

# SAFETY DATA SHEET

This safety data sheet complies with the requirements of:  
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Issue Date 21-Jul-2015

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Version 1

## Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identifier

Product Name Granite G60-SP Magenta

Contains Butoxyethyl acetate,  $\gamma$ -Butyrolactone

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Digital Printing

Uses advised against No information available

### 1.3. Details of the supplier of the safety data sheet

Manufacturer NUTEC DIGITAL INK (PTY) LTD. 1 CLIFFORD STREET OTTERY, 7800 SOUTH AFRICA  
For further information, please contact

Contact Point Regulatory Department

### 1.4. Emergency telephone number

Emergency Telephone During normal opening times: +27 21 763 6990  
24 Hours: +27 83 326 0774

## Section 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Acute toxicity - Inhalation (Vapors)	Category 4 - (H332)
Serious eye damage/eye irritation	Category 1 - (H318)

Classification according to Directive 67/548/EEC or 1999/45/EC

Full text of R-phrases: see section 16

### Hazard symbols

Xn - Harmful

### R-code(s)

Xn;R20/21 - Xi;R36

### 2.2. Label elements

#### Product identifier

Contains Butoxyethyl acetate,  $\gamma$ -Butyrolactone



#### Signal word

Danger

**Hazard statements**

H318 - Causes serious eye damage

H332 - Harmful if inhaled

EUH210 - Safety data sheet available on request

**Precautionary Statements - EU (§28, 1272/2008)**

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

P310 - Immediately call a POISON CENTER or doctor

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P271 - Use only outdoors or in a well-ventilated area

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P304 + P341 - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing

**2.3. Other hazards**

No information available

**Section 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.1 Substances**

Chemical Name	EC No	CAS No	Weight-%	Classification according to Directive 67/548/EEC or 1999/45/EC	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH Registration Number
Butoxyethyl acetate	203-933-3	112-07-2	<70	Xn; R20/21	Acute Tox. 4 (H312) Acute Tox. 4 (H332)	No data available
Cyclohexanone	203-631-1	108-94-1	<15	R10 Xn; R20	Acute Tox. 4 (H302) Acute Tox. 4 (H312) Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Eye Dam. 1 (H318)  Flam. Liq. 3 (H226)	No data available
γ-Butyrolactone	202-509-5	96-48-0	<10	Xn;R22 Xi; R41 R67	Acute Tox. 4 (H302) Eye Dam. 1 (H318) STOT SE 3 (H336)	No data available

**Full text of R-phrases: see section 16****Full text of H- and EUH-phrases: see section 16****Section 4: FIRST AID MEASURES****4.1. Description of first aid measures****General advice**

If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing.

**Inhalation**

Remove to fresh air. Call a physician. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Immediate medical attention is not required. Move to fresh air in case of

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	accidental inhalation of vapors. If symptoms persist, call a physician.
<b>Skin contact</b>	Consult a physician if necessary. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is not required. If skin irritation persists, call a physician.
<b>Eye contact</b>	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician. Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
<b>Ingestion</b>	Rinse mouth. Drink plenty of water. If symptoms persist, call a physician. Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician.
<b>Self-protection of the first aider</b>	Use personal protective equipment as required.

#### **4.2. Most important symptoms and effects, both acute and delayed**

**Symptoms** No information available.

#### **4.3. Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

### **Section 5: FIRE FIGHTING MEASURES**

#### **5.1. Extinguishing media**

##### **Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

##### **Unsuitable extinguishing media**

No information available

#### **5.2. Special hazards arising from the substance or mixture**

Thermal decomposition can lead to release of irritating and toxic gases and vapors

#### **5.3. Advice for firefighters**

Wear self-contained breathing apparatus and protective suit. Use personal protective equipment as required.

### **Section 6: ACCIDENTAL RELEASE MEASURES**

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

##### **Personal precautions**

Use personal protective equipment as required. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

##### **For emergency responders**

Use personal protection recommended in Section 8.

