Printing date 10/20/2016

Reviewed on 07/06/2016

1 Identification of the Substance/Mixture and of the Company/Undertaking

- · Product identifier
- Trade name: <u>*Universal HD Toner</u>
- · Application of the substance / the mixture Printing inks
- · Details of the supplier of the safety data sheet

· Information department: Product Safety Department

2 Hazards Identification

· Classification of the substance or mixture

Combustible Dust May form combustible dust concentrations in air.

- · Label elements
- GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms Void
- · Signal word Warning
- · Hazard statements

May form combustible dust concentrations in air.

- · Classification system:
- · NFPA ratings (scale 0 4)

Health = 1 Fire = 1 Reactivity = 0

· HMIS-ratings (scale 0 - 4)



- · Other hazards
- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- ·vPvB: Not applicable.

3 Composition/Information on Ingredients

• Chemical characterization: Mixtures • Description: Resin mixture

(Contd. on page 2)

TIS

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Trade name: *Universal HD Toner

		(Contd. of page 1
· Dangerous	components:	,
1333-86-4	Carbon black (bound)	2.5-10%
· Non-hazard	lous components	
25767-47-9	Styrene-Acrylic Copolymer	50-100%
	Silica	2.5-10%
9010-79-1	Ethlene Propylene Copolymer	2.5-10%
1317-61-9	triiron tetraoxide	≤ 2.5%

4 First Aid Measures

- · Description of first aid measures
- · General information: No special measures required.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact:
- Immediately wash with water and soap and rinse thoroughly.
- Generally the product does not irritate the skin.
- · After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- · After swallowing: Drink copious amounts of water and provide fresh air. Immediately call a doctor.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed
- No further relevant information available.

5 Firefighting Measures

- · Extinguishing media
- · Suitable extinguishing agents:
- CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- · For safety reasons unsuitable extinguishing agents: No Information Available
- · Special hazards arising from the substance or mixture
- Like most finely divided organic powders, toner dust may form an explosive mixture in air.
- · Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

6 Accidental Release Measures

- Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away.
- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up:

Vacuum or sweep the material into a sealed container. If a vacuum is used it must be dust explosion-proof. Dispose of in compliance with national, state, regional or provincial regulations.

- · Reference to other sections
- No dangerous substances are released.

See Section 7 for information on safe handling.

(Contd. on page 3)

Printing date 10/20/2016

Reviewed on 07/06/2016

(Contd. of page 2)

PIT

Trade name: *Universal HD Toner

See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

7 Handling and Storage

· Handling:

· Precautions for safe handling

- No special measures required.
- Store in cool, dry place in tightly closed receptacles.
- Keep away from heat and direct sunlight.
- No special precautions are necessary if used correctly.
- Use only in well ventilated areas.
- · Information about protection against explosions and fires: Keep ignition sources away Do not smoke.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: Store in a cool location.
- Store only in the original receptacle.
- · Information about storage in one common storage facility:
- Do not store together with oxidizing and acidic materials as well as heavy-metal compounds.
- Further information about storage conditions: Store in cool, dry conditions in well sealed receptacles. Protect from heat and direct sunlight.
- Protect from humidity and water.
- Specific end use(s) No further relevant information available.

8 Exposure Controls/Personal Protection

· Additional information about design of technical systems: No further data; see item 7.

· Control parameters

1333-86-4 Carbon black (bound)		
PEL	Long-term value: 3.5 mg/m ³	
REL	Long-term value: 3.5* mg/m ³ *0.1 in presence of PAHs;See Pocket Guide Apps.A+C	
TLV	Long-term value: 3* mg/m ³ *inhalable fraction	

US

Safety Data Sheet acc. to OSHA HCS

Printing date 10/20/2016

Reviewed on 07/06/2016

Trade name: *Universal HD Toner

USA OSHA (TWA/PEL): 15 mg/m3 (Total Dust), 5 mg/m3 (Respirable Fraction)	(Contd. of page 3)
ACGIH (TWA/TLV): 10 mg/m3 (Inhalable Particulate), 3 mg/m3 (Respirable Particulate)	
Amorphous Silica: USA OSHA (TWA/PEL): 20mppcf 80 mg/m3, ACGIH (TWA/TLV): 10 mg/m3	
TRGS 900 (Luftgrenzwert): 10 mg/m3 (Einatembare partikel)). 3 mg/m3 (Alveolengängige fraktion)	
UK WEL: 10 mg/m3 (Respirable Dust) 5 mg/m3 (Inhalible Dust) • Additional information: The lists that were valid during the creation were used as basis.	
· Exposure controls · Personal protective equipment:	
• General protective and hygienic measures: Wash hands before breaks and at the end of work.	
Do not inhale dust / smoke / mist. • Protection of hands:	
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degrada • Material of gloves	tion
The selection of the suitable gloves does not only depend on the material, but also on further marks of que from manufacturer to manufacturer.	uality and varies
Penetration time of glove material	

- The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- · Eye protection: Safety glasses

9 Physical and Chemical Properties

General Information	
Appearance: Form:	Powder
Color:	Dark
Odor:	Odorless
Odor threshold:	Not determined.
pH-value:	Not applicable.
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
Flash point:	Not applicable.
Flammability (solid, gaseous):	Not determined.
Ignition temperature:	
Decomposition temperature:	Not determined.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard in its original state.

