

**Phenatol Green Neutral Tone Paper Developer**

Material Safety Data Sheet

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**SECTION 1: Identification**

**1.1. Identification**

Product form : White powder

Substance name : Phenatol Green Neutral Tone Paper Developer

Chemical name : N/A - Mixture

CAS-No : N/A - Mixture

Brand : Flic Film Inc.

**1.2. Recommended use and restrictions on use**

Use of the substance/mixture : For photographic use only.   
Recommended use : Photographic chemicals   
Restrictions on use : Not for food, drug or household use

**1.3. Supplier**

Flic Film Inc.

10B Morrison Road, Longview, Alberta, Canada T0L 1HO

T +1-403-982-4272

**1.4. Emergency telephone number**

Emergency number : +1-403-982-4272

**SECTION 2: Hazard(s) identification**

**2.1. Classification of the substance or mixture GHS classification**   
Based on sodium carbonate content

**GHS Classification**

Skin irritation : Category 2

Eye irritation : Category 2A   
 Carcinogenicity : Not identified

Specific target organ toxicity

- repeated exposure : Category 3 (Respiratory System)

**2.2. GHS Label elements, including precautionary statements GHS labelling**

Hazard pictograms (GHS) :



GHS07

Signal word (GHS) : Warning

Hazard statements (GHS) : H315 - Causes skin irritation.   
 H319 - Causes serious eye irritation.   
 H335 - May cause respiratory irritation.

Precautionary statements (GHS) : P261 - Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.   
 P264 - Wash skin thoroughly after handling.   
 P271 - Use only outdoors or in a well-ventilated area.   
 P280 - Wear protective gloves/ eye protection/ face protection. P302 + P352 - IF ON SKIN: Wash with plenty of water.

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P304 + P340 + P312 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.

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

P332 + P313 - If skin irritation occurs: Get medical advice/ attention.

P337 + P313 - If eye irritation persists: Get medical advice/ attention.

P362 + P364T- Take off contaminated clothing and wash it before reuse.

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.   
 P405 - Store locked up.

P501 - Dispose of contents/ container to an approved waste disposal plant.

**2.3. Other hazards which do not result in classification** Other hazards not contributing to the

classification

**2.4. Unknown acute toxicity (GHS)**

Not applicable

**SECTION 3: Composition/Information on ingredients**

**3.1. Substances**

Substance type : Multi-constituent

|  |  |  |
| --- | --- | --- |
| **Name** |  |  |
| **Product identifier** | **% w/** |
| Sodium carbonate Sodium sulfite Ascorbic acid Potassium bromide Phenidone | (CAS-No.) 497-19-8 (CAS-No.) 7757-83-7 (CAS-No.) 5081-7 (CAS-No.) 7758-02-3 (CAS-No.) 2654-57-1 |  |
| >50 >30 >10 >0.5 <1.0 |

**3.2. Mixtures**

Not applicable

**SECTION 4: First-aid measures**

**4.1. Description of first aid measures**

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice   
 (show the label where possible).

First-aid measures after inhalation : Allow victim to breathe fresh air. Allow the victim to rest. If breathing is difficult, give oxygen.   
 Get medical attention

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor / physician.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a POISON CENTER or   
 doctor/physician if you feel unwell.

**4.2. Most important symptoms and effects (acute and delayed)**

**5.2. Specific hazards arising from the chemical**

Oxides of sodium and potassium. Sulfur dioxide. Carbon dioxide. Carbon monoxide. Bromine.

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**6.1. Personal precautions, protective equipment and emergency procedures**

Avoid contact with skin and eyes. Avoid breathing dust. Avoid dust formation. Wash thoroughly after handling. Wear correct personal protective equipment.

**6.1.1. For non-emergency personnel**

Protective equipment : Safety glasses. Protective clothing. Gloves. Dust mask.   
Emergency procedures : Evacuate unnecessary personnel.

**6.1.2. For emergency responders**

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

**6.2. Environmental precautions**

This material is harmful to aquatic life. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

**6.3. Methods and material for containment and cleaning up**

Spills : Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering the area. Dilute   
 with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal   
 container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local   
 and regional authority requirements.

**6.4. Reference to other sections**

See Heading 8. Exposure controls and personal protection.

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of dust build up. Avoid breathing   
 dust. Avoid contact with skin and eyes. Obtain special instructions before use. Use personal protective   
 equipment as required. Do not handle until all safety precautions have been read and understood.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash exposed skin thoroughly after handling.   
 Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

**7.2. Conditions for safe storage, including any incompatibilities**

Storage conditions : Keep container closed when not in use. Store in a cool, dry, well-ventilated area.

Incompatible products : Acids, lime, Prolonged contact with aluminum, brass, bronze, copper, lead, tin, zinc or other alkali sensitive   
 metals or alloys.

Incompatible materials : Store protected from moisture.

Note: Solutions of sodium carbonate are corrosive to aluminium.