#### **6.2. Environmental precautions**

Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

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

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Cover liquid spill with sand, earth or other non-combustible absorbent material. Cover powder spill with plastic sheet or tarp to minimize spreading. Pick up and transfer to properly labeled containers. Soak up with inert absorbent material. Dam up.

#### 6.4. Reference to other sections

See section 8 for more information. See section 13 for more information.

## Section 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling

#### **Advice on safe handling**

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Use with local exhaust ventilation.

#### **General Hygiene Considerations**

When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended.

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

#### **Storage Conditions**

Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers.

#### **Incompatible materials**

None known based on information supplied.

### 7.3. Specific end use(s)

#### **Risk Management Methods (RMM)**

The information required is contained in this Material Safety Data Sheet.

## Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

Chemical Name	European Union	United Kingdom	France	Spain	Germany
Butoxyethyl acetate 112-07-2	TWA 20 ppm TWA 133 mg/m <sup>3</sup> STEL 50 ppm STEL 333 mg/m <sup>3</sup> *	TWA: 20 ppm TWA: 133 mg/m <sup>3</sup> STEL: 50 ppm STEL: 332 mg/m <sup>3</sup> Sk*	TWA: 10 ppm TWA: 133 mg/m <sup>3</sup> STEL: 50 ppm STEL: 333 mg/m <sup>3</sup> *	TWA: 20 ppm TWA: 133 mg/m <sup>3</sup> STEL: 50 ppm STEL: 333 mg/m <sup>3</sup> vía dérmica*	TWA: 20 ppm TWA: 130 mg/m <sup>3</sup> H*
Cyclohexanone 108-94-1	TWA 10 ppm TWA 40.8 mg/m <sup>3</sup> STEL 20 ppm STEL 81.6 mg/m <sup>3</sup> *	TWA: 10 ppm TWA: 41 mg/m <sup>3</sup> STEL: 20 ppm STEL: 82 mg/m <sup>3</sup> Sk*	TWA: 10 ppm TWA: 40.8 mg/m <sup>3</sup> STEL: 20 ppm STEL: 81.6 mg/m <sup>3</sup>	TWA: 10 ppm TWA: 41 mg/m <sup>3</sup> STEL: 20 ppm STEL: 82 mg/m <sup>3</sup> vía dérmica*	TWA: 20 ppm TWA: 80 mg/m <sup>3</sup> H*
Chemical Name	Italy	Portugal	Netherlands	Finland	Denmark
Butoxyethyl acetate 112-07-2	TWA: 20 ppm TWA: 133 mg/m <sup>3</sup> STEL: 50 ppm STEL: 333 mg/m <sup>3</sup> pelle*	TWA: 20 ppm TWA: 133 mg/m <sup>3</sup> STEL: 50 ppm STEL: 333 mg/m <sup>3</sup> P*	TWA: 135 mg/m <sup>3</sup> STEL: 333 mg/m <sup>3</sup> H*	TWA: 20 ppm TWA: 130 mg/m <sup>3</sup> STEL: 50 ppm STEL: 330 mg/m <sup>3</sup> iho*	TWA: 20 ppm TWA: 134 mg/m <sup>3</sup> H*
Cyclohexanone 108-94-1	TWA: 10 ppm TWA: 40.8 mg/m <sup>3</sup> STEL: 20 ppm STEL: 81.6 mg/m <sup>3</sup> pelle*	TWA: 10 ppm TWA: 40.8 mg/m <sup>3</sup> STEL: 20 ppm STEL: 81.6 mg/m <sup>3</sup> P*	STEL: 50 mg/m <sup>3</sup> H*	TWA: 10 ppm TWA: 41 mg/m <sup>3</sup> STEL: 20 ppm STEL: 82 mg/m <sup>3</sup> iho*	TWA: 10 ppm TWA: 41 mg/m <sup>3</sup> H*
γ-Butyrolactone	-	-	-	TWA: 50 ppm	-

