



Draft Assessment Report

Evaluation of Active Substances

Plant Protection Products

Prepared according to **Regulation (EC) 1107/2009**
as it applies in Great Britain (GB PPP)

Cinmethylin (BAS 684 H)

Volume 3 – B.2 (PPP) – BAS 684 03 H

Physical & Chemical Properties

Great Britain

November 2020

Version History

When	What
November 2020	Draft DAR

Table of contents

B.2. PHYSICAL AND CHEMICAL PROPERTIES OF THE PLANT PROTECTION PRODUCT BAS 684 03 H.....	4
B.2.1. APPEARANCE.....	4
B.2.2. EXPLOSIVE AND OXIDIZING PROPERTIES	4
B.2.3. FLAMMABILITY AND AUTO-FLAMMABILITY	4
B.2.4. ACIDITY/ALKALINITY AND PH VALUE	5
B.2.5. VISCOSITY AND SURFACE TENSION.....	5
B.2.6. RELATIVE DENSITY AND BULK DENSITY.....	6
B.2.7. STORAGE STABILITY AND SHELF-LIFE: EFFECTS OF TEMPERATURE ON TECHNICAL CHARACTERISTICS OF THE PLANT PROTECTION PRODUCT.....	6
B.2.8. TECHNICAL CHARACTERISTICS OF THE PLANT PROTECTION PRODUCT.....	7
B.2.8.1. Wettability	7
B.2.8.2. Persistence foaming.....	7
B.2.8.3. Suspensibility	7
B.2.8.4. Degree of dissolution and dilution stability	8
B.2.8.5. Particle size distribution, dust content, attrition and mechanical stability	8
B.2.8.6. Emulsifiability, re-emulsifiability, emulsion stability	9
B.2.8.7. Flowability, pourability and dustability.....	9
B.2.9. PHYSICAL AND CHEMICAL COMPATIBILITY WITH OTHER PRODUCTS INCLUDING PLANT PROTECTION PRODUCTS WITH WHICH ITS USE IS TO BE AUTHORISED.....	10
B.2.10. ADHERENCE AND DISTRIBUTION TO SEEDS	10
B.2.11. OTHER STUDIES.....	11
B.2.12. REFERENCES RELIED ON.....	14

B.2. PHYSICAL AND CHEMICAL PROPERTIES OF THE PLANT PROTECTION PRODUCT BAS 684 03 H

The representative formulation BAS 684 03 H is an emulsifiable concentrate (EC) containing 750 g/L of the active substance cinmethylin. Tests were conducted with BAS 684 03 H formulation batches No. FD-170209-0001 (741 g/L cinmethylin) or FD-161114-0020 (750 g/L cinmethylin). The proposed in-use concentrations are 0.08325 - 0.666 %v/v.

Test or Study & Data point	Guideline and method	Test material purity and specification	Used methods / Results	Comments (Acceptable / Non acceptable)	GLP	Reference
B.2.1. APPEARANCE						
Physical state and colour B.2.1/01	Colour: OCSPP 830.6302 Physical state: OCSPP 830.6303 Odour: OCSPP 830.6304	FD-170209-0001 (741.0 g/L)	The liquid product has a clear light yellow appearance with faint smell like ether.	Acceptable	Y	Keller, M; 2017a; KCP 2.1/01
B.2.2. EXPLOSIVE AND OXIDIZING PROPERTIES						
Explosive properties B.2.2/01	OECD 113 (DSC) (EC A14)	FD-170209-0001 (741.0 g/L)	The test item showed two exothermic effects in the temperature ranges of 90 - 200 °C and 280 - 430 °C, with a maximum decomposition energy of -270 J/g, meaning the decomposition energy is below the threshold of -500 J/g to exclude explosive properties. Due to this, further tests on explosive properties were not necessary. The test item has no explosive properties.	Acceptable As the decomposition energy was < -500 J/g, no further testing is required according to EC A14 or UN-RTDG Class 1 test methods. The formulation is considered to be not explosive in accordance with CLP Reg. (EC) 1272/2008.	Y	Dreisch S; 2017a; KCP 2.2/01
Oxidizing properties B.2.2/02	EC A21	FD-170209-0001 (741.0 g/L)	According to the tests, the mean pressure rise time for the test item (30.63 s) is greater than the mean pressure rise time for the reference item (2.28 s). The test item BAS 684 03 H has no oxidizing properties according to the UN Transport Regulation, division 5.1 and Regulation EC No. 440/2008 Method A.21. Oxidizing Properties of Liquids.	Acceptable The test results indicate that the formulation is therefore considered to be not oxidising in accordance with CLP Reg. (EC) 1272/2008.	Y	Dreisch S; 2017a; KCP 2.2/01
B.2.3. FLAMMABILITY AND AUTO-FLAMMABILITY						
Flash point of the liquids	EC A9	FD-170209-0001	The test item BAS 684 03 H has a flash point of	Acceptable	Y	Dreisch S; 2017a;

