
101 W. Prospect Avenue
Cleveland, OH 44115

Emergency telephone number of the company : (216) 566-2917

Product Information Telephone Number : (800) 247-3270

Transportation Emergency Telephone Number : (800) 424-9300

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : AEROSOLS - Category 1
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
SKIN SENSITIZATION - Category 1
CARCINOGENICITY - Category 2
TOXIC TO REPRODUCTION - Category 1B
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
ASPIRATION HAZARD - Category 1
Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 17% (oral), 24.7% (dermal), 17% (inhalation)

GHS label elements

Hazard pictograms :



Signal word : Danger

Section 2. Hazards identification

Hazard statements : Extremely flammable aerosol. Pressurized container: may burst if heated.
 May be fatal if swallowed and enters airways.
 May cause an allergic skin reaction.
 Causes serious eye irritation.
 May cause drowsiness or dizziness.
 Suspected of causing cancer.
 May damage fertility or the unborn child.
 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

General : Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing, eye protection, face protection, or hearing protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Use only outdoors or in a well-ventilated area. Do not breathe dust or mist. Wash thoroughly after handling. Do not pierce or burn, even after use.

Response : IF exposed or concerned: Get medical advice or attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do NOT induce vomiting. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. Take off contaminated clothing and wash it before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

Storage : Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place. Keep container tightly closed.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.
 Please refer to the SDS for additional information. Keep out of reach of children. Keep upright in a cool, dry place. Do not discard empty can in trash compactor.

Hazards not otherwise classified : DANGER: Rags, steel wool, other waste soaked with this product, and sanding residue may spontaneously catch fire if improperly discarded. Immediately place rags, steel wool, other waste soaked with this product, and sanding residue in a sealed, water-filled, metal container. Dispose of in accordance with local fire regulations.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Other means of identification : Not available.

CAS number/other identifiers

Ingredient name	% by weight	Identifiers
Acetone	≥25 - ≤50	67-64-1
Propane	≥10 - ≤25	74-98-6
Ethylbenzene	≤10	100-41-4
Butane	≤10	106-97-8
Toluene	<10	108-88-3
Nickel	<1	7440-02-0
Hydrotreated Heavy Petroleum Naphtha	≤0.3	64742-48-9

Section 3. Composition/information on ingredients

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
- Skin contact** : May cause an allergic skin reaction.
- Ingestion** : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness

Section 4. First aid measures

- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
reduced fetal weight
increase in fetal deaths
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
reduced fetal weight
increase in fetal deaths
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:
nausea or vomiting
reduced fetal weight
increase in fetal deaths
skeletal malformations

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

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

- Specific hazards arising from the chemical** : Extremely flammable aerosol. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
metal oxide/oxides

Section 5. Fire-fighting measures



- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- Remark** : Flammable aerosol.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. 
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. 

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not swallow. Avoid breathing gas. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.

Section 7. Handling and storage

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits (OSHA United States)

Ingredient name	CAS #	Exposure limits
Acetone	67-64-1	ACGIH TLV (United States, 1/2024) A4. TWA 8 hours: 250 ppm. STEL 15 minutes: 500 ppm. NIOSH REL (United States, 10/2020) TWA 10 hours: 250 ppm. TWA 10 hours: 590 mg/m ³ . OSHA PEL (United States, 5/2018) TWA 8 hours: 1000 ppm. TWA 8 hours: 2400 mg/m ³ .
Propane	74-98-6	ACGIH TLV (United States, 1/2024) Oxygen depletion [asphyxiant] , Explosive potential. NIOSH REL (United States, 10/2020) TWA 10 hours: 1000 ppm. TWA 10 hours: 1800 mg/m ³ . OSHA PEL (United States, 5/2018) TWA 8 hours: 1000 ppm. TWA 8 hours: 1800 mg/m ³ .
Ethylbenzene	100-41-4	ACGIH TLV (United States, 1/2024) A3. Ototoxicant. TWA 8 hours: 20 ppm. NIOSH REL (United States, 10/2020) TWA 10 hours: 100 ppm. TWA 10 hours: 435 mg/m ³ . STEL 15 minutes: 125 ppm. STEL 15 minutes: 545 mg/m ³ . OSHA PEL (United States, 5/2018) TWA 8 hours: 100 ppm. TWA 8 hours: 435 mg/m ³ .
Butane	106-97-8	ACGIH TLV (United States, 1/2024) [Butane] Explosive potential. STEL 15 minutes: 1000 ppm. NIOSH REL (United States, 10/2020) TWA 10 hours: 800 ppm. TWA 10 hours: 1900 mg/m ³ .
Toluene	108-88-3	ACGIH TLV (United States, 1/2024) A4. Ototoxicant. TWA 8 hours: 20 ppm. OSHA PEL Z2 (United States, 2/2013) TWA 8 hours: 200 ppm.