96-48-0				TWA: 14 mg/m <sup>3</sup> STEL: 250 ppm STEL: 70 mg/m <sup>3</sup> iho*	
<b>Chemical Name</b>	<b>Austria</b>	<b>Switzerland</b>	<b>Poland</b>	<b>Norway</b>	<b>Ireland</b>
Butoxyethyl acetate 112-07-2	TWA: 20 ppm TWA: 133 mg/m <sup>3</sup> STEL 40 ppm STEL 270 mg/m <sup>3</sup> H*	TWA: 10 ppm TWA: 66 mg/m <sup>3</sup> STEL: 20 ppm STEL: 132 mg/m <sup>3</sup> H*	STEL: 300 mg/m <sup>3</sup> TWA: 100 mg/m <sup>3</sup>	TWA: 10 ppm TWA: 65 mg/m <sup>3</sup> STEL: 20 ppm STEL: 97.5 mg/m <sup>3</sup> H*	TWA: 20 ppm TWA: 133 mg/m <sup>3</sup> STEL: 50 ppm STEL: 333 mg/m <sup>3</sup> Sk*
Cyclohexanone 108-94-1	TWA: 5 ppm TWA: 20 mg/m <sup>3</sup> STEL 20 ppm STEL 80 mg/m <sup>3</sup> H*	TWA: 25 ppm TWA: 100 mg/m <sup>3</sup> STEL: 50 ppm STEL: 200 mg/m <sup>3</sup> H*	STEL: 80 mg/m <sup>3</sup> TWA: 40 mg/m <sup>3</sup>	TWA: 20 ppm TWA: 80 mg/m <sup>3</sup> STEL: 30 ppm STEL: 120 mg/m <sup>3</sup> H*	TWA: 10 ppm TWA: 40.8 mg/m <sup>3</sup> STEL: 20 ppm STEL: 81.6 mg/m <sup>3</sup> Sk*

<b>Chemical Name</b>	<b>European Union</b>	<b>United Kingdom</b>	<b>France</b>	<b>Spain</b>	<b>Germany</b>
Butoxyethyl acetate 112-07-2	-	-	-	-	100 mg/L 200 mg/L
Cyclohexanone 108-94-1	-	2	-	80 8	-
<b>Chemical Name</b>	<b>Austria</b>	<b>Switzerland</b>	<b>Poland</b>	<b>Norway</b>	<b>Ireland</b>
Butoxyethyl acetate 112-07-2	-	100 200	-	-	-
Cyclohexanone 108-94-1	-	100 12	-	-	-

**Derived No Effect Level (DNEL)** No information available.

**Predicted No Effect Concentration (PNEC)** No information available.

## 8.2. Exposure controls

**Engineering Controls** Ensure adequate ventilation, especially in confined areas.

### Personal protective equipment

**Eye/face protection** Tight sealing safety goggles. Face protection shield.  
**Skin and body protection** Suitable protective clothing. Apron. Gloves made of plastic or rubber.

**Environmental exposure controls** Do not allow into any sewer, on the ground or into any body of water.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

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

<b>Physical state</b>	liquid	<b>Odor</b>	Characteristic
<b>Appearance</b>	Liquid	<b>Odor threshold</b>	No information available
<b>Color</b>	Magenta		
<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>	
<b>pH</b>		No information available	
<b>Melting point / freezing point</b>		No information available	
<b>Boiling point / boiling range</b>	153 °C / 307 °F		
<b>Flash point</b>	72 °C / 162 °F		
<b>Evaporation rate</b>		No information available	
<b>Flammability (solid, gas)</b>		No information available	
<b>Flammability Limit in Air</b>			
<b>Upper flammability limit:</b>		No information available	
<b>Lower flammability limit:</b>		No information available	
<b>Vapor pressure</b>		No information available	
<b>Vapor density</b>		No information available	
<b>Relative density</b>		No information available	
<b>Water solubility</b>		No information available	
<b>Solubility(ies)</b>		No information available	
<b>Partition coefficient</b>		No information available	

