211 Ink (Black, Red, Green, Yellow)

SECTION 1: IDENTIFICATION

Product Identifier:	**211 Ink (Black, Red, Green, Yellow)**
Other Means of Identification:	**1061**
Part Number:	**211- + 1 (black) or 2 (red) or 4 (green) or 5 (yellow)**
Recommended Use:	**Marking**
Restrictions on Use:	**None known**
Supplier Identifier:	**Sterling Marking Products Inc., 349 Ridout Street North, London, ON Canada N6A 2N8 1-800-265-5957, 519-434-5785**
Emergency Phone Number:	**CANUTEC (613) 966-6666, Cellular *666**

SECTION 2: HAZARD IDENTIFICATION

Classified according to Canada's Hazardous Products Regulations (WHMIS 2015) and the U.S. Hazardous Communication Standard (HCS 2012)

Classificaton

Flammable Liquid, Class B, Division 2

Eye irritation, Class D, Division 2B

Label Elements:

Signal Word: Warning

Hazard Statements:

H226, Flammable liquid and vapour

H315, Causes skin irritation

H320, Causes eye irritation

Prevention: Highly flammable. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing mist or vapor. Use only outdoors or in a well-ventilated area. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

Response: If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.

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/attention.

In case of fire: Use appropriate media to extinguish.

Storage: Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

Disposal: Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazards not otherwise classified (HNOC): None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Percentage (%)	Other Identifiers
2-Propoxyenthanol (Glycol Ether EP)	2807-30-9	30 – 60%	Not Applicable
Ethanol	64-17-5	10 – 30%	Not Applicable
Propyl Acetate	109-60-4	Not available	Not Applicable

Remaining components are proprietary, non-hazardous and/or present at amounts below reportable limits.
Note: All ingredients are listed on the Domestic Substances List (DSL) and the Toxic Substances Control Act (TSCA) list.

SECTION 4: FIRST AID MEASURES

Inhalation:

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin contact:

Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical attention if irritation develops and persists.

Eye contact:

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion:

Rinse mouth thoroughly. If ingestion of a large amount does occur, call a poison control center immediately.

Most important symptoms/effects, acute and delayed:

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation.

Indication of immediate medical attention and special treatment needed:

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General information:

Take off all contaminated clothing immediately. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable extinguishing media:

Water fog. Alcohol resistant foam. Dry chemical powder. Carbon dioxide (CO2). Potential Hazards: HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames. Vapours may form explosive mixtures with air. Vapours may travel to source of ignition and flash back. Most vapours are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapour explosion hazard indoors, outdoors or in sewers. Runoff to sewer may create fire or explosion hazard. Containers may explode when heated. Many liquids are lighter than water.

Small Fire: CAUTION: This product has a low flash point: Use of water spray when fighting fire may be inefficient.

Means of Extinction of Small Fire: Dry chemical, carbon dioxide, water spray or alcohol-resistant foam. Do not use dry chemical extinguishers to control fires involving nitromethane or nitroethane
Large Fire: Water spray, fog or alcohol-resistant foam. Do not use straight streams. Move containers from fire area if you can do it without risk.

Unsuitable extinguishing media:

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical:

Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters:

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire-fighting equipment/instructions:

In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.

Specific methods:

Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards:

Flammable liquid and vapor

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up:

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Keep combustibles (wood, paper, oil, etc.) away from spilled material.

Large Spills: Stop the flow of material, if this is without risk. Use water spray to reduce vapors or divert vapor cloud drift. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Clean up in accordance with all applicable regulations. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling:

Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Avoid contact with eyes. Avoid breathing mist

or vapor. Avoid prolonged exposure. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Use care in handling/storage.

Conditions for safe storage, including any incompatibilities:

Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS). Store between 35°F (2°C) and 120°F (49°C).

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Occupational Exposure Limits

Biological limit values:

No biological exposure limits noted for the ingredient(s).

Exposure guidelines:

SECTION II - HAZARDOUS INGREDIENTS

Component	CAS Registry	Toxicology	Concentration % (w/w)
Ethanol	**64-17-5**	TLV: 1000ppm L_D50: 3945mg/kg (oral, rat) L_C50: 20,000ppm/10H (inhalation, rat)	10-30%
2-Propoxyethanol	**2807-30-9**	TLV: Not available L_D50: Not available L_C50: Not available	30-60%
Propyl acetate	**109-60-4**	ACGIH TLV: 200ppm TWAEV: 200ppm STEV: 250ppm L_D50: Not available L_C50: Not available	N/av

Propoxyethanol (Glycol Ether EP) – the odor is objectionable at 100 ppm; higher levels produce eye, nose and throat irritation.

Appropriate engineering controls:

Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

Individual protection measures, such as personal protective equipment:

Eye/face protection:

Wear approved safety goggles.

Skin protection:

Hand protection:

Wear appropriate chemical resistant gloves.

Other:

Wear suitable protective clothing

Respiratory protection:

When workers are facing concentrations above the exposure limit they must use appropriate

certified respirators.