Section 8. Exposure controls/personal protection

Nickel	7440-02-0	CEIL: 300 ppm. AMP 10 minutes: 500 ppm. NIOSH REL (United States, 10/2020) TWA 10 hours: 100 ppm. TWA 10 hours: 375 mg/m ³ . STEL 15 minutes: 150 ppm. STEL 15 minutes: 560 mg/m ³ . ACGIH TLV (United States, 1/2024) A5. TWA 8 hours: 1.5 mg/m ³ . Form: Inhalable fraction. NIOSH REL (United States, 10/2020) [nickel metal and other compounds] NIA. TWA 10 hours: 0.015 mg/m ³ (as Ni). OSHA PEL (United States, 5/2018) [Nickel, metal and insoluble compounds] TWA 8 hours: 1 mg/m ³ (as Ni). None.
Hydrotreated Heavy Petroleum Naphtha	64742-48-9	None.

Occupational exposure limits (Canada)

Ingredient name	CAS #	Exposure limits
acetone	67-64-1	CA Saskatchewan Provincial (Canada, 4/2021) STEL 15 minutes: 750 ppm. TWA 8 hours: 500 ppm. CA British Columbia Provincial (Canada, 9/2024) TWA 8 hours: 250 ppm. STEL 15 minutes: 500 ppm. CA Ontario Provincial (Canada, 6/2019) TWA 8 hours: 250 ppm. STEL 15 minutes: 500 ppm. CA Quebec Provincial (Canada, 2/2024) TWAEV 8 hours: 250 ppm. STEV 15 minutes: 500 ppm. CA Alberta Provincial (Canada, 3/2023) OEL 8 hours: 1200 mg/m ³ . OEL 15 minutes: 1800 mg/m ³ . OEL 8 hours: 500 ppm. OEL 15 minutes: 750 ppm.
Normal propane	74-98-6	CA Saskatchewan Provincial (Canada, 4/2021) STEL 15 minutes: 1250 ppm. TWA 8 hours: 1000 ppm. CA British Columbia Provincial (Canada, 9/2024) Oxygen depletion [asphyxiant] , Explosive potential. CA Ontario Provincial (Canada, 6/2019) Oxygen depletion [asphyxiant] , Explosive potential. CA Quebec Provincial (Canada, 2/2024) Oxygen depletion [asphyxiant] , Explosive potential. CA Alberta Provincial (Canada, 3/2023) OEL 8 hours: 1000 ppm.
Ethylbenzene	100-41-4	CA Saskatchewan Provincial (Canada, 4/2021)

