

Safety Data Sheet



Waste Stream: Printer and Toner Cartridges
Report Ref:

Revision date: October 2019
Version: 0

SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Waste Stream Printer and Toner Cartridges		
Waste Generation Process Used cartridges from Transnet pipelines (Canon, Hewlett Packard and Epson)		
Restrictions on use Can be re-used or re-cycled by an appropriate appointed facility.		
Generators Name Transnet Pipelines -Mngeni Pumpstation		
Street address 6 Stockville Road, Mahogany Ridge, Westmead		
City Durban	Province Kwazulu Natal	
Postal Code	Emergency Telephone 031 308 8215 & 083 452 0577	
Fax	Email sibongile.mbhele@transnet.net	
Date SDS prepared October 2019	SDS prepared by Dolphin Coast Environmental Laboratory Solutions	Phone number/ Email Address 087 353 9750 / info@dceles.co.za

SECTION 2 HAZARDS IDENTIFICATION

Human Health	None Identified		
Environment	None Identified		
Physical	None Identified		
Signal words	WARNING, DANGER		
Hazard Statements	PHYSICAL None identified	HEALTH None identified	ENVIRONMENTAL None identified
Precautionary statements	PREVENTION None identified	RESPONSE None identified	STORAGE/DISPOSAL None identified
Pictograms: None Identified			

Note: Please refer to Section 11

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SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Substance	Mixture	x
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Trace amounts of the following may be present (the below mentioned constituents may be present with other ingredients and at different concentrations depending on the make of cartridge/toner. A list of some of the hazardous components has been developed but is not limited):

Ethylene Glycol
2-pyrrolidone
Ethoxylated 2, 4, 7, 9-tetramethyl-5-decyn-4, 7-diol
Water
Modified Carbon Black
Dipropylene Glycol
Sodium Hydroxide
Glycerin
Isopropyl Alcohol
Thiodiglycol
Styrene Acrylate Co-polymer
Amorphous silica
Iron oxide
Titanium Dioxide
Acrylic resin

SECTION 4 FIRST AID MEASURES

Skin contact: Immediately remove/take off all contaminated clothing and rinse all affected areas with water.
Eye contact Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention if irritation persists. Eye Wash stations in the working area will be advantageous.
Inhalation Remove to fresh air and keep at rest in a position comfortable for breathing; until help arrives.
Ingestion Rinse mouth. Do not induce vomiting.
Most important symptoms and effects (acute and delayed): Symptoms: None Identified Effects: None Identified
Protection of First Aiders and notes for doctor: This product contains hazardous constituents, at unknown concentrations, see section 3 for all material and treat symptomatically.

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SECTION 5 FIRE FIGHTING MEASURES

<p>Suitable extinguishing media</p> <ul style="list-style-type: none"> • Foam (Specifically trained personnel only) • Water fog (Specifically trained personnel only) • Dry chemical powder • Carbon dioxide • Other inert gases (subject to regulations) • Sand or earth 	<p>Unsuitable extinguishing media</p> <ul style="list-style-type: none"> • Direct water jets on the burning product. • Simultaneous use of foam and water on the same surface.
<p>Hazardous combustion products: Combustion materials may be toxic. Burning may produce carbon monoxide, carbon dioxide and other unidentified organic compounds.</p>	
<p>Precautions for Fire-fighters Complete PPE should be used with worn.</p>	

SECTION 6 ACCIDENTAL RELEASE MEASURES

<p>Personal precaution</p> <p>Wash hands, forearms and face thoroughly after handling waste stream; before eating, smoking, using the lavatory and at the end of the work day. Appropriate measures shall be used to remove potentially contaminated clothing and shall be washed prior to re-use. Contaminated materials should not be allowed to accumulate in the workplaces and should never be kept inside the pockets. Contaminated work clothing should not be allowed off-site. Access to area must be restricted to authorised personnel only.</p>
<p>Protective Equipment See section 8</p>
<p>Emergency Procedures Evacuate non-essential staff and those not equipped with individual protection apparatus. Spillages make surfaces slippery; SHEQ team on-site must be contacted in order to ensure all measures are taken and all correct procedures are followed.</p>
<p>Environmental Precautions Do not release into the environment or allow waste stream to enter into water ways.</p>
<p>Materials for containment</p> <p>Small Spills - Spill kits should be available in appropriate locations i.e. waste storage area, loading area and en-route to the disposal facility.</p> <p>Large Spills - Appropriate hazmat team must be appointed by relevant personnel to ensure spill is appropriately cleared. Disposal Vehicles must have adequate labelling.</p>
<p>Methods and materials for clean-up, neutralization and recovery Contain, collect and dispose of spilled waste as per local regulations.</p>

SECTION 7 HANDLING AND STORAGE

<p>Precautions for safe handling</p> <p>Keep away from sparks and flame. Do not breathe vapour or mist. Use in a well-ventilated area. Avoid contact with eyes, skin, clothing, and shoes. Do not smoke near this waste stream.</p>
<p>Conditions for safe storage</p> <p>Prior to disposal product must be stored in a dry, cool and well-ventilated place. The area must be bunded to ensure contaminants do not leach into the surrounding areas.</p>