Test or Study & Data point	Guideline and method	Test material purity and specification	Used methods / Results	Comments (Acceptable / Non acceptable)	GLP	Reference
formulations B.2.3/01	(Pensky-Martens)	(741.0 g/L)	145.0 °C (corrected and rounded down to the nearest multiple of 0.5 °C) according to Regulation EC No. 440/2008 Method A9 Flash Point, CIPAC MT 12 (2009) and Guideline OCSPP 830.6315 (1996).	The flash-point was determined to be 145.0 °C according to the EC A9 test method. The formulation is therefore considered to be not (highly) flammable in accordance with CLP Reg. (EC) 1272/2008.		KCP 2.3/01
Flammability of solid formulations B.2.3/02	-	-	Formulation is not a solid.	-	-	-
Self-heating of formulation B.2.3/03	EC A15	FD-170209-0001 (741.0 g/L)	The auto-ignition temperature was determined to lay at 353 °C.	Acceptable The auto-ignition has temperature was determined to be 353 °C (EC A15). The formulation is therefore not considered to be self-heating in accordance with CLP Reg. (EC) 1272/2008.	Y	Dreisch S; 2017a; KCP 2.3/01
B.2.4. ACIDITY/ALKALINITY AND PH VALUE						
pH of the neat aqueous formulation B.2.4/01	-	-	Not required as the formulation is not an aqueous solution.	-	-	-
pH of a 1 % dilution of the solid or non-aqueous formulation B.2.4/02	CIPAC MT 75.3 (OCSPP 830.7000)	FD-170209-0001 (741.0 g/L)	pH at 1% dilution (pure water): 6.5 at 26 °C pH at 1% dilution (CIPAC water D): 6.5 at 26 °C pH pure water: 5.8 at 26 °C pH CIPAC water D: 6.3 at 26 °C	Acceptable	Y	Keller, M; 2017a; KCP 2.4/01
Acidity / Alkalinity B.2.4/03	-	FD-170209-0001 (741.0 g/L)	pH value is not smaller than 4 or larger than 10. Thus acidity does not have to be determined.	Acceptable	Y	Keller, M; 2017a; KCP 2.4/01
B.2.5. VISCOSITY AND SURFACE TENSION						
Viscosity of the liquid formulation B.2.5/01	CIPAC MT 192 OECD 114 (OCSPP 830.7100)	FD-170209-0001 (741.0 g/L)	Dynamic Viscosity at 20 °C: 70 mPa.s at 1 s ⁻¹ 72 mPa.s at 10 s ⁻¹ 72 mPa.s at 100 s ⁻¹ 72 mPa.s at 200 s ⁻¹ Newtonian liquid.	Acceptable The formulation is a Newtonian liquid (viscosity is independent from the shear stress/rate). Based on the calculated kinematic viscosity and the formulation composition the formulation is not classified as an aspiration hazard.	Y	Keller, M; 2017a; KCP 2.5/01