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Butane	106-97-8	<p>STEL 15 minutes: 125 ppm. TWA 8 hours: 100 ppm.</p> <p>CA British Columbia Provincial (Canada, 9/2024) Carc 2B. TWA 8 hours: 20 ppm.</p> <p>CA Ontario Provincial (Canada, 6/2019) TWA 8 hours: 20 ppm.</p> <p>CA Quebec Provincial (Canada, 2/2024) C3. TWAEV 8 hours: 20 ppm.</p> <p>CA Alberta Provincial (Canada, 3/2023) OEL 8 hours: 100 ppm. OEL 8 hours: 434 mg/m³. OEL 15 minutes: 543 mg/m³. OEL 15 minutes: 125 ppm.</p> <p>CA Saskatchewan Provincial (Canada, 4/2021) [Aliphatic hydrocarbon gases, Alkane [C1-C4]] STEL 15 minutes: 1250 ppm. TWA 8 hours: 1000 ppm.</p> <p>CA Saskatchewan Provincial (Canada, 4/2021) [Butane] STEL 15 minutes: 1250 ppm. TWA 8 hours: 1000 ppm.</p> <p>CA British Columbia Provincial (Canada, 9/2024) [butane, all isomers] Explosive potential. STEL 15 minutes: 1000 ppm.</p> <p>CA Ontario Provincial (Canada, 6/2019) [Butane, All isomers] Explosive potential. STEL 15 minutes: 1000 ppm.</p> <p>CA Quebec Provincial (Canada, 2/2024) TWAEV 8 hours: 800 ppm. TWAEV 8 hours: 1900 mg/m³.</p> <p>CA Alberta Provincial (Canada, 3/2023) OEL 8 hours: 1000 ppm.</p>
toluene	108-88-3	<p>CA Saskatchewan Provincial (Canada, 4/2021) Absorbed through skin. STEL 15 minutes: 60 ppm. TWA 8 hours: 50 ppm.</p> <p>CA British Columbia Provincial (Canada, 9/2024) Repr. TWA 8 hours: 20 ppm.</p> <p>CA Ontario Provincial (Canada, 6/2019) TWA 8 hours: 20 ppm.</p> <p>CA Quebec Provincial (Canada, 2/2024) Ototoxicant. TWAEV 8 hours: 20 ppm.</p> <p>CA Alberta Provincial (Canada, 3/2023) Absorbed through skin. OEL 8 hours: 50 ppm. OEL 8 hours: 188 mg/m³.</p>
Nickel	7440-02-0	<p>CA Saskatchewan Provincial (Canada, 4/2021) STEL 15 minutes: 3 mg/m³. Form: Inhalable fraction. TWA 8 hours: 1.5 mg/m³. Form: Inhalable</p>

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		<p>fraction.</p> <p>CA British Columbia Provincial (Canada, 9/2024) [nickel - insoluble inorganic compounds] Carc 1A, Carc 1. TWA 8 hours: 0.05 mg/m³ (as Ni).</p> <p>CA British Columbia Provincial (Canada, 9/2024) [nickel - elemental, soluble inorganic compounds] Carc 1, Carc 2B. TWA 8 hours: 0.05 mg/m³ (as Ni).</p> <p>CA Ontario Provincial (Canada, 6/2019) TWA 8 hours: 1 mg/m³. Form: Inhalable particulate matter..</p> <p>CA Quebec Provincial (Canada, 2/2024) [nickel and inorganic compounds - metal] TWA 8 hours: 1.5 mg/m³. Form: inhalable aerosol fraction.</p> <p>CA Alberta Provincial (Canada, 3/2023) OEL 8 hours: 1.5 mg/m³.</p>
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Occupational exposure limits (Mexico)

Ingredient name	CAS #	Exposure limits
Acetone	67-64-1	NOM-010-STPS-2014 (Mexico, 4/2016) A4. TWA 8 hours: 500 ppm. STEL 15 minutes: 750 ppm.
Ethylbenzene	100-41-4	NOM-010-STPS-2014 (Mexico, 4/2016) A3. TWA 8 hours: 20 ppm.
Toluene	108-88-3	NOM-010-STPS-2014 (Mexico, 4/2016) A4. TWA 8 hours: 20 ppm.
Nickel	7440-02-0	NOM-010-STPS-2014 (Mexico, 4/2016) A5. TWA 8 hours: 1.5 mg/m ³ (as Ni). Form: Inhalable fraction.

Biological exposure indices (United States)

Ingredient name	Exposure indices
Acetone	ACGIH BEI (United States, 1/2024) BEI: 25 mg/l, acetone [in urine]. Sampling time: end of shift.
Ethylbenzene	ACGIH BEI (United States, 1/2024) BEI: 150 mg/g creatinine, sum of mandelic acid and phenylglyoxylic acid [in urine]. Sampling time: end of shift.
Toluene	ACGIH BEI (United States, 1/2024) BEI: 0.03 mg/l, toluene [in urine]. Sampling time: end of shift. BEI: 0.3 mg/g creatinine, o-cresol [in urine]. Sampling time: end of shift. BEI: 0.02 mg/l, toluene [in blood]. Sampling time: prior to last shift of workweek.
Nickel	ACGIH BEI (United States, 1/2024) [nickel and inorganic compounds] BEI: 30 µg/l, nickel [in urine after exposure to soluble compounds]. Sampling time: post-shift at end of workweek.

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BEI: 5 µg/l, nickel [in urine after exposure to elemental nickel and poorly soluble compounds]. Sampling time: post-shift at end of workweek.

