

**LEITFADEN
INTEGRATION VON ANWENDERWISSEN IN DIE
ERSTELLUNG UND KOMMUNIKATION VON REACH
EXPOSITIONSSZENARIEN – AM BEISPIEL SIEBDRUCK**

ANLAGE 3, TEIL 4

Upstream Information on Conditions of use of – substances as part of color film of printing-ink systems

General Information on use category

	Substance	ID		Function of Substance	
For	1) Name des Stoffes	2) CAS/EG-Nr	as	pigment	in
Product Category			Product/Preparation		
PC – 9 Coatings and Paints, Fillers, Putties, Thinners			Printing ink (not water based)		for
Article Category			Area /Articles of use		
AC 11 Paper products: newspaper, packaging			-		

Information on sector use DU 1 (Formulation)

Descriptor – Sector use	Description
SU 3 – Industrial manufacturing	Production of (Screen-) Print Inks

Available Information related to human occupation

Processes		Duration	Amount	Risk-Management
PROC	description	Max days, hours/shift	g/kg/t per Day	Description
-	GENERAL	220 d/a; 8 h/d	< 100 kg	Industrial Hygiene, gloves
PROC 5	Mixing, grinding	< 8 h	< 100 kg	forced ventilation
PROC 8	Charging/discharging	< 1	< 100 kg	forced ventilation
PROC 9	Filling line	< 8 h	< 100 kg	forced ventilation

Further sector specific Information	Measured data (Y/N)
No	Yes

Available Information related to environment

Amount of Substance	Emission days	Environmental Release Class	
Input/year	Number Days	ERC	description
<1.000 t	220	ERC 2	Formulation of preparations

Release to Environment		Measured data	RMM	
Via	% from Input	(Y/N)	RMM-Library code & short description	
Ambient air	< 1-2	no		
Via Waste	% from Input	EWL code	Waste treatment	R/D code
Waste inks	<< 1	08 03 06	Dedicated waste incineration	D 10
Ink in rags	<< 1	15 02 02	Specialized rag washing facility	-

Information on sector use DU 2 (Professional Use)

Descriptor – Sector use	Description
SU 7 – Printing and services related to printing	Professional use of printing inks (screenprint shop)

Available Information related to human occupation

Processes		Duration	Amount	Risk-Management
PROC	description	Max days, hours/shift	g/kg/t per Day	Description
-	GENERAL	220 d/a; 8 h/d	< 100 kg	Industrial Hygiene, gloves
PROC 10	Printing, handling of printed products	< 8 h	< 100 kg	Forced ventilation, local exhausted ventilation of drying unit
PROC 19	Hand-Mixing, cleaning	< 1 h	< 100 kg	local ventilation

Further sector specific Information	Measured data (Y/N)
--	No

Available Information related to environment

Amount of Substance	Emission days	Environmental Release Class	
Input/year	Number Days	ERC	description
< 100 t	220	ERC 5	Industrial use resulting in inclusion into or onto a matrix

Release to Environment		Measured data	RMM	
Via	% from Input	(Y/N)	RMM-Library code & short description	
Ambient air	< 5	no	--	
Waste water	< 2		“closed sinks” in production	
Via Waste	% from Input	EWL code	Waste treatment	R/D code
Waste inks	< 5	08 03 06	Dedicated waste incineration	D 10
Ink in rags	< 5	15 02 02	Specialized rag washing facility	-

Information on service life use (consumer use)

Descriptor – Artikel Category	Description of Article
AC 11 Paper products: newspaper, packaging	

Conditions of consumer use		
description	Intended (Y/N)	Further details if available
Food/drink contact	No	--

Post consumer waste		
description	EWL -code	Further details if available
Waste paper	20 01 01	Secondary paper mill

Overview Possibly relevant Exposure Types (based on available sector information, chapter 1.3.4 LE 2)

	Industrial (Formulation)	Professional use (print shop)	Consumer use (service life)	Waste stage
human, oral, short term				
human, oral, repeated/long term				
human, dermal, short term				
human, dermal, repeated/long term	x	x	x	x
human, inhalation, short term				
human, inhalation, repeated/long term	x	x		
environment, water, once/short term				
environment, water, continuous		(x)		(x)
environment, air, once/short term				
environment, air, continuous	x	x		x
environment, soil, once/short term				
environment, soil, continuous				

