Safety Data Sheet

SECTION 1 Identification of the substance/preparation and of the company/undertaking

1.1. Product identifier:

Product Name: MSK Mod23-3 toner

Product Code:

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

Descriptor: Industrial uses (SU3), Ink and toners (PC18)

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

Supplier: Katun Corporation

Address: 10951 Bush Lake Rd, Minneapolis, MN 55438

Telephone number: 952-941-9505

1.4. Emergency telephone number: (Chemtrec) (800) 424-9300

SECTION 2 Hazards identification

2.1 Classification of the Substance or mixture:

2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP]

Not classified as a hazardous mixture

Physical Hazards

Flam. Sol: Not classified

Health Hazards

Acute Tox. -oral:

Acute tox. -inhalation:

Skin Corr/ Irrit:

Not classified

Not classified

Not classified

Eye Dam/ Irrit:

Not classified

Not classified

Not classified

Not classified

Muta:

Not classified

All other Classifications not listed are either "Not applicable" or "Not available"

2.1.2 Classification according to Directive 1999/45/EC

None

2.2 Label elements:

2.2.1 Labeling according to Regulation (EC) No 1272/2008 [CLP]

None

2.2.2 Labeling according to Directive 1999/45/EC

None

2.3 Other hazards:

Risk of dust-explosion if finely dispersed in air with an ignition source.

SECTION 3 Composition/information on ingredients

3.2 Mixtures:

Ingredient Name	Weight %	CAS No.	REACH Registration	Classification according to 67/548/EEC	Classification according to Regulation(EC) No 1272/2008 [CLP]
Styrene acrylate copolymer	40-50	Confidential	Registered*	None	None
Magnetite	40-50	1317-61-9	Registered	None	None
Ethylene propylene copolymer	1-5	Confidential	Registered*	None	None
Silica	1-3	Confidential	Registered	None	None

^{*}Registered as all applicable monomers

SECTION 4 First aid measures

4.1 Description of first aid measures:

Immediate medical procedures:

None

Inhalation:

Move to fresh air and gargle with water.

Skin contact:

Wash with soap and water.

Eye contact:

Do not rub. Flush with large amount of water until particles are removed.

Seek medical advice

Ingestion:

Rinse mouth, then drink several glasses of water to dilute stomach content.

Seek medical advice.

4.2 Most important symptoms, both acute and delayed:

Inhalation of excessive amounts of dust may cause physical irritation to respiratory system.

4.3 Indication of any immediate medical attention and special treatment needed:

None

SECTION 5 Firefighting measures

5.1 Extinguishing media:

Water, CO₂, dry chemicals

5.2 Special hazards arising from substance or mixture:

Can form explosive dust-air mixture if finely dispersed in air.

5.3 Advice for firefighters:

Avoid inhalation of fume and smoke.

SECTION 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Avoid breathing dust. Dust-proof masks should be worn when working.

6.2 Environmental precautions:

Do not flush into sewer or natural watercourse.

6.3 Methods and material for containment and cleaning up:

For containment:

Keep in air-tight container.

For cleaning up:

Sweep the spilled powder slowly.

Clean the remainder with wet cloth, wet paper, or vacuum cleaner.

Vacuum cleaner must be equipped with dust proof filter and must be explosion-proof.

For containment:

Keep in air-tight container.

SECTION 7 Handling and storage

7.1 Precautions for safe handling:

Avoid breathing dust. Keep away from ignition sources.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry location away from direct sunlight.

7.3 Specific end use(s):

For use in electrophotographic apparatus such as laser-beam printers and copiers.

SECTION 8 Exposure contols/personal protection

8.1 Control parameters:

As mixture: Dust, respirable

	Limit value	e –Eight hours	Limit value –Short term	
Country	ppm	mg/m³	ppm	mg/m³
European Union	Not established	Not established	Not established	Not established
Austria	-	5	-	10
Belgium	-	3	-	-
France	-	5 (respirable aerosol)	-	-
Germany (AGS)	-	1.25	-	-
Germany (DFG)	-	1.5	-	-
Hungary	-	6	-	-
Ireland	-	4	-	-
Spain	-	3	-	-
Sweden	-	5	-	-
Switzerland	-	3	-	-
USA (ACGIH)	-	3	-	-
USA (OSHA PEL)	-	5	-	-

Applicable control parameters are not established in other Community Members not listed

Constituent substances:

This mixture is considered as a "Special Mixture" where substances are modulated by their inclusion within the matrix of the mixture; thus, control parameters for constituent substances do not apply in use of this mixture.

8.2 Exposure controls:

Appropriate engineering controls:

Use of local ventilation is recommended.

Individual protection measures:

Eye/face protection: Protective goggles should be used when handling bulk.

Skin Protection: Not required Hand protection: Not required

Respiratory protection: Dust-proof mask should be used when handling bulk.

SECTION 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Appearance: Black powder (average particle size: app. 8 microns)

Odour: Slight odour pH: Not applicable

Melting point: App. 140°C (flow temperature)

Boiling point: Not applicable
Flash point: Not applicable
Evaporation rate: Not applicable

Flammability: Not flammable (according to Directive 92/69/EEC)

Explosive limits: Not available
Vapour pressure: Not applicable
Vapour density: Not applicable

Relative density: 1.3-1.8

Solubility: Insoluble to water, partially soluble to toluene and xylene.