Biological exposure indices (Canada)

No exposure indices known.

Biological exposure indices (Mexico)

Ingredient name	Exposure indices
Acetone	<p>Official Mexican STANDARD NOM-047-SSA1-2011, Environmental Health-Biological exposure indices for personnel occupationally exposed to chemical substances. (Mexico, 6/2012)</p> <p>BEI: 50 mg/L [non-specific. The determinant is nonspecific, since it can be found after exposure to other chemicals.], acetone [in urine]. Sampling time: at the end of the work shift.</p>
Ethylbenzene	<p>Official Mexican STANDARD NOM-047-SSA1-2011, Environmental Health-Biological exposure indices for personnel occupationally exposed to chemical substances. (Mexico, 6/2012)</p> <p>BEI: 0.7 g/g creatinine [non-specific. The determinant is nonspecific, since it can be found after exposure to other chemicals.; semi-quantitative. The biological determinant is an indicator of chemical exposure, but the quantitative interpretation of the measure is ambiguous. These biological determinants should be used as a screening test if a quantitative test is not possible.], Sum of mandelic acid and acid phenylglyoxylic [in urine]. Sampling time: at the end of the shift at the end of the work week.</p> <p>BEI: semi-quantitative. The biological determinant is an indicator of chemical exposure, but the quantitative interpretation of the measure is ambiguous. These biological determinants should be used as a screening test if a quantitative test is not possible., ethylbenzene [in exhaled air]. Sampling time: uncritical.</p>
Toluene	<p>Official Mexican STANDARD NOM-047-SSA1-2011, Environmental Health-Biological exposure indices for personnel occupationally exposed to chemical substances. (Mexico, 6/2012)</p> <p>BEI: 0.05 mg/L, toluene [in blood]. Sampling time: sample time not specified.</p> <p>BEI: 1.6 g/g creatinine [Basal level. The determinant may be present in the biological</p>

Section 8. Exposure controls/personal protection

sample obtained from subjects who have not been occupationally exposed, at a concentration that could affect the interpretation of the results. These background levels are included in the valuation; non-specific. The determinant is nonspecific, since it can be found after exposure to other chemicals.], hippuric acid [in urine]. Sampling time: at the end of the work shift.

BEI: 0.5 mg/L [Basal level. The determinant may be present in the biological sample obtained from subjects who have not been occupationally exposed, at a concentration that could affect the interpretation of the results. These background levels are included in the valuation], o-cresol [in urine]. Sampling time: at the end of the work shift.

- Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
- Individual protection measures**
 - Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
 - Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
 - Skin protection**
 - Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
 - Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
 - Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Section 8. Exposure controls/personal protection

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state : Liquid.
Color : Silver.
Odor : Not available.
Odor threshold : Not available.
pH : Not applicable.
Melting point/freezing point : Not available.
Boiling point or initial boiling point and boiling range : Not available.
Flash point : Closed cup: -29°C (-20.2°F) [Pensky-Martens Closed Cup]
Evaporation rate : 5.6 (butyl acetate = 1)
Flammability : Flammable aerosol.
Lower and upper explosion limit/flammability limit : Lower: 1%
Upper: 12.8%
Vapor pressure : 101.3 kPa (760 mm Hg)
Relative vapor density : 1.55 [Air = 1]
Relative density : 0.77
Density : 0.76 g/cm³
Solubility(ies) :

Media	Result
cold water	Not soluble

Partition coefficient: n-octanol/water : Not applicable.
Auto-ignition temperature : Not available.
Decomposition temperature : Not available.
Viscosity : Dynamic (room temperature): Not available.
Kinematic (room temperature): Not available.
Kinematic (40°C (104°F)): <20.5 mm²/s (<20.5 cSt)
Molecular weight : Not applicable.
Particle characteristics
Median particle size : Not applicable.
Aerosol product
Type of aerosol : Spray
Heat of combustion : 27.253 kJ/g

Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : Avoid all possible sources of ignition (spark or flame).
- Incompatible materials** : No specific data.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name

Result

Acetone

Rat - Oral - LD50

5800 mg/kg

Toxic effects: Behavioral - Altered sleep time (including change in righting reflex) Behavioral - Tremor