Test or Study & Data point	Guideline and method	Test material purity and specification	Used methods / Results	Comments (Acceptable / Non acceptable)	GLP	Reference
			Dynamic Viscosity at 40 °C: 21 mPa.s at 1 s ⁻¹ 22 mPa.s at 10 s ⁻¹ 22 mPa.s at 100 s ⁻¹ 22 mPa.s at 200 s ⁻¹ Newtonian liquid. Kinematic Viscosity at 40°C (calculated): 21.3 mm ² /s			
Surface tension of the formulation B.2.5/02	OECD 115 EC A5	FD-170209-0001 (741.0 g/L)	Neat formulation: 26.3 mN/m at 25 °C 0.7 % dilution: 33.7 mN/m at 20 °C 0.03 % dilution: 42.6 mN/m at 20 °C	Acceptable The surface tension was determined at a concentration of 0.7 % (as well as for neat formulation), exceeding the highest in-use concentration of 0.666 %. The formulation is considered to be surface active.	Y	Keller, M; 2017a; KCP 2.5/01
B.2.6. RELATIVE DENSITY AND BULK DENSITY						
Relative density of the liquid formulation B.2.6/01	OECD 109 EC A3 (OCSP 830.7300)	FD-170209-0001 (741.0 g/L)	Relative density: 1.002 Density at 20 °C: 1.002 g/cm ³ Density at 40 °C: 0.986 g/cm ³	Acceptable	Y	Keller, M; 2017a; KCP 2.6/01
Bulk density (pour and tap) of powder or granules B.2.6/02	-	-	Liquid formulation.	-	-	-
B.2.7. STORAGE STABILITY AND SHELF-LIFE: EFFECTS OF TEMPERATURE ON TECHNICAL CHARACTERISTICS OF THE PLANT PROTECTION PRODUCT						
Stability after accelerated storage (54 °C during 14 days, 8 weeks at 40 °C, 12 weeks at 35 °C or 18 weeks at 30 °C) B.2.7/01	CIPAC MT 46.3	FD-170209-0001 (741.0 g/L)	See table B.2.7-01 (below) for results.	Acceptable The data indicate that the formulation is stable following storage for 14 days at 54 °C in coextruded HDPE/PA packaging. The analytical method for the determination of the active substance content in the formulation is fully validated according to SANCO/3030/99 rev. 4 and summarised in Volume 3 CP B.5 under KCA 5.1.1.	Y	Keller, M; 2017a; KCP 2.7/01

Test or Study & Data point	Guideline and method	Test material purity and specification	Used methods / Results	Comments (Acceptable / Non acceptable)	GLP	Reference			
				Two relevant impurities (Reg No. 4359586 (1SR,2RS,4RS)-1-methyl-4-(propan-2-yl)-7-oxabicyclo[2.2.1]heptan-2-ol and toluene) were identified in cinmethylin technical material; Toluene cannot form or increase during formulation and storage of the product BAS 684 03 H therefore no determination of the content of toluene after storage is required. Determination of the content of the impurity Reg No. 4359586 after storage is required.					
Effect of low temperature on stability of liquid formulation B.2.7/02	CIPAC MT 39.3	FD-170209-0001 (741.0 g/L)	See table B.2.7-01 (below) for results.	Acceptable The data indicate that the formulation is stable following storage for 7 days at 0 °C.	Y	Keller, M; 2017a; KCP 2.7/01			
Shelf life following storage at ambient temperature B.2.7/03	-	-	No data provided.	The shelf life of the product in commercial packaging following storage at ambient temperature should be addressed at product authorisation.	-	-			
B.2.8. TECHNICAL CHARACTERISTICS OF THE PLANT PROTECTION PRODUCT									
B.2.8.1. Wettability									
Wettability of solid formulation B.2.8.1/01	-	-	Formulation is not a solid.	-	-	-			
B.2.8.2. Persistence foaming									
Persistence of foaming of the diluted formulation B.2.8.2/01	CIPAC MT 47.2	FD-170209-0001 (741.0 g/L)	Time (min)		0.03 % foam volume (mL)	0.7 % foam volume (mL)	Acceptable The persistence of foaming was tested at concentrations of 0.03 and 0.7 % in CIPAC water D, which covers the in-use concentration range of 0.083 - 0.666 %. The maximum amount of foam measured was within the acceptable limit of 60 mL after 1 min.	Y	Keller, M; 2017a; KCP 2.8.2/01
			0*		10	28			
			1		10	22			
			3		10	18			
			12		10	4			
			*0 min = 10 sec						
B.2.8.3. Suspensibility									
Suspensibility of water	-	-	Not required for EC formulation.	-	-	-			