Partition coefficient: Not available
Auto-ignition temperature: Not available
Decomposition temperature: >200°C

Viscosity: Not applicable

Explosive properties: Explosive dust-air mixture is formed when finely dispersed in air

Oxidizing properties: Not available

9.2 Other information: None

SECTION 10 Stability and reactivity

10.1 Reactivity:No data10.2 Chemical stability:Stable

10.3 Possibility of hazardous reactions: Strong oxidization may produce Cr(VI)10.4 Conditions to avoid: Do not disperse in air with ignition source.

10.5 Incompatible materials: Strong acids, strong oxidizers

10.6 Hazardous decomposition products: Decomposition will not occur under intended uses.

SECTION 11 Toxicological information

11.1 Information on toxicological effects:

Acute toxicity:

Inhalation: LC_{50} : inh-rat > 5.19mg/L/4 hours (maximum concentration achieved)*;

-Not classified**

Ingestion: LD₅₀: oral-rat > 2500mg/kg body weight; -Not classified**

Skin corrosion/irritation: Rabbit-4hr; not irritant*; -Not classified**

Serious eye damage/irritation:

Rabbit-3days; not irritant*; -Not classified**

Skin sensitization: Guinea pig-maximization; not a sensitizer*: -Not classified**

Germ cell mutagenicity: Ames test Negative; -Not classified**

Carcinogenicity: Not available for mixture

No constituent components are classified**

Reproductive toxicity: Not available for mixture

No constituent components are classified**

STOT-single exposure: Not available for mixture

No constituent components are classified**

STOT-repeated exposure: Not available for mixture

No constituent components are classified**

Aspiration hazards: Not available for mixture

No constituent components are classified**

SECTION 12 Ecological information

12.1 Toxicity

Not available for mixture

No constituent components are classified**

12.2 Persistence and degradability

Not available

12.3 Bioaccumulative potential

Not available

12.4 Mobility in soil

Not available

12.5 Results of PBT and vPvB assessment:

This mixture does not contain any substance that are assessed to be PBT or vPvB.

12.6 Other adverse effects:

Not available

SECTION 13 Disposal consideration

13.1 Waste treatment methods

Dispose according to local authority requirements.

Waste should not be released to sewer or natural watercourse.

DO NOT put toner powder or container into fire.

^{*}data from toner with similar composition.

^{**}according to criteria of Regulation (EC) No 1272/2008 [CLP]

^{**}according to criteria of Regulation (EC) No 1272/2008 [CLP]

SECTION 14 Transport information

14.1 UN number

None

14.2 UN proper shipping name

None

14.3 Transport hazard class(es)

None

14.4 Packing group

None

14.5 Environmental hazards:

Not classified as environmentally hazardous under UN Model Regulations and marine pollutant under IMDG Code.

14.6 Special precautions for user:

None

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:

None

SECTION 15 Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulations

Regulation (EC) No 1272/2008 [CLP]

Not classified as hazardous mixture, label not required

Regulation (EC) No 1907/2006 [REACH]

Restricted substances: None SVHC: None*

Registration: See SECTION 3

*Up to 12th updated list issued 17-Dec.-2014

National regulations (France):

French enforcement Decree no. 2012-232 of 17-February, 2012

Substance "Silica" is considered as nanomaterial, but it is considered to be modulated by their inclusion within the matrix of the mixture; thus, it is not considered to be "contained without being linked to the mixture."

15.2 Chemical safety assessment:

No chemical safety assessment has been carried out for this mixture by the supplier.

SECTION 16 Other information

Issued according to (EC) 453/2010 Annex II amendment of REACH Annex II

Indication of changes:

22-Apr.-2015: First issued

Abbreviations and acronyms:

FAX: Facsimile

CLP: Classification Labelling Packaging regulation

Flam. Sol.
Tox.
Toxicity
Corr.
Irrit.
Dam.
Sens.
Muta.
Flammable Solid
Tox.
Corrosivity
Irritation
Damage
Sens.
Sensitization
Mutagenicity

CAS: Chemical Abstract Service

REACH: Registration, Evaluation, Authorization, and Restriction of Chemicals

ppm: parts per million (weight/weight)

AGS Ausschuss für Gefahrstoffe DFG Deutsche Forschungsgemeinschaf

USA United States of America

ACGIH: American Conference of Governmental Industrial Hygienists

TWA: Time weighted Average

OSHA Occupational Safety and Health Administration

PEL Permissible Exposure Limit

app. approximately

LC50Lethal Concentration to 50% of test populationLD50Lethal Dose to 50% of test populationIARC:International Agency for Research on CancerSTOT-SE:Specific Target Organ Toxicity –Single ExposureSTOT RESpecific Target Organ Toxicity –Repeated Exposure

PBT Persistent, Bioaccumulative, and Toxic vPvB: very Persistent and very Bioaccumulative

UN United Nations

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

RID: Regulations concerning the International Carriage of Dangerous Goods by Rail

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG International Maritime Dangerous Goods

IATA-DGR: International Air Transport Association Dangerous Goods Regulations ICAO-TI: Technical Instructions for the Safe Transport of Dangerous Goods by Air

SVHC: Substances of Very High Concern

Classification procedures:

Flam. Sol: Classification data of constituent substances

Acute Tox. -oral:

Acute tox. -inhalation:

Skin Corr/ Irrit:

Eye Dam/ Irrit:

Data from similar mixture and bridging principle "Dilution"

Muta: On basis of test data of this mixture

This SDS is for experimental sample research and development purposes only. Safety compliance may not be enough to import the product for other uses.