

1116179		V-11633 KELLY GREEN	25 KG DRUMS
Product specification	RS_FP_303051	Revision Date	12/08/2015
Version	2	Print Date	04/12/2016
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SECTION 1. IDENTIFICATION

Product name : V-11633 KELLY GREEN 25 KG DRUMS
000000000001116179

Product code : RS_FP_303051

Manufacturer or supplier's details

Company name of supplier : Ferro Corporation

Address : 6060 Parkland Blvd. Suite 250
Mayfield Heights OH 44124-4185

Telephone : (216) 875-5600

Disposal considerations : Dispose of wastes in an approved waste disposal facility.

Emergency telephone number

CHEMTREC In-Country : (800)424-9300
Number

CHEMTREC Global Number : +(1)-703-527-3887(Call Collect)

Recommended use of the chemical and restrictions on use

Recommended use : Industrial use

Restrictions on use : Reserved for industrial and professional use.

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Skin sensitisation : Category 1

Carcinogenicity : Category 1A

Specific target organ toxicity : Category 1
- repeated exposure

GHS Label element

Hazard pictograms :



Signal word : Danger

Hazard statements : H317 May cause an allergic skin reaction.
H350 May cause cancer.
H372 Causes damage to organs through prolonged or repeated exposure.

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Precautionary statements : **Prevention:**
 P201 Obtain special instructions before use.
 P202 Do not handle until all safety precautions have been read and understood.
 P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
 P264 Wash skin thoroughly after handling.
 P270 Do not eat, drink or smoke when using this product.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P280 Wear protective gloves.
 P281 Use personal protective equipment as required.

Response:
 P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
 P308 + P313 IF exposed or concerned: Get medical advice/ attention.
 P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
 P363 Wash contaminated clothing before reuse.

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

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : inorganic pigment, metal oxide/hydroxide, ceramic material

Hazardous components

Chemical Name	CAS-No.	Concentration (%)
Co-Ti spinel green	68186-85-6	>= 90 - <= 100
nickel titanium trioxide	12035-39-1	>= 1 - < 5
Co-Al spinel blue	1345-16-0	>= 1 - < 5

SECTION 4. FIRST AID MEASURES

General advice : Consult a physician.

If inhaled : Remove to fresh air.
 If unconscious place in recovery position and seek medical advice.
 Never give anything by mouth to an unconscious person.

In case of skin contact : Wash off immediately with soap and plenty of water.
 If a person feels unwell or symptoms of skin irritation appear, consult a physician.

In case of eye contact : Rinse immediately with plenty of water and seek medical advice.

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- If swallowed : Do NOT induce vomiting.
Rinse immediately with plenty of water and seek medical advice.
- Most important symptoms and effects, both acute and delayed : May cause an allergic skin reaction.
May cause cancer.
Causes damage to organs through prolonged or repeated exposure.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : Do not use a solid water stream as it may scatter and spread fire.
- Specific hazards during firefighting : Exposure to decomposition products may be a hazard to health.
Do not allow run-off from fire fighting to enter drains or water courses.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation.
Follow safe handling advice and personal protective equipment recommendations.
- Environmental precautions : Do not flush into surface water or sanitary sewer system.
Prevent product from entering drains.
- Methods and materials for containment and cleaning up : Sweep up and shovel into suitable containers for disposal.
Clean contaminated floors and objects thoroughly while observing environmental regulations.

SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Do not get in eyes or mouth or on skin.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Do not use in areas without adequate ventilation.
Keep away from heat and sources of ignition.
- Conditions for safe storage : Keep in a dry, cool and well-ventilated place.

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SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Co-Ti spinel green	68186-85-6	TWA	0.02 mg/m ³ (Cobalt)	ACGIH
nickel titanium trioxide	12035-39-1	TWA	1 mg/m ³ (Nickel)	OSHA Z-1
		TWA	1 mg/m ³ (Nickel)	OSHA P0
		TWA	0.015 mg/m ³ (Nickel)	NIOSH REL
Co-Al spinel blue	1345-16-0	TWA	0.02 mg/m ³ (Cobalt)	ACGIH

Engineering measures : Apply technical measures to comply with the occupational exposure limits.
Provide adequate ventilation.

Personal protective equipment

Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hand protection
Material : Protective gloves

Eye protection : Safety glasses with side-shields
Ensure that eyewash stations and safety showers are close to the workstation location.

Protective measures : Wear suitable protective equipment.
Avoid contact with skin.
When using do not eat, drink or smoke.