Test or Study & Data point	Guideline and method	Test material purity and specification	Used methods / Results	Comments (Acceptable / Non acceptable)	GLP	Reference
dispersible formulation B.2.8.3/01						
Spontaneity of dispersion of water dispersible formulation B.2.8.3/02	-	-	Not required for EC formulation.	-	-	-
Dispersion stability of SE, OD or EG formulation B.2.8.3/03	-	-	Not required for EC formulation.	-	-	-
B.2.8.4. Degree of dissolution and dilution stability						
Degree of dissolution of water soluble formulation B.2.8.4/01	-	-	Not required for EC formulation.	-	-	-
Dilution stability of water soluble formulation B.2.8.4/02	-	-	Not required for EC formulation.	-	-	-
B.2.8.5. Particle size distribution, dust content, attrition and mechanical stability						
B.2.8.5.1. Particle size distribution						
Wet sieve test of water dispersible formulation B.2.8.5.1/01	-	-	Not required for EC formulation.	-	-	-
Size distribution of particles of powder or suspension concentrate formulation B.2.8.5.1/02	-	-	Not required for EC formulation.	-	-	-
Nominal size range of granule B.2.8.5.1/03	-	-	Not required for EC formulation.	-	-	-
B.2.8.5.2. Dust content						
Dust content of granular formulation B.2.8.5.2/01	-	-	Not required for EC formulation.	-	-	-

Test or Study & Data point	Guideline and method	Test material purity and specification	Used methods / Results	Comments (Acceptable / Non acceptable)	GLP	Reference
B.2.8.5.3. Attrition						
Attrition characteristics of granules and tablets B.2.8.5.3/01	-	-	Not required for EC formulation.	-	-	-
B.2.8.5.4. Hardness and integrity						
Hardness of tablets B.2.8.5.4/01	-	-	Not required for EC formulation.	-	-	-
Integrity of tablets B.2.8.5.4/02	-	-	Not required for EC formulation.	-	-	-
B.2.8.6. Emulsifiability, re-emulsifiability, emulsion stability						
Emulsifiability, emulsion stability and re-emulsifiability of formulation B.2.8.6/01	CIPAC MT 36.3	FD-170209-0001 (741.0 g/L)	See table B.2.8.6/01 (below) for results.	<p>Acceptable</p> <p>The emulsifiability, emulsion stability and re-emulsifiability was tested in CIPAC water A and D at concentrations of 0.03 % and 0.7 %, which encompass the minimum and maximum in-use concentrations of 0.083 and 0.666 %. It is noted that the lower concentration (0.03 %) is outside of the scope of CIPAC MT 36.3 (specified as 0.1 - 5 %v/v), nevertheless the results are considered to be valid. No spontaneous emulsion was formed prior to stirring. A small amount (<1 mL) of oil was observed 30 min, 2 h and 24 h after re-emulsification, this is considered to be acceptable a homogeneous emulsion was formed after re-emulsification.</p> <p>A label instruction recommending continuous agitation or to shake well before use should be included on the product label.</p>	Y	Keller, M; 2017a; KCP 2.8.26/01
B.2.8.7. Flowability, pourability and dustability						
Flowability of granular formulation B.2.8.7/01	-	-	Not required for EC formulation.	-	-	-
Pourability of suspensions B.2.8.7/02	-	-	Not required for EC formulation.	-	-	-

