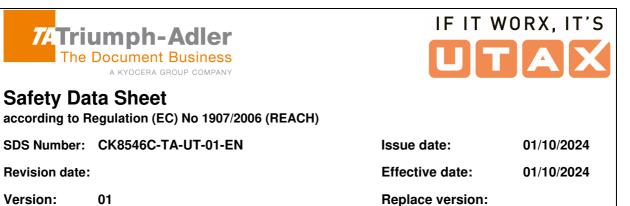


SDS Number: CK8546C-TA-UT-01-EN



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#### SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1	Product identifier	
	Product name	Cyan Toner for
		4009ci
	Consumable name	CK-8546C
	Product form	Mixture
1.2	Relevant identified us	ses of the substance or mixture and uses advised against
	Identified uses	The image formation of our electrophotographic equipment. Other uses are not recommended.
1.3	Details of the supplie	r of the safety data sheet
	Manufacturer	KYOCERA Document Solutions Inc.
	Address	1-2-28 Tamatsukuri, Chuo-ku, Osaka 540-8585, Japan
	Supplier	TA Triumph-Adler GmbH
	Address	Deelbögenkamp 4c 22297 Hamburg Germany
1.4	Emergency telephone	e number +49 (0) 40 / 528490 (This number is available only during office hours)

#### **SECTION 2: Hazards identification**

2.1	Classification of the substance or mixture
	Classification according to Regulation (EC) No 1272/2008 (CLP)
	Not classified as hazardous mixture.
2.2	Label elements
	Labelling according to Regulation (EC) No 1272/2008 (CLP)
	Not applicable.
2.3	Other hazards
	Assessment of PBT/vPvB
	No data available.
	See section 4 and 11 for information on health effects and symptoms. See section 9 for dust explosion information.

	_				
7	74 Triumph-Adler The Document Business				T WORX, IT'S
	Safety Data Sheet according to Regulation (EC) No 1907/2006 (REACH)				
SDS Nu	umber: CK854	6C-TA-UT-01-EN		Issue date:	01/10/2024
Revisio	on date:			Effective date	: 01/10/2024
Versio	n: 01			Replace version	on:
SECTIC	N 3. Composi	tion/information on ing	aredients		
	-		grouionto		
3.2	Mixtures		<b></b>		
	Chemical name	2	CAS No	Weight%	Classification (CLP)
	Polyester resin Ferrite (Ferrite Organic pigmer Amorphous silio Aluminium com	ca	Confidential 66402-68-4 Confidential 7631-86-9 1344-28-1	70-80 5-10 (as Mn: < 3-8 1-5 < 1	None 3)None None None None
	Information of	ingredients			
	(1) Substance,	which present a health	or environmenta	I hazard within t	he meaning of CLP:
		None.			
	(2) Substance,	which are assigned Cor	nmunity workpla	ace exposure lim	its:
		None.			
	(3) Substance, REACH:	which are PBT or vPvB	in accordance v	vith the criteria s	et out in Annex XIII of
		None.			
	(4) Substance, REACH (S)	which are included in th /HC):	e list established	d in accordance	with Article 59(1) of
		None.			
	See section 16	for the full text of the H	statements decl	ared above.	
SECTIC	N 4: First aid	measures			
4.1	Description of	first aid measures			
	Inhalation:	Remove from exposure Consult a doctor in cas			
	Skin contact:	Wash with soap and wa		0	0
	Eye contact:	Flush with water immed		a doctor if irritatii	ng.
	Ingestion:	Rinse out the mouth. D Seek medical treatmen		glasses of water	to dilute.
4.2	Most importan	it symptoms and effec		and delayed	
	-	effects and symptoms			
	Inhalation:	Prolonged inhalation of	f excessive dust	s may cause lun	g damage. Use of this





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# 4.2 Skin contact: Unlikely to cause skin irritation.Eye contact: May cause transient eye irritation.

**Ingestion:** Use of this product as intended does not result in ingestion.

# **4.3** Indication of any immediate medical attention and special treatment needed No additional information available.

#### **SECTION 5:** Firefighting measures

#### 5.1 Extinguishing media

Suitable extinguishing media

Water spray, foam, powder, CO<sub>2</sub> or dry chemical

Unsuitable extinguishing media

None specified.

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

Hazardous combustion products: Carbon dioxide, Carbon monoxide

#### 5.3 Advice for firefighters

Fire-fighting procedures

Pay attention not to blow away dust. Drain water off around and decrease the atmosphere temperature to extinguish the fire.

#### Protection equipment for firefighters

None specified.

#### **SECTION 6: Accidental release measures**

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

Avoid inhalation, ingestion, eye and skin contact in case of accidental release. Avoid formation of dust. Provide adequate ventilation.

#### 6.2 Environmental precautions

Do not allow to enter into surface water or drains.

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

Gather the released powder not to blow away and wipe up with a wet cloth.

#### 6.4 Reference to other sections

See section 13 for disposal information.





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#### SECTION 7: Handling and storage

01

#### 7.1 Precautions for safe handling

Do not attempt to force open or destroy the toner container or unit. See installation guide of this product.

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

Keep the toner container or unit tightly closed and store in a cool, dry and dark place. Keep away from fire. Keep out of the reach of children.

#### 7.3 Specific end use(s)

No additional information available.

#### SECTION 8: Exposure controls/personal protection

8.1 Control parameters

### (Reference data)

#### US ACGIH Threshold Limit Values (TWA)

Particles: 10 mg/m<sup>3</sup> (Inhalable particles) 3 mg/m<sup>3</sup> (Respirable particles) Manganese inorganic compounds (Ferrite component):

0.1 mg/m<sup>3</sup> (Inhalable fraction)

0.02 mg/m<sup>3</sup> (Respirable fraction) (as Mn

Aluminium insoluble compound: 1 mg/m<sup>3</sup> (Respirable fraction)

#### US OSHA PEL (TWA)

Particles: 15 mg/m³ (Total dust)5 mg/m³ (Respirable fraction)Manganese compounds (Ferrite component): 5 mg/m³ (Ceiling) (as Mn)Amorphous silica: 80 mg/m³/%SiO2

EU Occupational exposure limits: Directive (EC) 2000/39, (EC) 2006/15 and (EU) 2009/161

Not listed.

#### 8.2 Exposure controls

#### Appropriate engineering controls

Special ventilator is not required under normal intended use. Use in a well-ventilated area.

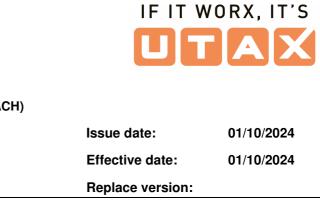
#### Personal protective equipment

Respiratory protection, eye protection, hand protection, skin and body protection are not required under normal intended use.

#### **Environmental exposure controls**

No additional information available.





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#### SECTION 9: Physical and chemical properties

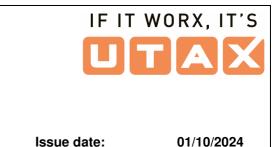
1	Information on basic physical and chemic	cal properties	
	Appearance		
	Physical state	Solid (fine powder)	
	Colour	Cyan	
	Odour	Odourless	
	Melting point/freezing point [°C]	100-120 (Toner)	
	Boiling point or initial boiling point and boiling range	No data available.	
	Flammability	No data available.	
	Lower and upper explosion limit	No data available.	
	Flash point	No data available.	
	Auto-ignition temperature	No data available.	
	Decomposition temperature	No data available.	
	рН	No data available.	
	Kinematic viscosity	No data available.	
	Solubility	Almost insoluble in water.	
	Partition coefficient: n-octanol/water (log value)	No data available.	
	Vapour pressure	No data available.	
	Density and/or relative density [g/cm3]	1.2-1.4 (Toner)	
	Relative vapour density	Not applicable.	
	Particle characteristics [µm]	1-10 (Toner) 30-50 (Carrier)	

#### 9.2 Other information

#### Dust explosion properties

Dust explosion is improbable under normal intended use. Experimental explosiveness of toner is classified into the same rank such kind of powder as flour, dry milk and resin powder according to the pressure rising speed.