<b>Autoignition temperature</b>	No information available
<b>Decomposition temperature</b>	No information available
<b>Kinematic viscosity</b>	No information available
<b>Dynamic viscosity</b>	No information available
<b>Explosive properties</b>	No information available
<b>Oxidizing properties</b>	No information available

**9.2. Other information**

<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC Content (%)</b>	No information available
<b>Density</b>	No information available
<b>Bulk density</b>	No information available

## Section 10: STABILITY AND REACTIVITY

**10.1. Reactivity**

No data available.

**10.2. Chemical stability**

Stable under normal conditions.

Explosion data

Sensitivity to Mechanical Impact	None.
Sensitivity to Static Discharge	None.

**10.3. Possibility of hazardous reactions****Possibility of Hazardous Reactions**

None under normal processing.

**10.4. Conditions to avoid**

None known.

**10.5. Incompatible materials**

No information available.

**10.6. Hazardous decomposition products**

None under normal use conditions.

## Section 11: TOXICOLOGICAL INFORMATION

**11.1. Information on toxicological effects****Acute toxicity****Product Information**

Product does not present an acute toxicity hazard based on known or supplied information.

<b>Inhalation</b>	No data available.
<b>Eye contact</b>	No data available.
<b>Skin contact</b>	No data available.
<b>Ingestion</b>	No data available.

The following values are calculated based on chapter 3.1 of the GHS document

<b>ATEmix (oral)</b>	7,381.00 mg/kg
<b>ATEmix (dermal)</b>	2,016.00 mg/kg ppm
<b>ATEmix (inhalation-dust/mist)</b>	10.00 mg/l

**ATEmix (inhalation-vapor)** 13.87 mg/l

**Unknown acute toxicity**

24.6179% of the mixture consists of ingredient(s) of unknown toxicity.

4.6375 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.

9.6175 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.

24.6179 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).

15.1379 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).

9.6179 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Butoxyethyl acetate	= 2400mg/kg ( Rat )	= 1500 mg/kg ( Rabbit )	
Cyclohexanone	= 1544 mg/kg ( Rat )	= 3160 mg/kg ( Rabbit )	= 8000 ppm ( Rat ) 4 h
γ-Butyrolactone	= 1540 mg/kg ( Rat )		> 5100 mg/m <sup>3</sup> ( Rat ) 4 h

**Skin corrosion/irritation** No information available.

**Serious eye damage/eye irritation** No information available.

**Sensitization** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** No information available.

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Target Organ Effects** blood, Central nervous system, Eyes, Hematopoietic System, kidney, liver, Respiratory system, Skin.

**Aspiration hazard** No information available.

## Section 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

Unknown Aquatic Toxicity 9.6175 % of the mixture consists of components(s) of unknown hazards to the aquatic environment  
9.6175 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Cyclohexanone	20: 96 h Chlorella vulgaris mg/L EC50	8.9: 96 h Pimephales promelas mg/L LC50 481 - 578: 96 h Pimephales promelas mg/L LC50 flow-through	800: 24 h Daphnia magna mg/L EC50
γ-Butyrolactone	360: 72 h Desmodesmus subspicatus mg/L EC50	-	500: 48 h Daphnia magna Straus mg/L EC50

### 12.2. Persistence and degradability

No information available.

### 12.3. Bioaccumulative potential

No information available.

Chemical Name	Partition coefficient

Butoxyethyl acetate	1.51
Cyclohexanone	0.86
$\gamma$ -Butyrolactone	-0.566

**12.4. Mobility in soil****Mobility in soil**

No information available.

**12.5. Results of PBT and vPvB assessment**

No information available.