Upstream Information on Conditions of use of – substances as reactive component in UV-cured printing-ink systems

General Information on use category

	Substance	ID		Function of Substance	
For	1) Name des Stoffes	2) CAS/EG-Nr	as	Organic reactive component	in
Product Category			Product/Preparation		
PC – 9 Coatings and Paints, Fillers, Putties, Thinners			Printing ink (not water based)		for
Article Category			Area /Articles of use		
AC 11 Paper products: newspaper, packaging			-		

Information on sector use DU 1 (Formulation)

Descriptor – Sector use	Description
SU 3 – Industrial manufacturing	Production of (Screen-) Print Inks

Available Information related to human occupation

Processes		Duration	Amount	Risk-Management
PROC	description	Max days, hours/shift	g/kg/t per Day	Description
-	GENERAL	220 d/a; 8 h/d	< 1 t	Industrial Hygiene, gloves
PROC 5	Mixing, grinding	< 8 h	< 1 t	forced ventilation, local exhausted ventilation of vessel
PROC 8	Charging/discharging	< 1	< 1 t	forced ventilation, local exhausted ventilation of vessel
PROC 9	Filling line	< 4 h	< 1 t	forced ventilation, local exhausted ventilation of vessel

Further sector specific Information	Measured data (Y/N)
No	Yes

Available Information related to environment

Amount of Substance	Emission days	Environmental Release Class	
Input/year	Number Days	ERC	description
<1.000 t	220	ERC 2	Formulation of preparations

Release to Environment		Measured data	RMM
Via	% from Input	(Y/N)	RMM-Library code & short description
Ambient air	< 1-2	no	
Waste water	< 1	no	“closed sinks” in production
Via Waste	% from Input	EWL code	Waste treatment R/D code

Waste inks	<< 1	08 03 06	Dedicated waste incineration	D 10
Ink in rags	<< 1	15 02 02	Specialized rag washing facility	-

Information on sector use DU 2 (Professional Use)

Descriptor – Sector use	Description
SU 7 – Printing and services related to printing	Professional use of printing inks (screenprint shop)

Available Information related to human occupation

Processes		Duration	Amount	Risk-Management
PROC	description	Max days, hours/shift	g/kg/t per Day	Description
-	GENERAL	220 d/a; 8 h/d	< 100 kg	Industrial Hygiene, gloves
PROC 10	Printing, handling of printed products	< 8 h	< 100 kg	Forced ventilation, local exhausted ventilation of drying unit
PROC 19	Hand-Mixing, cleaning	< 1 h	< 100 kg	local ventilation

Further sector specific Information	Measured data (Y/N)
--	No

Available Information related to environment

Amount of Substance	Emission days	Environmental Release Class	
Input/year	Number Days	ERC	description
< 100 t	220	ERC5	Industrial use resulting in inclusion into or onto a matrix

Release to Environment		Measured data	RMM	
Via	% from Input	(Y/N)	RMM-Library code & short description	
Ambient air	< 5	no	--	
Waste water	< 2		“closed sinks” in production	
Via Waste	% from Input	EWL code	Waste treatment	R/D code
Waste inks	< 5	08 03 06	Dedicated waste incineration	D 10
Ink in rags	< 1	15 02 02	Specialized rag washing facility	-

Information on service life use (consumer use)

Descriptor – Artikel Category	Description of Article
AC 11 Paper products: newspaper, packaging	

Conditions of consumer use		
description	Intended (Y/N)	Further details if available
Food/drink contact	No	--

Post consumer waste		
description	EWL -code	Further details if available
Waste paper	20 01 01	Secondary paper mill

Overview Possibly relevant Exposure Types (based on available sector information, chapter 1.3.4 LE 2)

	Industrial (Formulation)	Professional use (print shop)	Consumer use (service life)	Waste stage
human, oral, short term				
human, oral, repeated/long term				
human, dermal, short term				
human, dermal, repeated/long term	x	x	x	x
human, inhalation, short term				
human, inhalation, repeated/long term	x	x		
environment, water, once/short term				
environment, water, continuous	x	x		(x)
environment, air, once/short term				
environment, air, continuous	x	x		(x)
environment, soil, once/short term				
environment, soil, continuous				