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Component Occupational Exposure Limits** | | |  |
| Sodium sulfite ACGIH TWA 5mg/m3 (8 hour) | | | | |
| Sodium carbonate Not listed | | | | |
| Ascorbic acid Not listed | | | | |
| Potassium bromide Not listed | | | | |
| Phenidone Not listed | | | | |

**8.2. Appropriate engineering controls**

Appropriate engineering controls : Emergency eye wash fountains should be available in the immediate vicinity of any potential

exposure. Ensure adequate ventilation. Material should be handled using local exhaust ventilation (LEV) or laboratory hood whenever possible.

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**8.3. Individual protection measures/Personal protective equipment**

**Personal protective equipment:**

Chemical resistant apron. Gloves. Face shield. Protective clothing. Safety glasses. Respirator.





**Hand protection:**

Wear protective gloves

**Eye protection:**

Chemical goggles or safety glasses

**Respiratory protection:**   
Wear respiratory protection.

**Other information:**

Do not eat, drink or smoke during use.

**SECTION 9: Physical and chemical properties**

**9.1. Information on basic physical and chemical properties**

Physical state : Solid.

Appearance : Power / crystalline.

Colour : White.

Odour : Slight sulfurous / acidic smell.

Odour threshold : No data available.

pH : No data available.

Melting point : No data available.

Freezing point : No data available.

Boiling point : No data available.

Flash point : No data available.

Flammability (solid, gas) : Non flammable.

Vapour pressure : No data available.

Relative vapour density at 20 °C : No data available.

Relative density : No data available.

Specific gravity / density : No data available.

Molecular mass : N/A - Mixture.

Solubility : Easily soluble in cold water, hot water. Insoluble in alcohol. Auto-ignition temperature : No data available.

Decomposition temperature : No data available

Viscosity, kinematic : No data available

Viscosity, dynamic : No data available

Explosion limits : No data available

Explosive properties : No data available

Oxidizing properties : No data available

Hygroscopic : No data available

**9.2. Other information**

No additional information available

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**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

The mixture is stable.

**10.2. Chemical stability** Stable under normal conditions.

**10.3. Possibility of hazardous reactions**

Moisture can also hydrolyze sodium sulfite to liberate sulfur dioxide which is a highly irritating and corrosive gas.

**10.4. Conditions to avoid**

Direct sunlight. Possible emission of gaseous decomposition products may lead to a dangerous pressure build. Exposure to moisture. Elevated temperatures. Store protected from moisture.

**10.5. Incompatible materials**

Lime. Strong acids. Prolonged contact with aluminum, brass, bronze, copper, lead, tin, zinc or other alkali sensitive metals or alloys. Sodium carbonate can be basic enough to catalyze decomposition of nitro-compounds perhaps leading to explosion. Avoid contact with lime to prevent corrosive sodium hydroxide. Avoid strong acids to prevent generation of highly irritant and corrosive sulfur dioxide gas.

**10.6. Hazardous decomposition products**

Oxides of sodium and potassium. Sulfur dioxide. Carbon dioxide. Carbon monoxide. Bromine.

**11: Toxicological information**

**11.1. Information on toxicological effects**

Likely routes of exposure : Inhalation; Skin and eye contact.   
Acute toxicity : Oral: Harmful if swallowed.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Phenatol Green Natural Tone Paper Developer (Toxicological data provided for sodium carbonate - greatest concentration)** | |  |
| LD50 Oral | | 4,090 mg/kg (rat) | |
| LD50 Dermal | | 500 mg/kg (rabbit) | |
| LC50 Inhalation | | 2,300 mg/m3/2H (rat) | |

Skin corrosion/irritation : Causes skin irritation, redness.

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitization : May cause an allergic skin reaction. Sodium sulfite may cause severe or deadly allergic   
 reactions in some asthmatics and sulfite sensitive individuals. Possible signs and symptoms   
 of allergic reactionsinclude bronchoconstriction, sweating, flushing, hives, rapid heart rate,   
 decreased blood pressure and anaphylaxis. Repeated or prolonged contact may cause dermatitis. Germ cell mutagenicity : Not classified as a mutagen.

Carcinogenicity : Not classified as a carcinogen.

Reproductive toxicity : Not classified. Specific target organ toxicity – single exposure : Not classified

Specific target organ toxicity – repeated exposure

: Based on available data, the classification criteria are not met. Harmful if swallowed.

Aspiration hazard : Not classified

Potential Adverse human health effects and

symptoms

Symptoms/effects after skin contact : May cause skin irritation and/or dermatitis.   
Symptoms/effects after eye contact : May cause irreversible eye damage.

Symptoms/effects after ingestion : Swallowing a small quantity of this material will result in serious health hazard. Prolonged or   
 chronic ingestion may cause bromism charaterised by disturbances to the central nervous system.

|  |
| --- |
| **SECTION 12: Ecological information** |
| **12.1. Toxicity** |

Ecology - water : Harmful to aquatic life.

**12.2. Persistence and degradability**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **C41 Developer - Part A mixture** | |  |
| Persistence and degradability | | The material is inorganic and not subject to biodegradation and not to persist in the environment. | |

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**12.3. Bioaccumulative potential**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **C41 Developer - Part A mixture** | |  |
| Bioaccumulative potential | | This material is believed not to bioaccumulate.. | |

**12.4. Mobility in soil**

No additional information available

**12.5. Other adverse effects**

Other information : Avoid release to the environment.