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### SECTION 10: Stability and reactivity

01

#### 10.1 Reactivity

No data available.

#### 10.2 Chemical stability

This product is stable under normal conditions of use and storage.

#### 10.3 Possibility of hazardous reactions

Hazardous reactions will not occur.

10.4 Conditions to avoid

None specified.

# 10.5 Incompatible materials

None specified.

#### 10.6 Hazardous decomposition products

Hazardous decomposition products are not to be produced.

#### SECTION 11: Toxicological information

Information on hazard classes	s as defined in Regulation (EC) No 1272/2008	
Based on available data, the classification criteria listed below are not met.		
Acute toxicity		
. ,	> 2000 mg/kg (rat)* (Toner) > 2500 mg/kg (rat)** (Carrier)	
	No data available (Toner). No data available (Carrier).	
Inhalation (LC50(4hr))	> 5.10 mg/l (rat)* (Toner)	
Skin corrosion/irritation		
	Non-irritant (rabbit)* (Toner) Non-irritant (rabbit)** (Carrier)	
Serious eye damage/irritation		
Acute eye irritation	Mild irritant (rabbit)* (Toner)	
Respiratory or skin sensitisat	ion	
	Non-sensitising (mouse)* (Toner) Non-sensitising** (Carrier)	

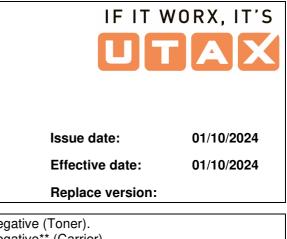


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# Version: 01 11.1 Germ cell mutagenicity AMES test is negative (Toner). AMES test is negative\*\* (Carrier). \*(Based on test result of similar product) \*\*(Based on test result of constituent materials) Information of ingredients: No mutagen according to MAK, TRGS905 and (EC) No 1272/2008 Annex VI. Carcinogenicity Information of ingredients: No carcinogen or potential carcinogen according to IARC, Japan Association on Industrial Health, ACGIH, EPA, OSHA, NTP, MAK, California Proposition 65, TRGS 905 and (EC) No 1272/2008 Annex VI. **Reproductive toxicity** Information of ingredients: No reproductive toxicant according to MAK, California Proposition 65, TRGS 905 and (EC) No 1272/2008 Annex VI. STOT-single exposure No data available. STOT-repeated exposure No data available. Aspiration hazard No data available. **Chronic effects** In a study in rats by chronic inhalation exposure to a typical toner, a mild to moderate degree of lung fibrosis was observed in 92% of the rats in the high concentration (16 mg/m<sup>3</sup>) exposure group, and a minimal to mild degree of fibrosis was noted in 22% of the animal in the middle (4mg/m<sup>3</sup>) exposure group (1). But no pulmonary change was reported in the lowest (1mg/m<sup>3</sup>) exposure group, the most relevant level to potential human exposures. 11.2 Information on other hazards No data available. Endocrine disrupting properties Other information No data available.





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#### SECTION 12: Ecological information

#### 12.1 Toxicity

No data available.

12.2 Persistence and degradability

No data available.

12.3 Bio accumulative potential

No data available.

#### 12.4 Mobility in soil

No data available.

#### 12.5 Results of PBT and vPvB assessment

No data available.

12.6 Endocrine disrupting properties

No data available.

#### 12.7 Other adverse effects

No additional information available.

#### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

Do not attempt to incinerate the toner container or unit and the waste toner yourself. Dangerous sparks may cause burn. The toner/developer/ink contains synthetic polymer microparticles. When disposing of this product/parts, avoid release of contents into the environment. Dispose of contents(toner/developer/ink) in accordance with local/regional/national/ international regulations.

#### **SECTION 14:** Transport information

#### 14.1 UN-number or ID number

None.

14.2 UN Proper shipping name

None.

14.3 Transport hazard class(es)

None.

14.4 Packing group

None.

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# 14.5 Environmental hazards

None.

#### 14.6 Special precautions for user

No additional information available.

# 14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

SECTION 15: Regulatory information

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

#### EU-regulations

Regulation (EU) No 2024/590 (on substances that deplete the ozone layer, Annex I and II):

Not listed.

Regulation (EU) 2019/1021 (on persistent organic pollutants, Annex I as amended):

Not listed.

Regulation (EU) No 649/2012 (concerning the export and import of dangerous chemicals, Annex I and V as amended):

Not listed.

Regulation (EC) No 1907/2006 REACH Annex XVII as amended (Restrictions on use):

Not listed.

Regulation (EC) No 1907/2006 REACH Annex XIV as amended (Authorisations):

Not listed.

#### **US-regulations**

All ingredients in this product comply with order under TSCA.

#### **Canada regulations**

This product is not a WHMIS-controlled product, since we consider it as a manufactured article.

#### 15.2 Chemical Safety Assessment

No data available.

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#### SECTION 16: Other information

01

To the best of our knowledge, the information contained herein is accurate. However, we cannot assume any liability whatsoever for the accuracy or completeness of the information contained herein. The contents and format of this SDS are in accordance with Regulation (EC) No 1907/2006, Annex II as amended by Regulation (EU) 2020/878 with respect to SDSs.

**Revision information:** 

Full text of H statements under sections 3: Not applicable.

#### Abbreviations and acronyms

ACGIH	American Conference of Governmental Industrial Hygienists 2016 TLVs and BEIs (Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices)
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
EPA	Environmental Protection Agency (Integrated Risk Information System) (US)
IARC	International Agency for Research on Cancer (IARC Monographs on the Evaluations of Carcinogenic Risks to Humans)
MAK	Maximale Arbeitsplatzkonzentration der Deutschen Forschungsgesellschaft (2011)
NTP	National Toxicology Program (Report on Carcinogens) (US)
OSHA	Occupational Safety and Health Administration (29 CFR Part 1910 Subpart Z)
PBT	Persistent, Bio accumulative and Toxic
PEL	Permissible Exposure Limits
Proposition 65	California, Safe Drinking Water and Toxic Enforcement Act of 1986
REACH	Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
STOT	Specific target organ toxicity
SVHC	Substances of Very High Concern
TRGS 905	Technische Regeln für Gefahrstoffe (Deutschland)
TSCA	Toxic Substances Control Act (US)
TWA	Time Weighted Average
UN	United Nations
vPvB	very Persistent and very Bio accumulative
WHMIS	Workplace Hazardous Materials Information System (Canada)

#### Key literature references and sources for data

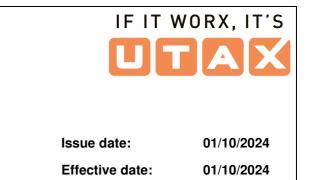
(1) Pulmonary Response to Toner upon Chronic Inhalation Exposure in Rats, H. Muhle et al., Fundamental and Applied Toxicology 17.280-299 (1991) Lung Clearance and Retention of Toner, utilising a Tracer Technique, during Chronic Inhalation Exposure in Rats, B. Bellmann, Fundamental and Applied Toxicology 17.300-313 (1991)

(2) IARC Monograph on the Evaluation of the Carcinogenic Risk of Chemicals to Humans, Vol. 93

NIOSH CURRENT INTELLIGENCE BULLETIN "Evaluation of Health Hazard and Recommendation for Occupational (3) Exposure to Titanium Dioxide DRAFT'

The contents are in accordance with Material Safety Data Sheet "CK8546C-TA-UT-01-EN"; 01/10/2024 of the (4) KYOCERA Document Solutions Inc., 1-2-28 Tamatsukuri, Chuo-ku, Osaka 540-8585, Japan.