Test or Study & Data point	Guideline and method	Test material purity and specification	Used methods / Results	Comments (Acceptable / Non acceptable)	GLP	Reference
Dustability of dustable powders after accelerated storage B.2.8.7/03	-	-	Not required for EC formulation.	-	-	-
B.2.9. PHYSICAL AND CHEMICAL COMPATIBILITY WITH OTHER PRODUCTS INCLUDING PLANT PROTECTION PRODUCTS WITH WHICH ITS USE IS TO BE AUTHORISED						
Physical and chemical compatibility of tank mixtures B.2.9/01	ASTM Method: E 1518-05	FD-161114-0020 (750 g/L nominal)	<p>In the first study (C. Ott, 2017a):</p> <p>In total 4 mixtures of BAS 684 03 H with other plant protection products were tested. The following products were tested as possible tank mixing partners: BAS 773 01 H (Butisan Avant), BAS 798 01 H (Vantiga) + BAS 160 00 S (Dash), BAS 797 00 H (Cleranda) + BAS 160 00 S (Dash) and BAS 9323 0 H (Colzor Trio).</p> <p>All mixtures were determined to be physically compatible and can be used in spray applications. In all mixtures no lumping and no flocculation occurred.</p> <p>In the second study (C. Ott, 2018a):</p> <p>In total 7 mixtures of BAS 684 03 H with other plant protection products were tested. The following products were tested as possible tank mixing partners: BAS 455 48 H (Stomp Aqua), 455 37 H (Stomp SC), 706 02 H (Crystal), 758 00 H (Pontos), 758 01 H (Quirinus), 701 02 H (Picon), 701 03 H (Orient),.</p> <p>All mixtures were determined to be physically compatible and can be used in spray applications. In all mixtures no lumping and no flocculation occurred</p>	<p>Acceptable</p> <p>The physical and chemical compatibility of 11 formulations (SC, SE, EC and CS) with BAS 684 03 H has been demonstrated. No lumping, flocculation or other interaction between the formulations was observed, therefore the following mixing partners can be used for spraying at recommended application rates (0.33 L/ha study 1 and 0.67 L/ha study for BAS 684 H).</p> <p>The method used is considered acceptable for the evaluation of the physical and chemical compatibility of tank mixtures. GLP is not a requirement for this endpoint and therefore the studies can be accepted.</p>	N	<p>Ott, C; 2017a; KCP 2.9/01</p> <p>Ott, C; 2018a; KCP 2.9/02</p>
B.2.10. ADHERENCE AND DISTRIBUTION TO SEEDS						
Distribution and adhesion to seeds B.2.9.10/01	-	-	Not required for EC formulation.	-	-	-

Test or Study & Data point	Guideline and method	Test material purity and specification	Used methods / Results	Comments (Acceptable / Non acceptable)	GLP	Reference
B.2.11. OTHER STUDIES						
Flammability in contact with water	UN-RTDG N.5 (Statement)	FD-170209-0001 (741.0 g/L)	It is known that the test item BAS 684 03 H forms a stable mixture with water, therefore the test on flammability (contact with water) does not need to be performed	Acceptable	N	Dreisch S; 2017a; KCP 2.11/01
Pyrophoric properties	UN-RTDG N.3 (Statement)	FD-170209-0001 (741.0 g/L)	It is known that the test item BAS 684 03 H is stable at room temperature under air for a longer time period (at least one day), therefore the test on pyrophoric properties does not need to be performed.	Acceptable	N	Dreisch S; 2017a; KCP 2.11/01
Freezing point	CIPAC MT 1	FD-170209-0001 (741.0 g/L)	The freezing point was determined to be < -20 °C	Acceptable	N	Keller, M; 2017a; KCP 2.14/01

Table B.2.7-01: Storage stability results after 14 days at 54 °C and 7 days at 0 °C in coextruded HDPE/PA packaging