Thermal hazards:
Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations:
When using, do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Coloured liquid.
Physical state:	Liquid.
Form:	Liquid.
Color:	Various, white, black, yellow, orange, blue
Odor:	Characteristic, Glycol Ether
Odor threshold:	Not available.
pH:	Not available.
Melting point/freezing point:	Not available.
Initial boiling point:	115˚C
Flash point:	12˚C
Evaporation rate:	>1
Flammability (solid, gas):	Flammable as vapour
Vapor pressure:	Not Established
Vapor density:	Not available.
Relative density:	Not available.
Solubility(ies):	
Solubility (water):	Partial

SECTION 10: STABILITY AND REACTIVITY

Reactivity:
The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability:
Material is stable under normal conditions.
Possibility of hazardous reactions:
No dangerous reaction known under conditions of normal use.
Conditions to avoid:
Keep away from heat, sparks and open flame. Avoid temperatures exceeding the flash point.
Contact with incompatible materials:
Incompatible materials:
Strong oxidizing agents. Strong acids. Strong bases. Alkali metals. Amines
Hazardous decomposition products:
In case of fire: Dry chemical, Carbon oxides, H_2O, Nitrogen Oxides. Fire will produce irritating, corrosive and/or toxic gases.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Inhalation:

May cause irritation to the respiratory system.

Skin contact:

May cause mild skin irritation.

Eye contact:

Causes serious eye irritation.

Ingestion:

May cause discomfort if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics:

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

SECTION II - HAZARDOUS INGREDIENTS

Component	CAS Registry	Toxicology	Concentration % (w/w)
Ethanol	**64-17-5**	TLV: 1000ppm L_D50: 3945mg/kg (oral, rat) L_C50: 20,000ppm/10H (inhalation, rat)	10-30
2-Propoxyethanol	**2807-30-9**	TLV: Not available L_D50: Not available L_C50: Not available	30-60
Propyl acetate	**109-60-4**	ACGIH TLV: 200ppm TWAEV: 200ppm STEV: 250ppm L_D50: Not available L_C50: Not available	N/av

Information on toxicological effects:

Acute toxicity: N/A

Skin corrosion/irritation:

Prolonged or repeated contact may dry skin and cause dermatitis.

Serious eye damage/eye irritation:

Causes serious eye irritation.

Respiratory or skin sensitization:

May cause skin irritation.

Respiratory sensitization:

Not a respiratory sensitizer.

Skin sensitization:

This product is not expected to cause skin sensitization.

Germ cell mutagenicity:

No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity:

This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. Titanium dioxide is considered carcinogenic only when in an inhalable powdered form.

IARC Monographs. Overall Evaluation of Carcinogenicity:

Titanium dioxide (CAS 13463-67-7) 2B Possibly carcinogenic to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

Not listed.

Reproductive toxicity:

This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure:

May cause respiratory irritation.

Specific target organ toxicity - repeated exposure:

Not classified.

Aspiration hazard:

No data available.

Chronic effects:

Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis. The product contains organic solvents which may be absorbed into the body by skin contact and cause permanent damage to the nervous system, including the brain.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability:

No data available.

Bioaccumulative potential:

The product does not contain any substances expected to be bioaccumulating.

Mobility in soil:

This product is moderately water soluble and may disperse in soil.

Other adverse effects:

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal instructions:

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations:

Dispose in accordance with all applicable regulations.

Hazardous waste code:

D001: Waste Flammable material with a flash point <140 °F

Waste from residues / unused products:

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). Dispose of waste and residues in accordance with local authority requirements.

Contaminated packaging:

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: TRANSPORT INFORMATION

DOT

UN number: UN1210
UN proper shipping name: Printing ink, flammable
Transport hazard class(es):
Class: 3
Subsidiary risk: -
Label(s): 3
Packing group: III
Special precautions for user: Read safety instructions, SDS and emergency procedures before handling.
Special provisions: B1, IB3, T2, TP1
Packaging exceptions: 150
Packaging non bulk: 173
Packaging bulk: 242

IATA

UN number: UN1210
UN proper shipping name: Printing ink, flammable
Transport hazard class(es):
Class: 3
Subsidiary risk: -
Label(s): 3
Packing group: III
Environmental Hazards No.
ERG Code: 3L
Special precautions for user: Read safety instructions, SDS and emergency procedures before handling.

IMDG

UN number: UN1210
UN proper shipping name: Printing ink, flammable
Transport hazard class(es):
Class: 3
Subsidiary risk: -
Label(s): 3
Packing group: III
Environmental Hazards
Marine pollutant: No.
EmS: F-E, S-D
Special precautions for user: Read safety instructions, SDS and emergency procedures before handling.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:
Not established.

SECTION 15: REGULATORY INFORMATION

US federal regulations:

This product is hazardous according to OSHA 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

International Inventories

Country(s) or region name	Inventory	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s). A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

WHMIS Hazardous Class:
B2 FLAMMABLE LIQUIDS

SECTION 16: OTHER INFORMATION

Additional Information: This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

HMIS® ratings:
Health: 2
Flammability: 3
Physical hazard: 0

Further information: HMIS® is a registered trade and service mark of the NPCA

NFPA ratings

Disclaimer: NOTICE TO READER: Sterling Marking Products Inc. disclaims all express or implied warranties of merchantability and fitness for a particular purpose, with respect to the product or the information provided herein, and shall under no circumstances be liable for incidental or consequential damages.

Do not use ingredient information and/or ingredient percentages in this SDS as a product specification. For product specification information refer to a Product Specification Sheet and/or a Certificate of Analysis. These can be obtained from your local Sterling Marking Products Inc. Sales Office.

All information appearing herein is based upon data obtained from the manufacturer and/or recognized technical sources. While the information is believed to be correct, Sterling Marking Products Inc. makes no representations as to its accuracy or sufficiency. Conditions of use are beyond Sterling Marking Products' control and therefore users are responsible to verify this data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product, or from the publication or use of, reliance upon, information contained herein. This information relates only to the product designated herein, and does not relate to its use in combination with any other material or in any other process.

End of SDS.