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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1	Product identifier		
	Product name	Black Toner for	
		4009ci	
	Consumable name	CK-8546K	
	Product form	Mixture	
1.2	Relevant identified u	ses of the substance or mixture and uses advised against	
	Identified uses	The image formation of our electrophotographic equipment. Other uses are not recommended.	
1.3	Details of the supplie	lier of the safety data sheet	
	Manufacturer	KYOCERA Document Solutions Inc.	
	Address	1-2-28 Tamatsukuri, Chuo-ku, Osaka 540-8585, Japan	
	Supplier	TA Triumph-Adler GmbH	
	Address	Deelbögenkamp 4c 22297 Hamburg Germany	
1.4	Emergency telephon	e number +49 (0) 40 / 528490 (This number is available only during office hours)	

SECTION 2: Hazards identification

0.4	
2.1	Classification of the substance or mixture
	Classification according to Regulation (EC) No 1272/2008 (CLP)
	Not classified as hazardous mixture.
2.2	Label elements
	Labelling according to Regulation (EC) No 1272/2008 (CLP)
	Not applicable.
2.3	Other hazards
	Assessment of PBT/vPvB
	No data available.
	See section 4 and 11 for information on health effects and symptoms. See section 9 for dust explosion information.

7	Triumph-Adler The Document Business A KYOCERA GROUP COMPANY					
	Safety Data Sheet according to Regulation (EC) No 1907/2006 (REACH)					
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SECTIO	N 3: Composi	ition/information on ing	aradiante			
	-		greatents			
3.2	Mixtures					
	Chemical name	_	CAS No	<u>Weight%</u>	Classification (CLP)	
	Polyester resin	including manganese)	Confidential 66402-68-4	70-80 5-10(as Mn:< 3	None 3)None	
	Carbon black	manganooo)	1333-86-4	3-8	None	
	Amorphous sili		7631-86-9	1-5	None	
	Aluminium com		1344-28-1	< 1	None	
	Information of	-	or opvironmonto	hozord within t	the meening of CLP:	
	(1) Substance,	which present a health		a nazaru witnin	the meaning of CLP.	
		None.	a na sua itu su sa al sa la		oʻto i	
	(2) Substance,	which are assigned Cor		ace exposure inf	mus:	
		None.				
	(3) Substance, REACH:	which are PBT or vPvB	in accordance v	with the criteria s	set out in Annex XIII of	
		None.				
	(4) Substance, REACH (S)	which are included in th VHC):	e list establishe	d in accordance	with Article 59(1) of	
		None.				
	See section 16	for the full text of the H	statements dec	lared above.		
SECTIO	ON 4: First aid	measures				
4.1	Description of	first aid measures				
	Inhalation:	Remove from exposure Consult a doctor in cas				
	Skin contact:	Wash with soap and wa		terme de cougrin	.9.	
	Eye contact:	Flush with water immed		a doctor if irritati	ing.	
	Ingestion:	Rinse out the mouth. D Seek medical treatmen	Prink one or two		-	
4.2	Most importar	nt symptoms and effec	-	and delaved		
	-	n effects and symptoms				
	Inhalation:	Prolonged inhalation of	f excessive dust	s may cause lur	ng damage. Use of this	
					ation of excessive toner	





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# 4.2 Skin contact: Unlikely to cause skin irritation.Eye contact: May cause transient eye irritation.

**Ingestion:** Use of this product as intended does not result in ingestion.

# **4.3** Indication of any immediate medical attention and special treatment needed No additional information available.

#### **SECTION 5:** Firefighting measures

#### 5.1 Extinguishing media

Suitable extinguishing media

Water spray, foam, powder, CO<sub>2</sub> or dry chemical

Unsuitable extinguishing media

None specified.

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

Hazardous combustion products: Carbon dioxide, Carbon monoxide

#### 5.3 Advice for firefighters

Fire-fighting procedures

Pay attention not to blow away dust. Drain water off around and decrease the atmosphere temperature to extinguish the fire.

#### Protection equipment for firefighters

None specified.

#### **SECTION 6: Accidental release measures**

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

Avoid inhalation, ingestion, eye and skin contact in case of accidental release. Avoid formation of dust. Provide adequate ventilation.

#### 6.2 Environmental precautions

Do not allow to enter into surface water or drains.

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

Gather the released powder not to blow away and wipe up with a wet cloth.

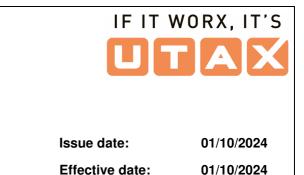
#### 6.4 Reference to other sections

See section 13 for disposal information.



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#### SECTION 7: Handling and storage

01

#### 7.1 Precautions for safe handling

Do not attempt to force open or destroy the toner container or unit. See installation guide of this product.

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

Keep the toner container or unit tightly closed and store in a cool, dry and dark place. Keep away from fire. Keep out of the reach of children.

#### 7.3 Specific end use(s)

No additional information available.

#### SECTION 8: Exposure controls/personal protection

8.1 **Control parameters** (Reference data)

#### US ACGIH Threshold Limit Values (TWA)

Particles: 10 mg/m<sup>3</sup> (Inhalable particles) 3 mg/m<sup>3</sup> (Respirable particles) Carbon black: 3 mg/m<sup>3</sup> (Inhalable fraction) Manganese inorganic compounds (Ferrite component):

0.1 mg/m<sup>3</sup> (Inhalable fraction)

0.02 mg/m<sup>3</sup> (Respirable fraction) (as Mn)

Aluminium insoluble compound: 1 mg/m<sup>3</sup> (Respirable fraction)

#### **US OSHA PEL (TWA)**

Particles: 15 mg/m<sup>3</sup> (Total dust) 5 mg/m<sup>3</sup> (Respirable fraction) Carbon black: 3.5 mg/m<sup>3</sup> Manganese compounds (Ferrite component): 5 mg/m<sup>3</sup> (Ceiling) (as Mn) Amorphous silica: 80 mg/m<sup>3</sup>/%SiO<sub>2</sub>

EU Occupational exposure limits: Directive (EC) 2000/39, (EC) 2006/15 and (EU) 2009/161

Not listed.

#### 8.2 **Exposure controls**

#### Appropriate engineering controls

Special ventilator is not required under normal intended use. Use in a well-ventilated area.

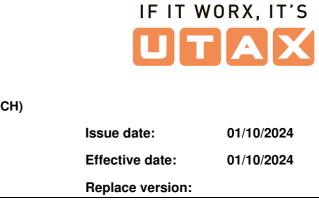
#### Personal protective equipment

Respiratory protection, eye protection, hand protection, skin and body protection are not required under normal intended use.

#### **Environmental exposure controls**

No additional information available.





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#### SECTION 9: Physical and chemical properties

1	Information on basic physical and chemic	al properties	
	Appearance		
	Physical state	Solid (fine powder)	
	Colour	Black	
	Odour	Odourless	
	Melting point/freezing point [°C]	100-120 (Toner)	
	Boiling point or initial boiling point and boiling range	No data available.	
	Flammability	No data available.	
	Lower and upper explosion limit	No data available.	
	Flash point	No data available.	
	Auto-ignition temperature	No data available.	
	Decomposition temperature	No data available.	
	рН	No data available.	
	Kinematic viscosity	No data available.	
	Solubility	Almost insoluble in water.	
	Partition coefficient: n-octanol/water (log value)	No data available.	
	Vapour pressure	No data available.	
	Density and/or relative density [g/cm3]	1.2-1.4 (Toner)	
	Relative vapour density	Not applicable.	
	Particle characteristics [µm]	1-10 (Toner) 30-50 (Carrier)	

#### 9.2 Other information

#### Dust explosion properties

Dust explosion is improbable under normal intended use. Experimental explosiveness of toner is classified into the same rank such kind of powder as flour, dry milk and resin powder according to the pressure rising speed.