**SECTION 13: Disposal considerations**

**13.1. Disposal methods**

Waste disposal recommendations : Dispose in a safe manner in accordance with local / national regulations. Dispose of

contents / container to comply with local, state and federal regulations.   
Ecology - waste materials : Avoid release to the environment.

**SECTION 14: Transport information**

**Department of Transportation (DOT)**  : No transport restrictions for small packages, i.e. these are small quantity kits and not regulated.

In accordance with DOT Transport document

description : Not applicable.

UN-No.(DOT) : UN3082

Proper Shipping Name (DOT) : Environmentally hazardous substances, liquid, n.o.s.

Transport hazard class(es) (DOT) : 9 - Class 9 - Miscellaneous hazardous material 49 CFR 173.140 Packing group (DOT) : III - Minor Danger

Hazard labels (DOT) : 9 - Class 9 (Miscellaneous dangerous materials)







Dangerous for the environment : Yes Marine pollutant : Yes



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DOT Special Provisions (49 CFR 172.102) : 8 - A hazardous substance that is not a hazardous waste may be shipped under the shipping description “Other regulated substances, liquid or solid, n.o.s.”, as appropriate. In addition, for

solid materials, special provision B54 applies.

146 - This description may be used for a material that poses a hazard to the environment but does not meet the definition for a hazardous waste or a hazardous substance, as defined in 171.8 of this subchapter, or any hazard class as defined in Part 173 of this subchapter, if it is designated as environmentally hazardous by the Competent Authority of the country of origin, transit or destination.

335 - Mixtures of solids that are not subject to this subchapter and environmentally hazardous liquids or solids may be classified as “Environmentally hazardous substances, solid, n.o.s,” UN3077 and may be transported under this entry, provided there is no free liquid visible at the   
time the material is loaded or at the time the packaging or transport unit is closed. Each

transport unit must be leak-proof when used as bulk packaging.

A112 - Notwithstanding the quantity limits shown in Column (9A) and (9B) for this entry, the   
following IBCs are authorized for transportation aboard passenger and cargo-only aircraft. Each IBC may not exceed a maximum net quantity of 1,000 kg:

a. Metal: 11A, 11B, 11N, 21A, 21B and 21N

b. Rigid plastics: 11H1, 11H2, 21H1 and 21H2

c. Composite with plastic inner receptacle: 11HZ1, 11HZ2, 21HZ1 and 21HZ2

d. Fiberboard: 11G

e. Wooden: 11C, 11D and 11F (with inner liners)

f. Flexible: 13H2, 13H3, 13H4, 13H5, 13L2, 13L3, 13L4, 13M1 and 13M2 (flexible IBCs must be sift-proof and water resistant or must be fitted with a sift-proof and water resistant liner).

B54 - Open-top, sift-proof rail cars are also authorized.

IB8 - Authorized IBCs: Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N); Rigid

plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 11HZ2, 21HZ1, 21HZ2, 31HZ1 and 31HZ2); Fiberboard (11G); Wooden (11C, 11D and 11F); Flexible (13H1, 13H2, 13H3, 13H4, 13H5, 13L1, 13L2, 13L3, 13L4, 13M1 or 13M2).

IP3 - Flexible IBCs must be sift-proof and water-resistant or must be fitted with a sift-proof and   
water-resistant liner.

N20 - A 5M1 multi-wall paper bag is authorized if transported in a closed transport vehicle.

T1 - 1.5 178.274(d)(2) Normal............. 178.275(d)(2)

TP33 - The portable tank instruction assigned for this substance applies for granular and   
powdered solids and for solids which are filled and discharged at temperatures above their   
melting point which are cooled and transported as a solid mass. Solid substances transported

or offered for transport above their melting point are authorized for transportation in portable tanks conforming to the provisions of portable tank instruction T4 for solid substances of

packing group III or T7 for solid substances of packing group II, unless a tank with more

stringent requirements for minimum shell thickness, maximum allowable working pressure, pressure-relief devices or bottom outlets are assigned in which case the more stringent tank instruction and special provisions shall apply. Filling limits must be in accordance with portable tank special provision TP3. Solids meeting the definition of an elevated temperature material   
must be transported in accordance with the applicable requirements of this subchapter.

DOT Packaging Exceptions (49 CFR 173.xxx) : 155   
DOT Quantity Limitations Passenger aircraft/rail

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)

: No limit

DOT Vessel Stowage Location : A - The material may be stowed ‘‘on deck’’ or ‘‘under deck’’ on a cargo vessel and on a

passenger vessel.

Other information : No supplementary information available.

**SECTION 15: Regulatory information**

**Canadian National Regulations**

Phenatol Green Neutral Tone Paper Developer

Not listed on the Canadian DSL (Domestic Substances List)   
Not listed on the Canadian IDL (Ingredient Disclosure List)

**SECTION 16: Other information**

Full text of H-phrases: H315 - Causes skin irritation.   
 H319 - Causes serious eye irritation.   
 H335 - May cause respiratory irritation.

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