Test	Method	Initial result (T ₀)			Result after 14 days at 54 °C			Result after 7 days at 0 °C		
Active substance content	AFL0954/01	739.2 g/L			737.7 g/L (-0.2 %)			-		
Water content	CIPAC MT 30.5	0.1 %			-			-		
Appearance	Colour: OCSPP 830.6302 Physical state: OCSPP 830.6303 Odour: OCSPP 830.6304	Colour: Light yellow Physical state: Clear liquid Odour: Faint ether			Colour: Light yellow Physical state: Clear liquid Odour: Faint ether			-		
pH	CIPAC MT 75.3	pH of 1 % dilution (pure water): 6.5 at 26 °C pH of 1 % dilution (CIPAC water D): 6.5 at 26 °C pH pure water: 5.8 at 26 °C pH CIPAC water D: 6.3 at 26 °C			pH of 1 % dilution (pure water): 6.5 at 23 °C pH of 1 % dilution (CIPAC water D): 6.4 at 23 °C pH pure water: 5.8 at 24 °C pH CIPAC water D: 6.3 at 23 °C			pH of 1 % dilution (pure water): 6.5 at 24 °C pH of 1 % dilution (CIPAC water D): 6.5 at 23 °C pH pure water: 5.8 at 23 °C pH CIPAC water D: 6.3 at 23 °C		
Viscosity	CIPAC MT 192 OECD 114	Dynamic Viscosity at 20 °C: 70 mPa.s at 1 s-1 72 mPa.s at 10 s-1 72 mPa.s at 100 s-1 72 mPa.s at 200 s-1 Dynamic Viscosity at 40 °C: 21 mPa.s at 1 s-1 22 mPa.s at 10 s-1 22 mPa.s at 100 s-1 22 mPa.s at 200 s-1			Dynamic Viscosity at 20 °C: 69 mPa.s at 1 s-1 71 mPa.s at 10 s-1 71 mPa.s at 100 s-1 71 mPa.s at 200 s-1 Dynamic Viscosity at 40 °C: 20 mPa.s at 1 s-1 22 mPa.s at 10 s-1 22 mPa.s at 100 s-1 22 mPa.s at 200 s-1			-		
Density	OECD 109 EC A3 (1.4.4)	Relative Density: 1.002 Density at 20 °C: 1.002 g/cm ³ Density at 40 °C: 0.986 g/cm ³			Relative Density: 1.001 Density at 20 °C: 1.001 g/cm ³ Density at 40 °C:			-		
Appearance (packaging)	Clarity: Visual inspection Weigh change: OCSPP 830.6317 Packaging appearance: OCSPP 830.6317 Corrosion: OCSPP 830.6320	Clarity: Clear Weight change: n/a Pack appearance: There is no influence of the product on the original container. Corrosion: No corrosion, seal intact and no peculiarities inside of the original container were observed.			Clarity: Clear Weight change: 0.06 % Pack appearance: There is no influence of the product on the original container. Corrosion: No corrosion, seal intact and no peculiarities inside of the original container were observed.			-		
Low temperature storage stability	CIPAC MT 39.3	-			-			After 7 days at 0 °C, the sample was homogeneous with no separated material observed		
Persistence of foaming	CIPAC MT 47.2		Time (min)	0.03 % foam (mL)	0.7 % foam (mL)		Time (min)	0.03 % foam (mL)	0.7 % foam (mL)	
			0	10	28		0	10	36	
			1	10	22		1	10	28	
			3	10	18		3	8	22	
			12	10	4		12	8	12	
			*0 min = 10 sec				*0 min = 10 sec			
Emulsion stability	CIPAC MT 36.3	See table B.2.8.6-01 below			See table B.2.8.6-01 below			See table B.2.8.6-01 below		

Table B.2.8.6-01: Emulsion stability (CIPAC MT 36.3)

Test conc. [%]		0.03							
Storage temp [°C]		---			0		54		
Storage time [weeks]		Initial			1		2		
CIPAC water		A		D		A		D	
Time interval	Description of separation	Separation [mL]							
30 seconds	Spontaneous emulsion	no, not completely emulsified; with fine striations; no froth	no, not completely emulsified; with fine striations; no froth	no, not completely emulsified; with fine striations; no froth	no, not completely emulsified; with fine striations; no froth	no, not completely emulsified; with fine striations; no froth	no, not completely emulsified; with fine striations; no froth	no, not completely emulsified; with fine striations; no froth	
30 minutes	Sediment	0	0	0	0	0	0	0	
	Top cream	0	0	0	0	0	0	0	
	Bottom cream	0	0	0	0	0	0	0	
	Top oil	0	0	0	0	0	0	0	
	Bottom oil	0	0	0	0	0	0	0	
2 hours	Sediment	0	0	0	0	0	0	0	
	Top cream	0	0	0	0	0	0	0	
	Bottom cream	0	0	0	0	0	0	0	
	Top oil	¹⁾ < 1	¹⁾ < 1	0	0	¹⁾ < 1	¹⁾ < 1		
	Bottom oil	0	0	0	0	0	0		
24 hours	Sediment	0	0	0	0	0	0	0	
	Top cream	0	0	0	0	0	0	0	
	Bottom cream	0	0	0	0	0	0	0	
	Top oil	²⁾ < 1	²⁾ < 1	0	0	²⁾ < 1	²⁾ < 1		
	Bottom oil	0	0	0	0	0	0		
Re-emulsification + 30 seconds	completely re-dispersed	yes, homog. emulsion; with small oil droplets	yes, homog. emulsion; with small oil droplets	yes, homog. emulsion	yes, homog. emulsion	yes, homog. emulsion; with small oil droplets	yes, homog. emulsion		
30 minutes after re-emulsification	Sediment	0	0	0	0	0	0	0	
	Top cream	0	0	0	0	0	0	0	
	Bottom cream	0	0	0	0	0	0	0	
	Top oil	³⁾ < 1	³⁾ < 1	0	0	³⁾ < 1	0		
	Bottom oil	0	0	0	0	0	0		