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#### SECTION 10: Stability and reactivity

01

#### 10.1 Reactivity

No data available.

#### 10.2 Chemical stability

This product is stable under normal conditions of use and storage.

#### 10.3 Possibility of hazardous reactions

Hazardous reactions will not occur.

10.4 Conditions to avoid

None specified.

# 10.5 Incompatible materials

None specified.

#### 10.6 Hazardous decomposition products

Hazardous decomposition products are not to be produced.

#### SECTION 11: Toxicological information

li	nformation on hazard classe	es as defined in Regulation (EC) No 1272/2008
E	Based on available data, the cl	assification criteria listed below are not met.
A	Acute toxicity	
	Oral (LD50)	> 2000 mg/kg (rat)* (Toner) > 2500 mg/kg (rat)** (Carrier)
	Dermal (LD50)	No data available (Toner). No data available (Carrier).
	Inhalation (LC50(4hr))	> 5.09 mg/l (rat)* (Toner)
S	Skin corrosion/irritation	
	Acute skin irritation	Non-irritant (rabbit)* (Toner) Non-irritant (rabbit)** (Carrier)
S	Serious eye damage/irritation	1
	Acute eye irritation	Mild irritant (rabbit)* (Toner)
F	Respiratory or skin sensitisa	tion
	Skin sensitisation	Non-sensitising (mouse)* (Toner) Non-sensitising** (Carrier)





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according to Regulation (EC) No 1907/2006 (RE	ACH)

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Version:	01	Replace version:	

11.1	Germ cell mutagenicity	AMES test is negative (Toner). AMES test is negative** (Carrier).
		*(Based on test result of similar product)
		**(Based on test result of constituent materials)
	Information of ingredients:	
	No mutagen according	to MAK, TRGS905 and (EC) No 1272/2008 Annex VI.
	Carcinogenicity	
	Information of ingredients:	
		cinogen (except carbon black) according to IARC, Japan h, ACGIH, EPA, OSHA, NTP, MAK, California Proposition 65, 2008 Annex VI.
		black as a Group 2B carcinogen (possibly carcinogenic to tion exposure test in rats. But, oral/skin test does not show
		is based upon the development of lung tumours in rat receiving ofree carbon black at level that induce particle overload of the
	The studies performed in animate between carbon black and lung	al models other than rats have not demonstrated an association g tumours. Moreover, a two-years cancer bioassay using a ning carbon black demonstrated no association between toner nent in rats. (*1)
	Reproductive toxicity	
	Information of ingredients:	
	No reproductive toxical (EC) No 1272/2008 An	nt according to MAK, California Proposition 65, TRGS 905 and nex VI.
	STOT-single exposure	No data available.
	STOT-repeated exposure	No data available.
	Aspiration hazard	No data available.
	Chronic effects	
	of lung fibrosis was observed in exposure group, and a minimal middle (4mg/m <sup>3</sup> ) exposure grou	nalation exposure to a typical toner, a mild to moderate degree n 92% of the rats in the high concentration (16 mg/m <sup>3</sup> ) I to mild degree of fibrosis was noted in 22% of the animal in the up (1). But no pulmonary change was reported in the lowest most relevant level to potential human exposures.
11.2	Information on other hazards	\$
	Endocrine disrupting proper	ties No data available.
	Other information	No data available.





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# Safety Data Sheet

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#### SECTION 12: Ecological information

#### 12.1 Toxicity

No data available.

12.2 Persistence and degradability

No data available.

12.3 Bio accumulative potential

No data available.

#### 12.4 Mobility in soil

No data available.

#### 12.5 Results of PBT and vPvB assessment

No data available.

12.6 Endocrine disrupting properties

No data available.

#### 12.7 Other adverse effects

No additional information available.

### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

Do not attempt to incinerate the toner container or unit and the waste toner yourself. Dangerous sparks may cause burn. The toner/developer/ink contains synthetic polymer microparticles. When disposing of this product/parts, avoid release of contents into the environment. Dispose of contents(toner/developer/ink) in accordance with local/regional/national/ international regulations.

#### **SECTION 14:** Transport information

#### 14.1 UN-number or ID number

None.

#### 14.2 UN Proper shipping name

None.

#### 14.3 Transport hazard class(es)

None.

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#### 14.4 Packing group

None.

#### 14.5 Environmental hazards

None.

#### 14.6 Special precautions for user

No additional information available.

#### 14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

#### SECTION 15: Regulatory information

# 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture EU-regulations Bogulation (ELI) No 2024/590 (on substances that deplote the ezone layer. Apply L and II):

Regulation (EU) No 2024/590 (on substances that deplete the ozone layer, Annex I and II):

Not listed.

Regulation (EU) 2019/1021 (on persistent organic pollutants, Annex I as amended):

Not listed.

Regulation (EU) No 649/2012 (concerning the export and import of dangerous chemicals, Annex I and V as amended):

Not listed.

Regulation (EC) No 1907/2006 REACH Annex XVII as amended (Restrictions on use):

Not listed.

Regulation (EC) No 1907/2006 REACH Annex XIV as amended (Authorisations):

Not listed.

#### **US-regulations**

All ingredients in this product comply with order under TSCA.

#### **Canada regulations**

This product is not a WHMIS-controlled product, since we consider it as a manufactured article.

#### 15.2 Chemical Safety Assessment

No data available.

7/4 Triumph-Adler	IF IT	WORX, IT'S
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Safety Data Sheet according to Regulation (EC) No 1907/2006 (REACH)		
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**Revision date:** 

#### SECTION 16: Other information

01

To the best of our knowledge, the information contained herein is accurate. However, we cannot assume any liability whatsoever for the accuracy or completeness of the information contained herein. The contents and format of this SDS are in accordance with Regulation (EC) No 1907/2006, Annex II as amended by Regulation (EU) 2020/878 with respect to SDSs.

**Revision information:** 

Full text of H statements under sections 3: Not applicable.

#### Abbreviations and acronyms

	•
ACGIH	American Conference of Governmental Industrial Hygienists 2016 TLVs and BEIs (Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices)
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
EPA	Environmental Protection Agency (Integrated Risk Information System) (US)
IARC	International Agency for Research on Cancer (IARC Monographs on the Evaluations of Carcinogenic Risks to Humans)
MAK	Maximale Arbeitsplatzkonzentration der Deutschen Forschungsgesellschaft (2011)
NTP	National Toxicology Program (Report on Carcinogens) (US)
OSHA	Occupational Safety and Health Administration (29 CFR Part 1910 Subpart Z)
PBT	Persistent, Bio accumulative and Toxic
PEL	Permissible Exposure Limits
Proposition 65	California, Safe Drinking Water and Toxic Enforcement Act of 1986
REACH	Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
STOT	Specific target organ toxicity
SVHC	Substances of Very High Concern
TRGS 905	Technische Regeln für Gefahrstoffe (Deutschland)
TSCA	Toxic Substances Control Act (US)
TWA	Time Weighted Average
UN	United Nations
vPvB	very Persistent and very Bio accumulative
WHMIS	Workplace Hazardous Materials Information System (Canada)
	· · · · · · · · · · · · · · · · · · ·