Ethylbenzene

Rat - Oral - LD50

3500 mg/kg

Toxic effects: Liver - Other changes Kidney, Ureter, and Bladder - Other changes

Butane

Rabbit - Dermal - LD50

>5000 mg/kg

Rat - Inhalation - LC50 Vapor

658000 mg/m³ [4 hours]

Toluene

Rat - Oral - LD50

636 mg/kg

Rat - Inhalation - LC50 Vapor

49 g/m³ [4 hours]

Hydrotreated Heavy Petroleum Naphtha

Rat - Oral - LD50

>6 g/kg

Rat - Inhalation - LC50 Vapor

8500 mg/m³ [4 hours]

Toxic effects: Lung, Thorax, or Respiration - Other changes

Conclusion/Summary [Product] : Not available.

Skin corrosion/irritation

Product/ingredient name

Result

Acetone

Rabbit - Skin - Mild irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 500 mg

Rabbit - Skin - Mild irritant

Amount/concentration applied: 395 mg

Ethylbenzene

Rabbit - Skin - Mild irritant

Duration of treatment/exposure: 24 hours

Date of issue/Date of revision : 6/4/2025

Date of previous issue : 11/25/2024

Version : 30

13/22

SS100

DUPLI-COLOR® Stainless Steel

SHW-85-NA-GHS-US

Section 11. Toxicological information

Toluene
Amount/concentration applied: 15 mg
Pig - Skin - Mild irritant
Duration of treatment/exposure: 24 hours
Amount/concentration applied: 250 uL
Rabbit - Skin - Mild irritant
Amount/concentration applied: 435 mg
Rabbit - Skin - Moderate irritant
Duration of treatment/exposure: 24 hours
Amount/concentration applied: 20 mg
Rabbit - Skin - Moderate irritant
Amount/concentration applied: 500 mg
Human - Skin - Severe irritant
Duration of treatment/exposure: 48 hours
Amount/concentration applied: 5 pph

Conclusion/Summary [Product] : Not available.

Serious eye damage/eye irritation

Product/ingredient name

Result

Acetone
Human - Eyes - Mild irritant
Amount/concentration applied: 186300 ppm
Rabbit - Eyes - Mild irritant
Amount/concentration applied: 10 uL
Rabbit - Eyes - Moderate irritant
Duration of treatment/exposure: 24 hours
Amount/concentration applied: 20 mg
Rabbit - Eyes - Severe irritant
Amount/concentration applied: 20 mg
Rabbit - Eyes - Severe irritant
Amount/concentration applied: 500 mg
Rabbit - Eyes - Mild irritant
Duration of treatment/exposure: 0.5 minutes
Amount/concentration applied: 100 mg
Rabbit - Eyes - Mild irritant
Amount/concentration applied: 870 ug
Rabbit - Eyes - Severe irritant
Duration of treatment/exposure: 24 hours
Amount/concentration applied: 2 mg
Rabbit - Eyes - Severe irritant
Amount/concentration applied: 0.1 MI

Conclusion/Summary [Product] : Not available.

Respiratory corrosion/irritation

Not available.

Conclusion/Summary [Product] : Not available.

Respiratory or skin sensitization

Not available.

Skin

Section 11. Toxicological information

Conclusion/Summary [Product] : Not available.

Respiratory

Conclusion/Summary [Product] : Not available.

Germ cell mutagenicity

Not available.

Conclusion/Summary [Product] : Not available.

Carcinogenicity

Not available.

Conclusion/Summary [Product] : Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
Ethylbenzene	-	2B	-
Toluene	-	3	-
Nickel	-	2B	Reasonably anticipated to be a human carcinogen.

Reproductive toxicity

Not available.

Conclusion/Summary [Product] : Not available.

Specific target organ toxicity (single exposure)

Product/ingredient name

Result

Acetone	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
Ethylbenzene	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
Toluene	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
Hydrotreated Heavy Petroleum Naphtha	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3

Specific target organ toxicity (repeated exposure)

Product/ingredient name

Result

Ethylbenzene	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
Toluene	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
Nickel	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1

Aspiration hazard

Product/ingredient name

Result

Section 11. Toxicological information

Ethylbenzene	ASPIRATION HAZARD - Category 1
Toluene	ASPIRATION HAZARD - Category 1
Hydrotreated Heavy Petroleum Naphtha	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure

Not available.