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SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Permissible concentrations Date: n/a Source: n/a Recommended test method: n/a	OEL None identified	Biological limits See comment below
Engineering controls Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If sulphur compounds are suspected to be present in the product, check the atmosphere for H2S content		
PPE: Respiratory Protection: Dust Mask; unless other personal protection stipulated by approved inspection authority. Hand Protection: chemical resistance, specifically to aromatic hydrocarbons Eye Protection: The use of dustproof goggles or glasses with side protections is recommended. Skin and Body Protection: Chemical Resistant Gloves		
Comments: No exposure limits have been established for this material; however, exposure limits may be available for individual constituents, listed in section 3. Contaminated packaging contains minute amounts of constituents listed in section 3.		

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance Varies	Odour Odourless	pH (concentration) Not determined
Melting point Not determined	Freezing point Not determined	Boiling point, initial boiling point, boiling range Not determined
Flashpoint Not determined	Upper/lower flammability/explosive limits Not determined	Vapour pressure Not determined
Vapour density Not determined	Density/relative density Not determined	Solubility Not determined
n-octanol/water partition coefficient Not determined	Auto-ignition temperature Not determined	Decomposition temperature Not determined
Odour threshold Not determined	Evaporation rate Not determined	Flammability Not determined
Viscosity Not determined	Radioactivity Not determined	

Note: further tests will have to be conducted for the above-mentioned parameters

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SECTION 10 STABILITY AND REACTIVITY

Chemical Stability Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	If no, under which conditions
Incompatibility with other substances Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	If yes, which ones?
Anticipated hazardous decomposition products None identified	

SECTION 11 TOXICOLOGICAL INFORMATION

- Crystalline silica is a known cause of lung fibrosis (silicosis). It has also has been classified as a human carcinogen. (International Agency for Research on Cancer).
- Carbon Black is suspected of causing cancer.
- Ethylene Glycol may cause damage to organs.
- Ethoxylated 2, 4, 7, 9-tetramethyl-5-decyn-4, 7-diol
- Sodium Hydroxide may cause skin and eye damage.
- Isopropyl Alcohol may be fatal if swallowed

Note: Residual amounts of the above-mentioned contaminants will be present.

SECTION 12 ECOLOGICAL INFORMATION

Component 1	
Aquatic toxicity Chronic aquatic toxicity (Category 2), H411	Possible environmental impact No Data Available
Persistence and biodegradability Not readily biodegradable	Bio-accumulative potential No Data Available
Mobility in soil No Data Available	Ecological Limit Values No Data Available

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods None determined
Waste Disposal options Waste shall be disposed of according to all applicable regulations. As per the new waste regulations records of all waste been disposed must be retained and a safe disposal certificate, where applicable, must also be received from the waste disposal facility or a designated authorized area.
Any other information Landfill at an approved site in accordance with national and local regulations. Do not dump into any sewers, on the ground, or into any body of water.

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SECTION 14 TRANSPORT INFORMATION

UN number 3077	UN proper shipping name Environmental Hazardous Substance; Solid; N.O.S	UN classification 9
Packaging group II	Marine Pollutant yes	Transport in bulk according to MARPOL Not Available
Special Precautions During transportation personnel handling this waste stream must be careful of possible exposure and spillage.		

SECTION 15 REGULATORY INFORMATION

Labelling Requirements 

SECTION 16 OTHER INFORMATION

A large quantity of data has been reviewed from various sources based on the contaminants of the above-mentioned waste stream. Caution must be practiced as there is a potentiality of the above-mentioned waste been flammable because of the presence of Diesel.
The information gathered and contents of this Safety Data Sheet are based on the current knowledge of the contaminants and an overall description of what could possibly be harmful to humans/aquatic environment. The waste stream must not be used for any other purpose unless handling instructions are obtained from the supplier.
Risk Phrases that might apply to the above product: R10 Flammable R45 May cause cancer R46 May cause inheritable genetic damage R58 May cause long-term adverse effects in the environment
REFERENCES: 1. The European Chemicals Agency.[ONLINE] Available at: http://echa.europa.eu/ 2. Sigma-Aldrich. 2014. sigma-Aldrich. [ONLINE] Available at: https://www.sigmaaldrich.com/south-africa.html . 3. General Material Safety Data Sheets 4. SANS 10243 (2008) Globally Harmonized System of classification and labelling of chemicals 5. Understanding the globally harmonized system of classification and labelling of chemicals (GHS) – June 2010
NOTICE: DCELS has completed this SDS through information conducted in good faith and believed to be correct and according to SANS 10234 at the date hereof. DCELS makes no depiction as to the completeness or accuracy thereof. Information is supplied and it is the responsibility of the persons receiving the substance to make their own determination as to the safety and suitability of their purposes prior to use. DCELS accepts no responsibility for damages of any nature whatsoever resulting from the use or reliance on the above information.