#### Key literature references and sources for data

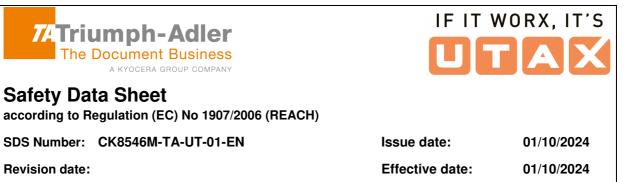
(1) Pulmonary Response to Toner upon Chronic Inhalation Exposure in Rats, H. Muhle et al., Fundamental and Applied Toxicology 17.280-299 (1991) Lung Clearance and Retention of Toner, utilising a Tracer Technique, during Chronic Inhalation Exposure in Rats, B. Bellmann, Fundamental and Applied Toxicology 17.300-313 (1991)

(2) IARC Monograph on the Evaluation of the Carcinogenic Risk of Chemicals to Humans, Vol. 93

NIOSH CURRENT INTELLIGENCE BULLETIN "Evaluation of Health Hazard and Recommendation for Occupational (3) Exposure to Titanium Dioxide DRAFT"

The contents are in accordance with Material Safety Data Sheet "CK8546K-TA-UT-01-EN"; 01/10/2024 of the (4) KYOCERA Document Solutions Inc., 1-2-28 Tamatsukuri, Chuo-ku, Osaka 540-8585, Japan.





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#### SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1	Product identifier	
	Product name	Magenta Toner for
		4009ci
	Consumable name	CK-8546M
	Product form	Mixture
1.2	Relevant identified u	ses of the substance or mixture and uses advised against
	Identified uses	The image formation of our electrophotographic equipment. Other uses are not recommended.
1.3	Details of the supplie	er of the safety data sheet
	Manufacturer	KYOCERA Document Solutions Inc.
	Address	1-2-28 Tamatsukuri, Chuo-ku, Osaka 540-8585, Japan
	Supplier	TA Triumph-Adler GmbH
	Address	Deelbögenkamp 4c 22297 Hamburg Germany
1.4	Emergency telephon	e number +49 (0) 40 / 528490 (This number is available only during office hours)

#### **SECTION 2: Hazards identification**

Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008 (CLP)
Not classified as hazardous mixture.
Label elements
Labelling according to Regulation (EC) No 1272/2008 (CLP)
Not applicable.
Other hazards
Assessment of PBT/vPvB
No data available.
See section 4 and 11 for information on health effects and symptoms. See section 9 for dust explosion information.

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Safe	ty Data Sh	eet			
	•	n (EC) No 1907/2006 (RI	EACH)		
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SECTIC	N 3: Composi	tion/information on ing	gredients		
3.2	Mixtures				
3.2	Chemical name	5	CAS No	Weight%	Classification (CLP)
	Polyester resin	2	Confidential	<u>70-80</u>	None
	•	including manganese)	66402-68-4	5-10 (as Mn: <3	
	Organic pigmer	nt	Confidential	3-8	None
	Amorphous silic Aluminium com		7631-86-9 1344-28-1	1-5 < 1	None None
	Information of		1044 20 1		None
		which present a health of	or environmenta	l hazard within th	ne meaning of CLP.
	(1) Cabotaneo,	None.			
	(2) Substance.	which are assigned Con	nmunity workpla	ce exposure limi	its:
	(_) ,	None.			
	(3) Substance.	which are PBT or vPvB	in accordance w	vith the criteria so	et out in Annex XIII of
	REACH:				
		None.			
	(4) Substance, REACH (S)	which are included in th /HC):	e list establishec	d in accordance	with Article 59(1) of
		None.			
	See section 16	for the full text of the H	statements decla	ared above.	
SECTIC	N 4: First aid	measures			
4.1	Description of	first aid measures			
	Inhalation:	Remove from exposure Consult a doctor in cas			
	Skin contact:	Wash with soap and wa	ater.		
	Eye contact:	Flush with water immed	diately and see a	a doctor if irritatir	ıg.
	Ingestion:	Rinse out the mouth. D Seek medical treatmen		glasses of water	to dilute.
4.2	Most importan	it symptoms and effect	ts, both acute a	ind delayed	
	Potential health	effects and symptoms			
	Inhalation:	Prolonged inhalation of product as intended do			

. dusts.





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# 4.2 Skin contact: Unlikely to cause skin irritation.Eye contact: May cause transient eye irritation.

**Ingestion:** Use of this product as intended does not result in ingestion.

# **4.3** Indication of any immediate medical attention and special treatment needed No additional information available.

#### **SECTION 5:** Firefighting measures

#### 5.1 Extinguishing media

Suitable extinguishing media

Water spray, foam, powder, CO<sub>2</sub> or dry chemical

Unsuitable extinguishing media

None specified.

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

Hazardous combustion products: Carbon dioxide, Carbon monoxide

#### 5.3 Advice for firefighters

Fire-fighting procedures

Pay attention not to blow away dust. Drain water off around and decrease the atmosphere temperature to extinguish the fire.

#### Protection equipment for firefighters

None specified.

#### **SECTION 6: Accidental release measures**

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

Avoid inhalation, ingestion, eye and skin contact in case of accidental release. Avoid formation of dust. Provide adequate ventilation.

#### 6.2 Environmental precautions

Do not allow to enter into surface water or drains.

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

Gather the released powder not to blow away and wipe up with a wet cloth.

#### 6.4 Reference to other sections

See section 13 for disposal information.





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#### SECTION 7: Handling and storage

01

#### 7.1 Precautions for safe handling

Do not attempt to force open or destroy the toner container or unit. See installation guide of this product.

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

Keep the toner container or unit tightly closed and store in a cool, dry and dark place. Keep away from fire. Keep out of the reach of children.

#### 7.3 Specific end use(s)

No additional information available.

#### SECTION 8: Exposure controls/personal protection

# 8.1 Control parameters

#### (Reference data)

#### US ACGIH Threshold Limit Values (TWA)

Particles: 10 mg/m<sup>3</sup> (Inhalable particles) 3 mg/m<sup>3</sup> (Respirable particles) Manganese inorganic compounds (Ferrite component):

0.1 mg/m<sup>3</sup> (Inhalable fraction)

0.02 mg/m<sup>3</sup> (Respirable fraction) (as Mn

Aluminium insoluble compound: 1 mg/m<sup>3</sup> (Respirable fraction)

#### US OSHA PEL (TWA)

Particles: 15 mg/m³ (Total dust)5 mg/m³ (Respirable fraction)Manganese compounds (Ferrite component): 5 mg/m³ (Ceiling) (as Mn)Amorphous silica: 80 mg/m³/%SiO2

EU Occupational exposure limits: Directive (EC) 2000/39, (EC) 2006/15 and (EU) 2009/161

Not listed.

#### 8.2 Exposure controls

#### Appropriate engineering controls

Special ventilator is not required under normal intended use. Use in a well-ventilated area.

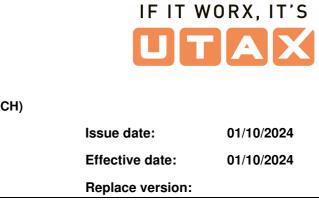
#### Personal protective equipment

Respiratory protection, eye protection, hand protection, skin and body protection are not required under normal intended use.

#### **Environmental exposure controls**

No additional information available.