Hygiene measures : Remove contaminated clothing and protective equipment before entering eating areas.
Wash hands before breaks and immediately after handling the product.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : powder

Colour : green

Odour : odourless

Odour Threshold : No data available

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pH	: No data available
Melting point/range	: No data available
Boiling point/boiling range	: No data available
Flash point	: Not applicable
Evaporation rate	: Not applicable
Burning rate	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available No data available
Relative density	: No data available
Bulk density	: No data available
Solubility(ies)	
Water solubility	: insoluble
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: not determined not determined
Thermal decomposition	: No data available
Viscosity	
Viscosity, dynamic	: Not applicable
Viscosity, kinematic	: No data available No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Refractive index	: Not applicable

SECTION 10. STABILITY AND REACTIVITY

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Reactivity	: No data available
Chemical stability	: No data available
Possibility of hazardous reactions	: No data available
	No data available
Conditions to avoid	: Incompatible materials
Incompatible materials	: Incompatible with oxidizing agents. Incompatible with strong acids and bases.
Hazardous decomposition products	: Stable under normal conditions.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

inhalation (dust/mist/fume)

inhalation (vapour)

Skin

Eye contact

Ingestion

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity : Remarks: No data available

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : Remarks: No data available

Skin corrosion/irritation

Not classified based on available information.

Serious eye damage/eye irritation

Not classified based on available information.

Respiratory or skin sensitisation

Skin sensitisation: May cause an allergic skin reaction.

Respiratory sensitisation: Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

May cause cancer.

IARC

Group 1: Carcinogenic to humans

nickel titanium trioxide

12035-39-1

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ACGIH	Confirmed animal carcinogen with unknown relevance to humans	
	Co-Ti spinel green	68186-85-6
	Co-Al spinel blue	1345-16-0
OSHA	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.	
NTP	Known to be human carcinogen	
	nickel titanium trioxide	12035-39-1

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Causes damage to organs through prolonged or repeated exposure.

Aspiration toxicity

Not classified based on available information.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Ecotoxicology Assessment

Acute aquatic toxicity : No data available

Chronic aquatic toxicity : No data available

Components:

Co-Al spinel blue:

Toxicity to fish : LC50 (Fish): 1,000 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia (water flea)): 10,000 mg/l
Exposure time: 48 h

Persistence and degradability

Product:

Biodegradability : Remarks: No data available

Components:

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Co-Ti spinel green:

Biodegradability : Remarks: No data available

Co-Al spinel blue:

Biodegradability : Remarks: No data available

Bioaccumulative potential**Product:**

Bioaccumulation : Remarks: No data available

Components:**Co-Ti spinel green:**

Bioaccumulation : Remarks: No data available

Co-Al spinel blue:

Bioaccumulation : Remarks: No data available

Mobility in soil**Product:**

Distribution among environmental compartments : Remarks: No data available

Components:**Co-Ti spinel green:**

Distribution among environmental compartments : Remarks: No data available

Co-Al spinel blue:

Distribution among environmental compartments : Remarks: No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Waste from residues : Dispose of wastes in an approved waste disposal facility.

SECTION 14. TRANSPORT INFORMATION**International Regulation****UNRTDG**

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

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IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Pollution category : N/A

Ship type : N/A

National Regulations**49 CFR DOT**

Not regulated as a hazardous material

SECTION 15. REGULATORY INFORMATION**TSCA list** : TSCA 5a - Not relevant

TSCA_12b - Not relevant

SARA 311/312 Hazards : Chronic Health Hazard**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.**SARA 313** : This product contains components that are reportable under the regulation.**Massachusetts Right To Know**

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know

This product contains components that are reportable under the regulation.

New Jersey Right To Know

This product contains components that are reportable under the regulation.

California Prop 65

WARNING! This product contains a chemical known to the State of California to cause cancer.

The components of this product are reported in the following inventories:

REACH : On the inventory, or in compliance with the inventory

CH INV : On the inventory, or in compliance with the inventory

TSCA : On TSCA Inventory

DSL : Not in compliance with the inventory

AICS : On the inventory, or in compliance with the inventory

NZIoC : On the inventory, or in compliance with the inventory

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- ENCS : Not in compliance with the inventory
- ISHL : Not in compliance with the inventory
- KECI : On the inventory, or in compliance with the inventory
- PICCS : Not in compliance with the inventory
- IECSC : Not in compliance with the inventory

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA), CH INV (Switzerland), MY INV (Malaysia), TR INV (Turkey), TW INV (Taiwan)

SECTION 16. OTHER INFORMATION

Revision Date : 12/08/2015

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.