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
- Skin contact** : May cause an allergic skin reaction.
- Ingestion** : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
 - pain or irritation
 - watering
 - redness
- Inhalation** : Adverse symptoms may include the following:
 - respiratory tract irritation
 - coughing
 - nausea or vomiting
 - headache
 - drowsiness/fatigue
 - dizziness/vertigo
 - unconsciousness
 - reduced fetal weight
 - increase in fetal deaths
 - skeletal malformations
- Skin contact** : Adverse symptoms may include the following:
 - irritation
 - redness
 - reduced fetal weight
 - increase in fetal deaths
 - skeletal malformations
- Ingestion** : Adverse symptoms may include the following:
 - nausea or vomiting
 - reduced fetal weight
 - increase in fetal deaths
 - skeletal malformations

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Potential chronic health effects

Section 11. Toxicological information

Not available.

Conclusion/Summary [Product] : Not available.

- General** : May cause damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- Carcinogenicity** : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
- Mutagenicity** : No known significant effects or critical hazards.
- Reproductive toxicity** : May damage fertility or the unborn child.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
DUPLI-COLOR® Stainless Steel	30395.6	N/A	N/A	95.5	N/A
Acetone	5800	N/A	N/A	N/A	N/A
Ethylbenzene	3500	N/A	N/A	11	N/A
Butane	N/A	N/A	N/A	658	N/A
Toluene	N/A	N/A	N/A	49	N/A
Hydrotreated Heavy Petroleum Naphtha	N/A	N/A	N/A	8.5	N/A

Section 12. Ecological information

Toxicity

Product/ingredient name

Acetone

Result

Acute - EC50 - Fresh water

Algae - Green algae - *Selenastrum sp.*
7200 mg/l [96 hours]

Effect: Population

Chronic - NOEC - Marine water

Algae - Green algae - *Ulva pertusa*
4.95 mg/l [96 hours]

Effect: Reproduction

Chronic - NOEC - Fresh water

Crustaceans - Daphnia - *Daphniidae*
0.016 ml/l [21 days]

Effect: Population

Chronic - NOEC - Marine water

Fish - Threespine stickleback - *Gasterosteus aculeatus* - Larvae
Age: 7 days

5 µg/l [42 days]

Effect: Population

Acute - LC50 - Marine water

ISO

Crustaceans - Calanoid copepod - *Acartia tonsa* - Copepodid
4.42589 ml/l [48 hours]

Effect: Mortality

Acute - LC50 - Fresh water

Section 12. Ecological information

Ethylbenzene	<p>Fish - Guppy - <i>Poecilia reticulata</i> <u>Age</u>: 4 to 12 months; <u>Size</u>: 2 to 10 cm; <u>Weight</u>: 0.5 to 14 g 5600 ppm [96 hours] <u>Effect</u>: Mortality</p> <p>Acute - LC50 - Fresh water Fish - Rainbow trout, donaldson trout - <i>Oncorhynchus mykiss</i> 4200 µg/l [96 hours] <u>Effect</u>: Mortality</p> <p>Acute - EC50 - Fresh water Daphnia - Water flea - <i>Daphnia magna</i> - Neonate <u>Age</u>: ≤24 hours 2.93 mg/l [48 hours] <u>Effect</u>: Intoxication</p> <p>Acute - EC50 - Fresh water Algae - Green algae - <i>Raphidocelis subcapitata</i> 3600 µg/l [96 hours] <u>Effect</u>: Population</p>
Toluene	<p>Acute - LC50 - Fresh water Fish - Coho salmon, silver salmon - <i>Oncorhynchus kisutch</i> - Fry <u>Weight</u>: 1 g 5500 µg/l [96 hours] <u>Effect</u>: Mortality</p> <p>Acute - EC50 - Fresh water Daphnia - Water flea - <i>Daphnia magna</i> - Juvenile (Fledgling, Hatchling, Weanling) 6000 µg/l [48 hours] <u>Effect</u>: Intoxication</p> <p>Chronic - NOEC - Fresh water Daphnia - Water flea - <i>Daphnia magna</i> <u>Age</u>: ≤24 hours 1 mg/l [21 days] <u>Effect</u>: Mortality</p> <p>Acute - EC50 - Fresh water Algae - Green algae - <i>Raphidocelis subcapitata</i> 12.5 mg/l [72 hours] <u>Effect</u>: Growth</p>
Nickel	<p>Acute - EC50 - Fresh water Aquatic plants - Duckweed - <i>Lemna minor</i> 450 µg/l [4 days] <u>Effect</u>: Growth</p> <p>Chronic - NOEC - Marine water Algae - Dinoflagellate - <i>Glenodinium halli</i> 100 mg/l [72 hours] <u>Effect</u>: Population</p> <p>Chronic - NOEC - Fresh water Fish - common carp - <i>Cyprinus carpio</i> <u>Age</u>: 13 months; <u>Size</u>: 10.5 cm; <u>Weight</u>: 27.8 g 3.5 µg/l [4 weeks] <u>Effect</u>: Accumulation</p> <p>Acute - LC50 - Fresh water US EPA, OECD Crustaceans - Water flea - <i>Ceriodaphnia dubia</i> - Juvenile (Fledgling, Hatchling, Weanling) <u>Age</u>: 2 to 8 hours 34.6 µg/l [48 hours] <u>Effect</u>: Mortality</p> <p>Chronic - EC10</p>