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#### SECTION 9: Physical and chemical properties

Information on basic physical and chemic	cal properties	
Appearance		
Physical state	Solid (fine powder)	
Colour	Magenta	
Odour	Odourless	
Melting point/freezing point [°C]	100-120 (Toner)	
Boiling point or initial boiling point and boiling range	No data available.	
Flammability	No data available.	
Lower and upper explosion limit	No data available.	
Flash point	No data available.	
Auto-ignition temperature	No data available.	
Decomposition temperature	No data available.	
рН	No data available.	
Kinematic viscosity	No data available.	
Solubility	Almost insoluble in water.	
Partition coefficient: n-octanol/water (log value)	No data available.	
Vapour pressure	No data available.	
Density and/or relative density [g/cm3]	1.2-1.4 (Toner)	
Relative vapour density	Not applicable.	
Particle characteristics [µm]	1-10 (Toner) 30-50 (Carrier)	

#### 9.2 Other information

#### Dust explosion properties

Dust explosion is improbable under normal intended use. Experimental explosiveness of toner is classified into the same rank such kind of powder as flour, dry milk and resin powder according to the pressure rising speed.





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# SECTION 10: Stability and reactivity

01

# 10.1 Reactivity

No data available.

# 10.2 Chemical stability

This product is stable under normal conditions of use and storage.

# 10.3 Possibility of hazardous reactions

Hazardous reactions will not occur.

10.4 Conditions to avoid

None specified.

# 10.5 Incompatible materials

None specified.

#### 10.6 Hazardous decomposition products

Hazardous decomposition products are not to be produced.

### SECTION 11: Toxicological information

I	Information on hazard classes as defined in Regulation (EC) No 1272/2008			
E	Based on available data, the classification criteria listed below are not met.			
ļ	Acute toxicity			
	Oral (LD50)	> 2000 mg/kg (rat)* (Toner) > 2500 mg/kg (rat)** (Carrier)		
	Dermal (LD50)	No data available (Toner). No data available (Carrier).		
	Inhalation (LC50(4hr))	> 5.08 mg/l (rat)* (Toner)		
S	Skin corrosion/irritation			
	Acute skin irritation	Non-irritant (rabbit)* (Toner) Non-irritant (rabbit)** (Carrier)		
S	Serious eye damage/irritation	n		
	Acute eye irritation	Mild irritant (rabbit)* (Toner)		
F	Respiratory or skin sensitisa	tion		
	Skin sensitisation	Non-sensitising (mouse)* (Toner) Non-sensitising** (Carrier)		



according to Regulation (EC) No 1907/2006 (REACH)

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11.1	Germ cell mutagenicity	AMES test is negative (Toner).
		AMES test is negative** (Carrier). *(Based on test result of similar product)
		**(Based on test result of constituent materials)
	Information of ingredients:	
		to MAK, TRGS905 and (EC) No 1272/2008 Annex VI.
	Carcinogenicity	
	Information of ingredients:	
		ntial carcinogen according to IARC, Japan Association on H, EPA, OSHA, NTP, MAK, California Proposition 65, p 1272/2008 Annex VI.
	Reproductive toxicity	
	Information of ingredients:	
	No reproductive toxical (EC) No 1272/2008 An	nt according to MAK, California Proposition 65, TRGS 905 and nex VI.
	STOT-single exposure	No data available.
	STOT-repeated exposure	No data available.
	Aspiration hazard	No data available.
	Chronic effects	
	degree of lung fibrosis (16 mg/m <sup>3</sup> ) exposure g of the animal in the mic	ronic inhalation exposure to a typical toner, a mild to moderate was observed in 92% of the rats in the high concentration roup, and a minimal to mild degree of fibrosis was noted in 22% Idle (4mg/m <sup>3</sup> ) exposure group (1). But no pulmonary change rest (1mg/m <sup>3</sup> ) exposure group, the most relevant level to ures.
11.2	Information on other hazards	
	Endocrine disrupting proper	ies No data available.
	Other information	No data available.





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#### SECTION 12: Ecological information

#### 12.1 Toxicity

No data available.

12.2 Persistence and degradability

No data available.

12.3 Bio accumulative potential

No data available.

#### 12.4 Mobility in soil

No data available.

#### 12.5 Results of PBT and vPvB assessment

No data available.

12.6 Endocrine disrupting properties

No data available.

#### 12.7 Other adverse effects

No additional information available.

### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

Do not attempt to incinerate the toner container or unit and the waste toner yourself. Dangerous sparks may cause burn. The toner/developer/ink contains synthetic polymer microparticles. When disposing of this product/parts, avoid release of contents into the environment. Dispose of contents(toner/developer/ink) in accordance with local/regional/national/ international regulations.

#### **SECTION 14:** Transport information

#### 14.1 UN-number or ID number

None.

14.2 UN Proper shipping name

None.

14.3 Transport hazard class(es)

None.

14.4 Packing group

None.

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# 14.5 Environmental hazards

None.

#### 14.6 Special precautions for user

No additional information available.

# 14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

SECTION 15: Regulatory information

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

#### EU-regulations

Regulation (EU) No 2024/590 (on substances that deplete the ozone layer, Annex I and II):

Not listed.

Regulation (EU) 2019/1021 (on persistent organic pollutants, Annex I as amended):

Not listed.

Regulation (EU) No 649/2012 (concerning the export and import of dangerous chemicals, Annex I and V as amended):

Not listed.

Regulation (EC) No 1907/2006 REACH Annex XVII as amended (Restrictions on use):

Not listed.

Regulation (EC) No 1907/2006 REACH Annex XIV as amended (Authorisations):

Not listed.

#### **US-regulations**

All ingredients in this product comply with order under TSCA.

#### **Canada regulations**

This product is not a WHMIS-controlled product, since we consider it as a manufactured article.

#### 15.2 Chemical Safety Assessment

No data available.

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#### SECTION 16: Other information

01

To the best of our knowledge, the information contained herein is accurate. However, we cannot assume any liability whatsoever for the accuracy or completeness of the information contained herein. The contents and format of this SDS are in accordance with Regulation (EC) No 1907/2006, Annex II as amended by Regulation (EU) 2020/878 with respect to SDSs.

**Revision information:** 

Full text of H statements under sections 3: Not applicable.

#### Abbreviations and acronyms

	•
ACGIH	American Conference of Governmental Industrial Hygienists 2016 TLVs and BEIs (Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices)
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
EPA	Environmental Protection Agency (Integrated Risk Information System) (US)
IARC	International Agency for Research on Cancer (IARC Monographs on the Evaluations of Carcinogenic Risks to Humans)
MAK	Maximale Arbeitsplatzkonzentration der Deutschen Forschungsgesellschaft (2011)
NTP	National Toxicology Program (Report on Carcinogens) (US)
OSHA	Occupational Safety and Health Administration (29 CFR Part 1910 Subpart Z)
PBT	Persistent, Bio accumulative and Toxic
PEL	Permissible Exposure Limits
Proposition 65	California, Safe Drinking Water and Toxic Enforcement Act of 1986
REACH	Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
STOT	Specific target organ toxicity
SVHC	Substances of Very High Concern
TRGS 905	Technische Regeln für Gefahrstoffe (Deutschland)
TSCA	Toxic Substances Control Act (US)
TWA	Time Weighted Average
UN	United Nations
vPvB	very Persistent and very Bio accumulative
WHMIS	Workplace Hazardous Materials Information System (Canada)

#### Key literature references and sources for data

(1) Pulmonary Response to Toner upon Chronic Inhalation Exposure in Rats, H. Muhle et al., Fundamental and Applied Toxicology 17.280-299 (1991) Lung Clearance and Retention of Toner, utilising a Tracer Technique, during Chronic Inhalation Exposure in Rats, B. Bellmann, Fundamental and Applied Toxicology 17.300-313 (1991)

(2) IARC Monograph on the Evaluation of the Carcinogenic Risk of Chemicals to Humans, Vol. 93