Upstream Information on Conditions of use – Substances in solvent components of printing inks and cleaning systems, on the basis of organic solvents

General Information on use category

	Substance	ID		Function of Substance	
For	1) Name des Stoffes	2) CAS/EG-Nr	as	solvent	in
Product Category			Product/Preparation		
PC – 9 Coatings and Paints, Fillers, Putties, Thinners			Printing ink based on organic solvents		for
Article Category			Area /Articles of use		
AC 11 Paper products: newspaper, packaging			-		

Information on sector use DU 1 (Formulation)

Descriptor – Sector use	Description
SU 3 – Industrial manufacturing	Production of (Screen-) Print Inks

Available Information related to human occupation

Processes		Duration	Amount	Risk-Management
PROC	description	Max days, hours/shift	g/kg/t per Day	Description
-	GENERAL	220 d/a; 8 h/d	< 10 t	Industrial Hygiene, gloves
PROC 5	Mixing, grinding	< 8 h	< 10 t	forced ventilation
PROC 8	Charging/discharging	< 2.5	< 10 t	forced ventilation
PROC 9	Filling line	< 8 h	< 10 t	forced ventilation

Further sector specific Information	Measured data (Y/N)
No	No

Available Information related to environment

Amount of Substance	Emission days	Environmental Release Class	
Input/year	Number Days	ERC	description
<1.000 t	220	ERC 2	Formulation of preparations

Release to Environment		Measured data	RMM	
Via	% from Input	(Y/N)	RMM-Library code & short description	
Ambient air	< 1	no	forced ventilation with activated charcoal filter	
Via Waste	% from Input	EWL code	Waste treatment	R/D code
Waste inks	< 1	08 03 12	Dedicated waste incineration	D 10
Ink in rags	< 1	15 02 02	Specialized rag washing facility	-

Information on sector use DU 2 (Professional Use)

Descriptor – Sector use	Description
SU 7 – Printing and services related to printing	Professional use of printing inks (screenprint shop)

Available Information related to human occupation

Processes		Duration	Amount	Risk-Management
PROC	description	Max days, hours/shift	g/kg/t per Day	Description
-	GENERAL	220 d/a; 8 h/d	< 100 kg	Industrial Hygiene, gloves
PROC 10	Printing, handling of printed products	< 8 h	< 100 kg	Local exhaust ventilation (printing machinery)
PROC 19	Hand-Mixing, cleaning	< 1 h	< 100 kg	general ventilation

Further sector specific Information	Measured data (Y/N)
VSK – Umgang mit Lösemitteln im Siebdruck (German)	Yes

Available Information related to environment

Amount of Substance	Emission days	Environmental Release Class	
Input/year	Number Days	ERC	description
> 100 t	220	ERC 8a	Wide dispersive indoor use of processing aids in open systems

Release to Environment		Measured data	RMM	
Via	% from Input	(Y/N)	RMM-Library code & short description	
Ambient air	< 90	no	--	
Waste water	<< 1		“closed sinks” in production	
Via Waste	% from Input	EWL code	Waste treatment	R/D code
Waste inks	< 5	08 03 06	Dedicated waste incineration	D 10
Ink in rags	< 2	15 02 02	Specialized rag washing facility	-

Information on service life use (consumer use)

Descriptor – Article Category	Description of Article
AC 11 Paper products: newspaper, packaging	Grafical print product

Conditions of consumer use		
description	Intended (Y/N)	Further details if available
Food/drink contact	No	-

Post consumer waste		
description	EWL -code	Further details if available
Waste paper	20 01 01	Secondary paper mill

Overview Possibly relevant Exposure Types (based on available sector information, chapter 1.3.4 LE 2)