Section 12. Ecological information

OECD
 Daphnia - Water flea - *Daphnia magna* - Neonate
 Age: <24 hours
 6.9 µg/l [21 days]
 Effect: Reproduction
Acute - LC50 - Fresh water
 Fish - Indian catfish - *Heteropneustes fossilis*
 47.5 ng/l [96 hours]
 Effect: Mortality

Conclusion/Summary [Product] : Not available.

Persistence and degradability

Not available.

Conclusion/Summary [Product] : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Acetone	-	-	Readily
Ethylbenzene	-	-	Readily
Toluene	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Toluene	-	90	Low
Hydrotreated Heavy Petroleum Naphtha	-	10 to 2500	High

Mobility in soil

Soil/Water partition coefficient : Not available.






Other adverse effects

No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IATA	IMDG
UN number	UN1950	UN1950	UN1950	UN1950	UN1950
UN proper shipping name	AEROSOLS	AEROSOLS	AEROSOLS	AEROSOLS, flammable	AEROSOLS
Transport hazard class(es)	2.1 	2.1 	2.1 	2.1 	2.1 
Packing group	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.
Additional information	- ERG No. 126 Dependent upon container size, this product may ship under the Limited Quantity shipping exception.	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.13-2.17 (Class 2). ERG No. 126 Dependent upon container size, this product may ship under the Limited Quantity shipping exception.	- ERG No. 126 Dependent upon container size, this product may ship under the Limited Quantity shipping exception.	- Dependent upon container size, this product may ship under the Limited Quantity shipping exception.	Emergency schedules F-D, S-U Dependent upon container size, this product may ship under the Limited Quantity shipping exception.

Special precautions for user : Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

Transport in bulk according to IMO instruments : Not available.

Proper shipping name : Not available.

Section 15. Regulatory information

U.S. Federal regulations :

[California Prop. 65](#)

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

[International regulations](#)

[Montreal Protocol](#)

Section 15. Regulatory information

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

- International lists** :
- Australia inventory (AIIIC):** Not determined.
 - China inventory (IECSC):** Not determined.
 - Japan inventory (CSCL):** Not determined.
 - Japan inventory (ISHL):** Not determined.
 - Korea inventory (KECI):** Not determined.
 - New Zealand Inventory of Chemicals (NZIoC):** Not determined.
 - Philippines inventory (PICCS):** Not determined.
 - Taiwan Chemical Substances Inventory (TCSI):** Not determined.
 - Thailand inventory:** Not determined.
 - Turkey inventory:** Not determined.
 - Vietnam inventory:** Not determined.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health	*	3
Flammability		4
Physical hazards		3

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

Procedure used to derive the classification

Classification	Justification
AEROSOLS - Category 1 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2 TOXIC TO REPRODUCTION - Category 1B SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 ASPIRATION HAZARD - Category 1	On basis of test data Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method

History

- Date of printing** : 6/4/2025
- Date of issue/Date of revision** : 6/4/2025
- Date of previous issue** : 11/25/2024
- Version** : 30

Section 16. Other information

Key to abbreviations

: ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
SGG = Segregation Group
UN = United Nations

▣ Indicates information that has changed from previously issued version.

Notice to reader

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.