

# FINAL REGISTRATION REPORT

## **Part B**

### **Section 1: Identity**

### **Section 2: Physical and chemical properties**

### **Section 4: Further information**

Detailed summary of the risk assessment

Product code: SHA 6100 A

Product name: ALIVE

Chemical active substance:

Propaquizafop, 100 g/L

Central Zone

Zonal Rapporteur Member State: Poland

## CORE ASSESSMENT

Applicant: Sharda Cropchem España S.L.

Submission date: October 2020

MS Finalisation date: **June 2021**; March 2022

## Version history

When	What
April 2021	Applicant update
June 2021	ZRMS evaluated the dRR updated by Applicant.
March 2022	The Final Registration Report

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State whether or not submitted data are sufficient for evaluation. Data gaps and conditions for registration should be listed, if appropriate.

Sufficient data on identity, physical and chemical properties and other information are available for the plant protection product and the contained technical active substance(s).

Noticed data gaps are:

- None

## **1 Section 1: Identity of the plant protection product**

### **1.1 Applicant (KCP 1.1)**

Name: Sharda Cropchem España S.L  
Address: Edificio Atalayas Business Center,  
Carril Condomina nº 3, 12<sup>th</sup> Floor,  
30006 Murcia, Spain  
Phone: +34868127589  
FAX: +34868127588

### **1.2 Producer of the plant protection product and of the active substances (KCP 1.2)**

#### **1.2.1 Producer(s) of the preparation**

Confidential information or data are provided separately (Part C).

#### **1.2.2 Producer(s) of the active substance**

Confidential information or data are provided separately (Part C).

### **1.2.3 Statement of purity (and detailed information on impurities) of the active substance**

#### **1.2.3.1 Propaquizafop**

Propaquizafop	min. 986.4 g/kg Sharda source min. 920 g/kg (Commission Implementing Directive 2009/37/EC and SANCO/131/08 final (26 May 2009))
Toluene	max. 5 g/kg Commission Implementing Directive

2009/37/EC and SANCO/131/08 final (26 May 2009))

### 1.3 Trade names and producer's development code numbers for the preparation (KCP 1.3)

Trade name: ALIVE  
Company code number: SHA 6100 A

### 1.4 Detailed quantitative and qualitative information on the composition of the preparation (KCP 1.4)

#### 1.4.1 Composition of the plant protection product (KCP 1.4.1)

**Table 1.4-1: Active substance and variant of the active substance**

Active substance / variant	Declared content of the pure active substance / variant (g/L or g/kg)	FAO Limits (min – max)	Technical content* (g/L or g/kg)	Technical content** (%w/w)
Propaquizafop	100 g/L	90 – 110 g/L (± 10% of the declared content)	101.4 g/L	9.84 %w/w

\* Based on the minimum purity of the active substance declared for registration in the active substance dossiers

\*\* Based on the density of the formulation = 1.0310

**Table 1.4-2: Relevant impurities**

Relevant impurity	Maximum content (g/L or g/kg)
Toluene	5 g/kg (5 % of the propaquizafop declared content) 0.5 g/kg

#### 1.4.2 Information on the active substance(s) (KCP 1.4.2)

**Table 1.4-3: Information on Propaquizafop**

Type	Propaquizafop
ISO common name	Propaquizafop
CAS No.	111479-05-1
EC No.	Not available
CIPAC No.	713

#### 1.4.3 Information on safeners, synergists and co-formulants (KCP 1.4.3)

CONFIDENTIAL information is provided separately (Part C).

### **1.5 Type and code of the plant protection product (KCP 1.5)**

Type: Emulsifiable Concentrate

[Code: EC]

### **1.6 Function (KCP 1.6)**

ALIVE (Propaquizafop 10% EC) is intended to be used as an herbicide.

## 2 Section 2: Physical, chemical and technical properties of the plant protection product

All studies have been performed in accordance with the current requirements and the results are deemed to be acceptable. The appearance of the product is that of yellow brown liquid, with a aromatic odour. It is not explosive, has no oxidising properties. The product is not flammable/has a flash point of 100 °C. It has a self ignition temperature of 445 °C. In aqueous solution, it has a pH value around 5.47 at 20 °C. There is no effect of low and high temperature on the stability of the formulation, since after 7 days at 0 °C and 14 days at 54 °C, neither the active ingredient content nor the technical properties were changed. The stability data indicate a shelf life of at least 2 years at ambient temperature when stored in HDPE/EVOH. Its technical characteristics are acceptable for a *emulsifiable concentrate* formulation. The intended concentration of use is 0.166% to 0.75%.