NIOSH CURRENT INTELLIGENCE BULLETIN "Evaluation of Health Hazard and Recommendation for Occupational (3) Exposure to Titanium Dioxide DRAFT'

The contents are in accordance with Material Safety Data Sheet "CK8546M0-TA-UT-01-EN"; 01/10/2024 of the (4) KYOCERA Document Solutions Inc., 1-2-28 Tamatsukuri, Chuo-ku, Osaka 540-8585, Japan.





according to Regulation (EC) No 1907/2006 (REACH)

SDS Number: CK8546Y-TA-UT-01-EN

01

**Revision date:** 

Version:

Effective date:

Replace version:

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1	Product identifier	
	Product name	Yellow Toner for
		4009ci
	Consumable name	CK-8546C
	Product form	Mixture
1.2	Relevant identified u	ses of the substance or mixture and uses advised against
	Identified uses	The image formation of our electrophotographic equipment. Other uses are not recommended.
1.3	Details of the supplie	er of the safety data sheet
	Manufacturer	KYOCERA Document Solutions Inc.
	Address	1-2-28 Tamatsukuri, Chuo-ku, Osaka 540-8585, Japan
	Supplier	TA Triumph-Adler GmbH
	Address	Deelbögenkamp 4c 22297 Hamburg Germany
1.4	Emergency telephon	e number +49 (0) 40 / 528490 (This number is available only during office hours)

### **SECTION 2: Hazards identification**

2.1	Classification of the substance or mixture
	Classification according to Regulation (EC) No 1272/2008 (CLP)
	Not classified as hazardous mixture.
2.2	Label elements
	Labelling according to Regulation (EC) No 1272/2008 (CLP)
	Not applicable.
2.3	Other hazards
	Assessment of PBT/vPvB
	No data available.
	See section 4 and 11 for information on health effects and symptoms. See section 9 for dust explosion information.

The Document Business				IF I	T WORX, IT'S
	ty Data Sh	<b>eet</b> n (EC) No 1907/2006 (RI	EACH)		
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SECTIO	N 3: Composi	tion/information on ing	predients		
	-		grouionto		
3.2	Mixtures			Maight9/	Classification (CLD)
	Chemical name	_	<u>CAS No</u>	<u>Weight%</u> 70-80	<u>Classification (CLP)</u> None
	Polyester resin Ferrite (Ferrite	including manganese)	Confidential 66402-68-4	5-10 (as Mn: <	
	Organic pigmer		Confidential	3-8	None
	Amorphous silie Aluminium com		7631-86-9 1344-28-1	1-5 < 1	None None
	Information of				
		which present a health of	or environmenta	I hazard within t	he meaning of CLP:
		None.			
	(2) Substance,	which are assigned Con	nmunity workpla	ce exposure lim	its:
		None.			
	(3) Substance, REACH:	which are PBT or vPvB	in accordance w	vith the criteria s	et out in Annex XIII of
		None.			
	(4) Substance, REACH (S)	which are included in the VHC):	e list established	d in accordance	with Article 59(1) of
		None.			
	See section 16	for the full text of the H	statements decl	ared above.	
SECTIC	N 4: First aid	measures			
4.1	Description of	first aid measures			
	Inhalation:	Remove from exposure Consult a doctor in case			
	Skin contact:	Wash with soap and wa	ater.		
	Eye contact:	Flush with water immed	diately and see a	a doctor if irritatin	ng.
	Ingestion:	Rinse out the mouth. D Seek medical treatmen		glasses of water	to dilute.
4.2	Most importar	nt symptoms and effect	ts, both acute a	ind delayed	
	Potential health	n effects and symptoms			
	Inhalation:	Prolonged inhalation of product as intended do dusts.			





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# 4.2 Skin contact: Unlikely to cause skin irritation.Eye contact: May cause transient eye irritation.

**Ingestion:** Use of this product as intended does not result in ingestion.

# **4.3** Indication of any immediate medical attention and special treatment needed No additional information available.

#### **SECTION 5:** Firefighting measures

#### 5.1 Extinguishing media

Suitable extinguishing media

Water spray, foam, powder, CO<sub>2</sub> or dry chemical

Unsuitable extinguishing media

None specified.

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

Hazardous combustion products: Carbon dioxide, Carbon monoxide

#### 5.3 Advice for firefighters

Fire-fighting procedures

Pay attention not to blow away dust. Drain water off around and decrease the atmosphere temperature to extinguish the fire.

#### Protection equipment for firefighters

None specified.

#### **SECTION 6: Accidental release measures**

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

Avoid inhalation, ingestion, eye and skin contact in case of accidental release. Avoid formation of dust. Provide adequate ventilation.

#### 6.2 Environmental precautions

Do not allow to enter into surface water or drains.

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

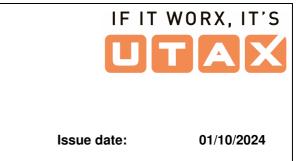
Gather the released powder not to blow away and wipe up with a wet cloth.

#### 6.4 Reference to other sections

See section 13 for disposal information.



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#### SECTION 7: Handling and storage

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#### 7.1 Precautions for safe handling

Do not attempt to force open or destroy the toner container or unit. See installation guide of this product.

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

Keep the toner container or unit tightly closed and store in a cool, dry and dark place. Keep away from fire. Keep out of the reach of children.

#### 7.3 Specific end use(s)

No additional information available.

#### SECTION 8: Exposure controls/personal protection

8.1 Control parameters

#### (Reference data)

#### US ACGIH Threshold Limit Values (TWA)

Particles: 10 mg/m<sup>3</sup> (Inhalable particles) 3 mg/m<sup>3</sup> (Respirable particles) Manganese inorganic compounds (Ferrite component):

0.1 mg/m<sup>3</sup> (Inhalable fraction)

0.02 mg/m<sup>3</sup> (Respirable fraction) (as Mn

Aluminium insoluble compound: 1 mg/m<sup>3</sup> (Respirable fraction)

#### US OSHA PEL (TWA)

Particles: 15 mg/m³ (Total dust)5 mg/m³ (Respirable fraction)Manganese compounds (Ferrite component): 5 mg/m³ (Ceiling) (as Mn)Amorphous silica: 80 mg/m³/%SiO₂

EU Occupational exposure limits: Directive (EC) 2000/39, (EC) 2006/15 and (EU) 2009/161

Not listed.

#### 8.2 Exposure controls

#### Appropriate engineering controls

Special ventilator is not required under normal intended use. Use in a well-ventilated area.

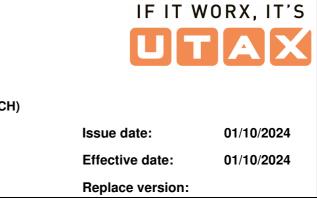
#### Personal protective equipment

Respiratory protection, eye protection, hand protection, skin and body protection are not required under normal intended use.

#### **Environmental exposure controls**

No additional information available.





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#### SECTION 9: Physical and chemical properties

1	Information on basic physical and chemical properties Appearance		
	Physical state	Solid (fine powder)	
	Colour	Yellow	
	Odour	Odourless	
	Melting point/freezing point [°C]	100-120 (Toner)	
	Boiling point or initial boiling point and boiling range	No data available.	
	Flammability	No data available.	
	Lower and upper explosion limit	No data available.	
	Flash point	No data available.	
	Auto-ignition temperature	No data available.	
	Decomposition temperature	No data available.	
	рН	No data available.	
	Kinematic viscosity	No data available.	
	Solubility	Almost insoluble in water.	
	Partition coefficient: n-octanol/water (log value)	No data available.	
	Vapour pressure	No data available.	
	Density and/or relative density [g/cm3]	1.2-1.4 (Toner)	
	Relative vapour density	Not applicable.	
	Particle characteristics [µm]	1-10 (Toner) 30-50 (Carrier)	

#### 9.2 Other information

Dust explosion properties

Dust explosion is improbable under normal intended use. Experimental explosiveness of toner is classified into the same rank such kind of powder as flour, dry milk and resin powder according to the pressure rising speed.