**12.6. Other adverse effects**

No information available

## Section 13: DISPOSAL CONSIDERATIONS

**13.1. Waste treatment methods**

<b>Waste from residues/unused products</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated packaging</b>	Improper disposal or reuse of this container may be dangerous and illegal.
<b>Other Information</b>	Waste codes should be assigned by the user based on the application for which the product was used.

## Section 14: TRANSPORT INFORMATION

**IMDG**

<b>14.1 UN/ID no</b>	Not regulated
<b>14.2 Proper shipping name</b>	Not regulated
<b>14.3 Hazard Class</b>	Not regulated
<b>14.4 Packing Group</b>	Not regulated
<b>14.5 Marine pollutant</b>	Not applicable
<b>14.6 Special Provisions</b>	None
<b>14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	No information available

**RID**

<b>14.1 UN/ID no</b>	Not regulated
<b>14.2 Proper shipping name</b>	Not regulated
<b>14.3 Hazard Class</b>	Not regulated
<b>14.4 Packing Group</b>	Not regulated
<b>14.5 Environmental hazard</b>	Not applicable
<b>14.6 Special Provisions</b>	None

**ADR**

<b>14.1 UN/ID no</b>	Not regulated
<b>14.2 Proper shipping name</b>	Not regulated
<b>14.3 Hazard Class</b>	Not regulated
<b>14.4 Packing Group</b>	Not regulated
<b>14.5 Environmental hazard</b>	Not applicable
<b>14.6 Special Provisions</b>	None



**IATA**

<b>14.1 UN/ID no</b>	Not regulated
<b>14.2 Proper shipping name</b>	Not regulated
<b>14.3 Hazard Class</b>	Not regulated
<b>14.4 Packing Group</b>	Not regulated
<b>14.5 Environmental hazard</b>	Not applicable
<b>14.6 Special Provisions</b>	None

<b>Section 15: REGULATORY INFORMATION</b>
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**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Chemical Name	French RG number	Title
Butoxyethyl acetate 112-07-2	RG 84	-
Cyclohexanone 108-94-1	RG 84	-
γ-Butyrolactone 96-48-0	RG 84	-

**European Union**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

**Authorizations and/or restrictions on use:**

This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

**Persistent Organic Pollutants**

Not applicable

**Ozone-depleting substances (ODS) regulation (EC) 1005/2009** Not applicable

**International Inventories**

<b>TSCA</b>	Does not comply
<b>DSL/NDSL</b>	Does not comply
<b>EINECS/ELINCS</b>	Does not comply
<b>ENCS</b>	Does not comply
<b>IECSC</b>	Does not comply
<b>KECL</b>	Does not comply
<b>PICCS</b>	Does not comply
<b>AICS</b>	Does not comply

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

**15.2. Chemical safety assessment**

No information available

## Section 16: OTHER INFORMATION

### Key or legend to abbreviations and acronyms used in the safety data sheet

#### **Full text of R-phrases referred to under sections 2 and 3**

R10 - Flammable  
 R20 - Harmful by inhalation  
 R67 - Vapors may cause drowsiness and dizziness  
 R41 - Risk of serious damage to eyes  
 R22 - Harmful if swallowed  
 R36 - Irritating to eyes  
 R20/21 - Harmful by inhalation and in contact with skin

#### **Full text of H-Statements referred to under section 3**

H302 - Harmful if swallowed  
 H312 - Harmful in contact with skin  
 H332 - Harmful if inhaled  
 H315 - Causes skin irritation  
 H318 - Causes serious eye damage  
 H226 - Flammable liquid and vapor  
 H336 - May cause drowsiness or dizziness

#### **Legend**

SVHC: Substances of Very High Concern for Authorization:

#### **Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

**Issue Date** 21-Jul-2015

**Revision Date** 21-Jul-2015

**Revision Note** Not applicable.

**This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006**

**End of Safety Data Sheet**