1) few, small oil droplets in the upper area

2) striations in the upper area

3) small oil droplets in the whole emulsion

Test conc. [%]		0.7					
Storage temp [°C]		---			0		54
Storage time [weeks]		Initial			1		2
CIPAC water		A	D	A	D	A	D
Time interval	Description of separation	Separation [mL]					
30 seconds	Spontaneous emulsion	no, not completely emulsified; with fine striations; no froth	no, not completely emulsified; with fine striations; no froth	no, not completely emulsified; with fine striations; no froth	no, not completely emulsified; with fine striations; no froth	no, not completely emulsified; with fine striations; no froth	no, not completely emulsified; with fine striations; no froth
30 minutes	Sediment	0	0	0	0	0	0
	Top cream	0	0	0	0	0	0
	Bottom cream	0	0	0	0	0	0
	Top oil	0	0	0	0	0	0
	Bottom oil	0	0	0	0	0	0
2 hours	Sediment	0	0	0	0	0	0
	Top cream	0	0	0	0	0	0
	Bottom cream	0	0	0	0	0	0
	Top oil	0	0	0	0	0	0
	Bottom oil	0	0	0	0	0	0
24 hours	Sediment	0	0	0	0	0	0
	Top cream	< 1	< 1	< 1	< 1	< 1	< 1
	Bottom cream	0	0	0	0	0	0
	Top oil	0	0	0	0	0	0
	Bottom oil	0	0	0	0	0	0
Re-emulsification + 30 seconds	completely re-dispersed	yes, homog. emulsion; with small oil droplets	yes, homog. emulsion	yes, homog. emulsion	yes, homog. emulsion	yes, homog. emulsion	yes, homog. emulsion
30 minutes after re-emulsification	Sediment	0	0	0	0	0	0
	Top cream	0	0	0	0	0	0
	Bottom cream	0	0	0	0	0	0
	Top oil	⁴⁾ < 1	0	0	0	⁴⁾ < 1	0
	Bottom oil	0	0	0	0	0	0

4) a congeries of small oil droplets in the upper area

B.2.12. REFERENCES RELIED ON

Data Point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Vertebrate study Y/N	Data protection claimed Y/N	Justification if data protection is claimed	Owner	Previous evaluation
KCP 2.1/1 KCP 2.4/1 KCP 2.5/1 KCP 2.6/1 KCP 2.7/1 KCP 2.8.2/1 KCP 2.8.6/1 KCP 2.11/01	Keller, M.	2017a	Physical and chemical properties of BAS 684 03 H including low temperature stability (7 days at 0°C) and accelerated storage stability (14 days at 54°C) 2017/1142804 BASF SE, Limburgerhof, Germany. yes Unpublished	N	Y	Data for first approval	BASF	
KCP 2.2/1 KCP 2.3/1 KCP 2.11/1	Dreich S.	2017a	Determination of physico-chemical properties according to UN Transport Regulation and Directive 94/37/EC (Regulation (EC) No. 440/2008) 2017/1054561 consilab Gesellschaft fuer Anlagensicherheit mbH, Frankfurt/Main, Germany yes Unpublished	N	Y	Data for first approval	BASF	
KCP 2.9/1	Ott, C.	2017a	Physical and chemical compatibility in aqueous tank mixtures of BAS 684 03 H 2017/1177602 BASF SE, Limburgerhof, Germany. no Unpublished	N	Y	Data for first approval	BASF	
KCP 2.9/2	Ott, C.	2018a	Physical and chemical compatibility in aqueous tank mixtures of BAS 684 03 H 2018/1000901 BASF SE, Limburgerhof, Germany yes Unpublished	N	Y	Data for first approval	BASF	