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SECTION 10: Stability and reactivity

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# 10.1 Reactivity

No data available.

# 10.2 Chemical stability

This product is stable under normal conditions of use and storage.

# 10.3 Possibility of hazardous reactions

Hazardous reactions will not occur.

10.4 Conditions to avoid

None specified.

# 10.5 Incompatible materials

None specified.

#### 10.6 Hazardous decomposition products

Hazardous decomposition products are not to be produced.

### SECTION 11: Toxicological information

Informa	ation on hazard classe	es as defined in Regulation (EC) No 1272/2008
Based c	on available data, the cl	assification criteria listed below are not met.
Acute t	oxicity	
	Oral (LD50)	> 2000 mg/kg (rat)* (Toner) > 2500 mg/kg (rat)** (Carrier)
	Dermal (LD50)	No data available (Toner). No data available (Carrier).
	Inhalation (LC50(4hr))	> 5.10 mg/l (rat)* (Toner)
Skin co	prrosion/irritation	
	Acute skin irritation	Non-irritant (rabbit)* (Toner) Non-irritant (rabbit)** (Carrier)
Serious	s eye damage/irritatior	1
	Acute eye irritation	Mild irritant (rabbit)* (Toner)
Respira	atory or skin sensitisa	tion
	Skin sensitisation	Non-sensitising (mouse)* (Toner) Non-sensitising** (Carrier)



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11.1	Germ cell mutagenicity	AMES test is negative (Toner). AMES test is negative** (Carrier). *(Based on test result of similar product) **(Based on test result of constituent materials)
	Information of ingredients:	
	No mutagen according	to MAK, TRGS905 and (EC) No 1272/2008 Annex VI.
	Carcinogenicity	
	Information of ingredients:	
	Industrial Health, ACG	ntial carcinogen according to IARC, Japan Association on IH, EPA, OSHA, NTP, MAK, California Proposition 65, o 1272/2008 Annex VI.
	Reproductive toxicity	
	Information of ingredients:	
	No reproductive toxica (EC) No 1272/2008 Ar	nt according to MAK, California Proposition 65, TRGS 905 and nex VI.
	STOT-single exposure	No data available.
	STOT-repeated exposure	No data available.
	Aspiration hazard	No data available.
	Chronic effects	
	degree of lung fibrosis (16 mg/m <sup>3</sup> ) exposure g of the animal in the mid	ronic inhalation exposure to a typical toner, a mild to moderate was observed in 92% of the rats in the high concentration group, and a minimal to mild degree of fibrosis was noted in 22% ddle (4mg/m <sup>3</sup> ) exposure group (1). But no pulmonary change vest (1mg/m <sup>3</sup> ) exposure group, the most relevant level to sures.
11.2	Information on other hazards	8
	Endocrine disrupting proper	ties No data available.
	Other information	No data available.





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#### SECTION 12: Ecological information

#### 12.1 Toxicity

No data available.

12.2 Persistence and degradability

No data available.

12.3 Bio accumulative potential

No data available.

#### 12.4 Mobility in soil

No data available.

#### 12.5 Results of PBT and vPvB assessment

No data available.

12.6 Endocrine disrupting properties

No data available.

#### 12.7 Other adverse effects

No additional information available.

#### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

Do not attempt to incinerate the toner container or unit and the waste toner yourself. Dangerous sparks may cause burn. The toner/developer/ink contains synthetic polymer microparticles. When disposing of this product/parts, avoid release of contents into the environment. Dispose of contents(toner/developer/ink) in accordance with local/regional/national/ international regulations.

#### **SECTION 14:** Transport information

#### 14.1 UN-number or ID number

None.

14.2 UN Proper shipping name

None.

14.3 Transport hazard class(es)

None.

14.4 Packing group

None.

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# 14.5 Environmental hazards

None.

#### 14.6 Special precautions for user

No additional information available.

# 14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

SECTION 15: Regulatory information

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

#### EU-regulations

Regulation (EU) No 2024/590 (on substances that deplete the ozone layer, Annex I and II):

Not listed.

Regulation (EU) 2019/1021 (on persistent organic pollutants, Annex I as amended):

Not listed.

Regulation (EU) No 649/2012 (concerning the export and import of dangerous chemicals, Annex I and V as amended):

Not listed.

Regulation (EC) No 1907/2006 REACH Annex XVII as amended (Restrictions on use):

Not listed.

Regulation (EC) No 1907/2006 REACH Annex XIV as amended (Authorisations):

Not listed.

#### **US-regulations**

All ingredients in this product comply with order under TSCA.

#### **Canada regulations**

This product is not a WHMIS-controlled product, since we consider it as a manufactured article.

#### 15.2 Chemical Safety Assessment

No data available.

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#### SECTION 16: Other information

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To the best of our knowledge, the information contained herein is accurate. However, we cannot assume any liability whatsoever for the accuracy or completeness of the information contained herein. The contents and format of this SDS are in accordance with Regulation (EC) No 1907/2006, Annex II as amended by Regulation (EU) 2020/878 with respect to SDSs.

**Revision information:** 

Full text of H statements under sections 3: Not applicable.

#### Abbreviations and acronyms

	-
ACGIH	American Conference of Governmental Industrial Hygienists 2016 TLVs and BEIs (Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices)
CAS	Chemical Abstracts Service
CLP	
EPA	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
	Environmental Protection Agency (Integrated Risk Information System) (US)
IARC	International Agency for Research on Cancer (IARC Monographs on the Evaluations of Carcinogenic Risks to Humans)
MAK	Maximale Arbeitsplatzkonzentration der Deutschen Forschungsgesellschaft (2011)
NTP	National Toxicology Program (Report on Carcinogens) (US)
OSHA	Occupational Safety and Health Administration (29 CFR Part 1910 Subpart Z)
PBT	Persistent, Bio accumulative and Toxic
PEL	Permissible Exposure Limits
Proposition 65	California, Safe Drinking Water and Toxic Enforcement Act of 1986
REACH	Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of
	Chemicals
STOT	Specific target organ toxicity
SVHC	Substances of Very High Concern
TRGS 905	Technische Regeln für Gefahrstoffe (Deutschland)
TSCA	Toxic Substances Control Act (US)
TWA	Time Weighted Average
UN	United Nations
vPvB	very Persistent and very Bio accumulative
WHMIS	Workplace Hazardous Materials Information System (Canada)

#### Key literature references and sources for data

(1) Pulmonary Response to Toner upon Chronic Inhalation Exposure in Rats, H. Muhle et al., Fundamental and Applied Toxicology 17.280-299 (1991) Lung Clearance and Retention of Toner, utilising a Tracer Technique, during Chronic Inhalation Exposure in Rats, B. Bellmann, Fundamental and Applied Toxicology 17.300-313 (1991)

(2) IARC Monograph on the Evaluation of the Carcinogenic Risk of Chemicals to Humans, Vol. 93

(3) NIOSH CURRENT INTELLIGENCE BULLETIN "Evaluation of Health Hazard and Recommendation for Occupational Exposure to Titanium Dioxide DRAFT"

(4) The contents are in accordance with Material Safety Data Sheet "CK8546Y-TA-UT-01-EN"; 01/10/2024 of the KYOCERA Document Solutions Inc., 1-2-28 Tamatsukuri, Chuo-ku, Osaka 540-8585, Japan.