### Justified Proposals for Classification and Labelling (KCP 12) for physical chemical part only

~~Neither classification nor labelling is relevant for this section.~~

The viscosity in 40 °C is less than 20.5 mm<sup>2</sup>/s. Product contains over 10% of hydrocarbons thus the Category 1 aspiration hazard (hazard statement H304) should be applied

### Notifier Proposals for Risk and Safety Phrases (KCP 12)

No risk and safety phrases are relevant for this section.

### Compliance with FAO specifications:

The product ALIVE (Propaquizafop 10% EC) complies with FAO specifications.

### Formulation used for tests

The product used in the test is the one cited in Part C, Propaquizafop 10% EC (batch: SCL-86421).

**Table 2-1: Physical, chemical and technical properties of the plant protection product**

Annex point	Method used / deviations	Test material	Findings	GLP Y/N	Reference	Acceptability / comments
Colour and physical state (KCP 2.1)	OPPTS 830.6302 OPPTS 830.6303 OPPTS 830.6304	Propaquizafop 10% EC SCL-86421	Yellow brown liquid with aromatic odor	Y	Krzysiak-Warzała B., 2017 100/2017/BA-AD	Accepted.
Explosive properties (KCP 2.2.1)	EEC A.14	Propaquizafop 10% EC SCL-86421	Propaquizafop 10% EC does not have explosive properties according to the criteria of EEC A.14	Y	Buczowski D., 2017 BW-14/17	Accepted.
Oxidizing properties (KCP 2.2.2)	EEC A.21	Propaquizafop 10% EC SCL-86421	Propaquizafop 10% EC has not got the oxidising properties according to A.21 method	Y Y	Grojs P., 2017 BC-54/17	Accepted.
Flash point (KCP 2.3.1)	EEC A.9	Propaquizafop 10% EC SCL-86421	Flash point = 100 °C Not flammable liquid	Y	Krzysiak-Warzała B., 2017 100/2017/BA-AD	Accepted.
Flammability (KCP 2.3.2)	EEC A.15	Propaquizafop 10% EC SCL-86421	Auto-ignition temperature = 445 °C (p=99.18 kPa, ignition delay 2-3 seconds)	Y	Krzysiak-Warzała B., 2017 100/2017/BA-AD	Accepted.
Self-heating (KCP 2.3.3)	-	-	Not required.	-	-	-
Acidity or alkalinity and pH (KCP 2.4.1)	-	-	See point 2.4.2	-	-	-
pH of a 1% aqueous dilution, emulsion or dispersion (KCP 2.4.2)	CIPAC MT 75.3	Propaquizafop 10% EC SCL-86421	5.47 (20 °C)	Y	Krzysiak-Warzała B., 2017 100/2017/BA-AD	Accepted.