	Industrial (Formulation)	Professional use (print shop)	Consumer use (service life)	Waste stage
human, oral, short term				
human, oral, repeated/long term				
human, dermal, short term				
human, dermal, repeated/long term	x	x	x	x
human, inhalation, short term				x
human, inhalation, repeated/long term	x	x	(x)	
environment, water, once/short term				
environment, water, continuous		(x)		x
environment, air, once/short term				
environment, air, continuous	x	x		x
environment, soil, once/short term				
environment, soil, continuous				

Upstream Information on Conditions of use – substances in water based print-ink- and cleaning-systems

General Information on use category

	Substance	ID		Function of Substance	
For	1) Name des Stoffes	2) CAS/EG-Nr	as	Water solved substances	in
Product Category			Product/Preparation		
PC – 9			Coatings and Paints, Fillers, Putties, Thinners		
Article Category			Area /Articles of use		

Information on sector use DU 1 (Formulation)

Descriptor – Sector use	Description
SU 3 – Industrial manufacturing	Production of (Screen-) Print Inks

Available Information related to human occupation

Processes		Duration	Amount	Risk-Management
PROC	description	Max days, hours/shift	g/kg/t per Day	Description
-	GENERAL	220 d/a 8 h/d	< 10 t	Industrial Hygiene, gloves, glasses
PROC 5	Mixing, grinding	< 8 h	< 10 t	Industrial Hygiene, gloves, glasses
PROC 8	Charging/discharging	< 2.5	< 10 t	Industrial Hygiene, gloves, glasses
PROC 9	Filling line	< 8 h	< 10 t	Industrial Hygiene, gloves, glasses

Further sector specific Information	Measured data (Y/N)
No	No

Available Information related to environment

Amount of Substance	Emission days	Environmental Release Class	
Input/year	Number Days	ERC	description
<10 t	220	ERC 2	Formulation of preparations

Release to Environment		Measured data	RMM	
Via	% from Input	(Y/N)	RMM-Library code & short description	
water	< 5	no		
Via Waste	% from Input	EWL code	Waste treatment	R/D code
Waste inks	<< 1	07 03 01	Industrial waste water treatment	
Ink in rags	<< 1	20 03 01	Communal waste	-

Information on sector use DU 2 (Professional Use)

Descriptor – Sector use	Description
SU 7 – Printing and services related to printing	Professional use of printing inks (screenprint shop)

Available Information related to human occupation

Processes		Duration	Amount	Risk-Management
PROC	description	Max days, hours/shift	g/kg/t per Day	Description
-	GENERAL	220 d/a 8 h/d	< 100 kg	Industrial Hygiene, gloves
PROC 10	Printing, handling of printed products	< 8 h	< 10 kg	local ventilation
PROC 19	Hand-Mixing, cleaning	< 1 h	< 10 kg	local ventilation
			< 10 kg	

Further sector specific Information	Measured data (Y/N)
--	No

Available Information related to environment

Amount of Substance	Emission days	Environmental Release Class	
Input/year	Number Days	ERC	description
< 1 t	220	ERC5	Industrial use resulting in inclusion into or onto a matrix

Release to Environment		Measured data	RMM	
Via	% from Input	(Y/N)	RMM-Library code & short description	
Waste water	< 5		"closed sinks" in production	
Via Waste	% from Input	EWL code	Waste treatment	R/D code
Waste inks	< 1	07 03 01	Waste water treatment	
Ink in rags	< 1	20 03 01	Communal waste	-

Information on service life use (consumer use)

Descriptor – Artikel Category	Description of Article
AC 11	Paper products: newspaper, packaging

Conditions of consumer use	Intended (Y/N)	Further details if available
description		
Food/drink contact	No	--

Post consumer waste	EWL -code	Further details if available
description		
Waste paper	20 01 01	Secondary paper mill

Overview Possibly relevant Exposure Types (based on available sector information, chapter 1.3.4 LE 2)

	Industrial (Formulation)	Professional use (print shop)	Consumer use (service life)	Waste stage
human, oral, short term				
human, oral, repeated/long term				
human, dermal, short term				
human, dermal, repeated/long term	x	x	x	x
human, inhalation, short term				
X human, inhalation, repeated/long term				
environment, water, once/short term				
environment, water, continuous	x	x		x
environment, air, once/short term				
environment, air, continuous				
environment, soil, once/short term				
environment, soil, continuous				