Printing date 10/20/2016

Reviewed on 07/06/2016

Trade name: *Universal HD Toner

		(Contd. of page
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapor pressure:	Not applicable.	
Density at 20 °C (68 °F):	1.1 g/cm ³ (9.18 lbs/gal)	
•	SG: 1.3-1.8	
Relative density	Not determined.	
Vapor density	Not applicable.	
Evaporation rate	Not applicable.	
Solubility in / Miscibility with		
Water:	Insoluble.	
Partition coefficient (n-octanol/v	vater): Not determined.	
Viscosity:		
Dynamic:	Not applicable.	
Kinematic:	Not applicable.	
Solvent content:		
Organic solvents:	0.0 %	
VOC content:	0.0 g/l / 0.00 lb/gl	
Solids content:	100.0 %	
Other information	No further relevant information available.	

10 Stability and Reactivity

- · Reactivity Non reactive.
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological Information

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- on the skin: No toxic irritating effect, according to Directive 67/548/EEC or Directive 199/45/EC.
- on the eye: No toxic irritating effect, according to Directive 67/548/EEC or Directive 199/45/EC.
- · Sensitization: No toxic sensitizing effects known, according to EU Directive 67/548/EEC or Directive 199/45/EC.
- · Other information (about experimental toxicology):

Mutagenicity : Ames test Negative (According to the test result of similar composition.)

(Contd. on page 6)

Printing date 10/20/2016

Reviewed on 07/06/2016

(Contd. of page 5)

2B

Trade name: *Universal HD Toner

· Additional toxicological information:

The product is not subject to classification according to internally approved calculation methods for preparations: When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

1333-86-4 Carbon black (bound)

· NTP (National Toxicology Program)

None of the ingredients is listed.

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological Information

· Toxicity

- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes:
- Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal Considerations

- · Waste treatment methods
- · Recommendation: Smaller quantities can be disposed of with household waste.

· Uncleaned packagings:

· Recommendation: Disposal must be made according to official regulations.

4 Transport Information		
· UN-Number · DOT, ADR, ADN, IMDG, IATA	Not a regulated material under the United States DOT, IMDG, ADR RID, or ICAO/IATA. Void	
· UN proper shipping name	Not a regulated material under the United States DOT, IMDG, ADR RID, or ICAO/IATA	

Printing date 10/20/2016

Reviewed on 07/06/2016

Trade name: *Universal HD Toner

	(Contd. of page)
· DOT, ADR, ADN, IMDG, IATA	Void
· Transport hazard class(es)	Not a regulated material under the United States DOT, IMDG, ADR RID, or ICAO/IATA.
· DOT, ADR, ADN, IMDG, IATA	
· Class	Void
· Packing group	Not a regulated material under the United States DOT, IMDG, ADR RID, or ICAO/IATA.
· DOT, ADR, IMDG, IATA	Void
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Not applicable.
• Transport in bulk according to Annex	II of
MARPOL73/78 and the IBC Code	Not applicable.
· UN "Model Regulation":	Void

15 Regulatory Information

• Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.

· Sara

· Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

• TSCA (Toxic Substances Control Act):

All ingredients are listed.

· Proposition 65

· Chemicals known to cause cancer:

1333-86-4 Carbon black (bound)

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

(Contd. on page 8)

Printing date 10/20/2016

Reviewed on 07/06/2016

(Contd. of page 7)

A4

Trade name: *Universal HD Toner

• TLV (Threshold Limit Value established by ACGIH)

1333-86-4 Carbon black (bound)

·NIOSH-Ca (National Institute for Occupational Safety and Health)

1333-86-4 Carbon black (bound)

• GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms Void

· Signal word Warning

· Hazard statements

May form combustible dust concentrations in air.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other Information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing SDS: Product safety department

· Contact:

During Normal Operating Hours: 919-774-3808

Emergency Telephone Number: 1-919-770-7984 or 1-919-770-6019

· Date of preparation / last revision 10/20/2016 / -

· Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

* * Data compared to the previous version altered.

No changes to the Material Safety Data Sheet, all sections are current as the date of print seen above describes.