Annex point	Method used / deviations	Test material	Findings	GLP Y/N	Reference	Acceptability / comments						
Viscosity (KCP 2.5.1)	CIPAC MT 192 OECD 114	Propaquizafop 10% EC SCL-86421	Viscosity at 20 °C (Share rate of 66 sec <sup>-1</sup> ) 11.1 mPa·s Viscosity at 20 °C (Share rate of 132 sec <sup>-1</sup> ) 10.7 mPa·s Viscosity at 40 °C (Share rate of 66 sec <sup>-1</sup> ) 6.0 mPa·s Viscosity at 40 °C (Share rate of 132 sec <sup>-1</sup> ) 5.8 mPa·s  Kinematic viscosity Viscosity at 20 °C (Share rate of 66 sec <sup>-1</sup> ) 10.77 mm <sup>2</sup> /s Viscosity at 20 °C (Share rate of 132 sec <sup>-1</sup> ) 10.38 mm <sup>2</sup> /s Viscosity at 40 °C (Share rate of 66 sec <sup>-1</sup> ) 5.82 mm <sup>2</sup> /s Viscosity at 40 °C (Share rate of 132 sec <sup>-1</sup> ) 5.63 mm <sup>2</sup> /s	Y	Krzysiak-Warzała B., 2017 100/2017/BA-AD	Accepted.  The viscosity in 40 °C is less than 20.5 mm <sup>2</sup> /s. Product contains over 10% of hydrocarbons thus the Category 1 aspiration hazard (hazard statement H304) should be applied.						
Surface tension (KCP 2.5.2)	EEC A.5	Propaquizafop 10% EC SCL-86421	Surface tension (neat test item) 33.9 mN/m (surface-active material) Surface tension (6.0 mL/L aqueous solution) 28.6 mN/m (surface-active material)	Y	Krzysiak-Warzała B., 2017 100/2017/BA-AD	Accepted.						
Relative density (KCP 2.6.1)	EEC A.3	Propaquizafop 10% EC SCL-86421	1.0310 (20 °C sample, 4 °C water)	Y	Krzysiak-Warzała B., 2017 100/2017/BA-AD	Accepted.						
Bulk density (KCP 2.6.2)	-	-	Not required.	-	-							
Storage Stability after 14 days at 54° C (KCP 2.7.1)	CIPAC MT 46.3 OPPTS 830.6302 OPPTS 830.6303	Propaquizafop 10% EC SCL-86421	<table border="1"> <tr> <td>Active substance content</td> <td>9.7 % (w/w) 97 g/kg 10.0 % (w/v) 100 g/L</td> </tr> <tr> <td>Relevant impurity content (Toluene)</td> <td>0.03 % (w/w) 0.27 g/kg 0.03 % (w/v) 0.28 g/L</td> </tr> <tr> <td>Apearance</td> <td>Yellow brown liquid with aromatic</td> </tr> </table>	Active substance content	9.7 % (w/w) 97 g/kg 10.0 % (w/v) 100 g/L	Relevant impurity content (Toluene)	0.03 % (w/w) 0.27 g/kg 0.03 % (w/v) 0.28 g/L	Apearance	Yellow brown liquid with aromatic	Y	Krzysiak-Warzała B., 2017 100/2017/BA-AD	Accepted.  The study doesnot reflect the intended
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Annex point	Method used / deviations	Test material	Findings	GLP Y/N	Reference	Acceptability / comments										
	OPPTS 830.6304 CIPAC MT 75.3 CIPAC MT 36.3 (Standard water D) Technical Monograph CropLife		<table border="1"> <tr> <td data-bbox="801 327 1039 355"></td> <td data-bbox="1039 327 1375 355">odor</td> </tr> <tr> <td data-bbox="801 355 1039 403">pH value (1% aqueous dilution)</td> <td data-bbox="1039 355 1375 403">5.57</td> </tr> <tr> <td data-bbox="801 403 1039 651">Emulsifiability/emulsion stability/re-emulsification (1.2 mL/L aqueous solution)</td> <td data-bbox="1039 403 1375 651">                     0 h after dilution – initial emulsification complete                      0.5 h after dilution – there was no cream or free oil                      2 h after dilution - there was no cream or free oil                      24 h after dilution – re-emulsification complete                      24.5 h after dilution - there was no cream or free oil                 </td> </tr> <tr> <td data-bbox="801 651 1039 898">Emulsifiability/emulsion stability/re-emulsification (6.0 mL/L aqueous solution)</td> <td data-bbox="1039 651 1375 898">                     0 h after dilution – initial emulsification complete                      0.5 h after dilution – there was no cream or free oil                      2 h after dilution - there was no cream or free oil                      24 h after dilution – re-emulsification complete                      24.5 h after dilution - there was no cream or free oil                 </td> </tr> <tr> <td data-bbox="801 898 1039 1276">Stability of packaging and packaging/preparation interactions</td> <td data-bbox="1039 898 1375 1276">                     No significant effect of the formulation on pack was observed; after accelerated storage procedure no changes in appearance of packaging was observed                      No significant effect of the pack on formulation was observed; after accelerated storage procedure no changes in appearance of sample was observed                      No significant effect on the weight of the package with sample was observed; after accelerated storage procedure weight loss was 0.009 % (w/w).                 </td> </tr> </table>		odor	pH value (1% aqueous dilution)	5.57	Emulsifiability/emulsion stability/re-emulsification (1.2 mL/L aqueous solution)	0 h after dilution – initial emulsification complete 0.5 h after dilution – there was no cream or free oil 2 h after dilution - there was no cream or free oil 24 h after dilution – re-emulsification complete 24.5 h after dilution - there was no cream or free oil	Emulsifiability/emulsion stability/re-emulsification (6.0 mL/L aqueous solution)	0 h after dilution – initial emulsification complete 0.5 h after dilution – there was no cream or free oil 2 h after dilution - there was no cream or free oil 24 h after dilution – re-emulsification complete 24.5 h after dilution - there was no cream or free oil	Stability of packaging and packaging/preparation interactions	No significant effect of the formulation on pack was observed; after accelerated storage procedure no changes in appearance of packaging was observed No significant effect of the pack on formulation was observed; after accelerated storage procedure no changes in appearance of sample was observed No significant effect on the weight of the package with sample was observed; after accelerated storage procedure weight loss was 0.009 % (w/w).			highest and lowest concentration (1.66-7.5). The concentrations used in the study are however similar and taken into account that the safety margin is wide, the study can be accepted.
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Stability after storage for other periods and/or temperatures (KCP 2.7.2)	-	-	Not required. Please refer to point KCP 2.7.1.			-										

Annex point	Method used / deviations	Test material	Findings	GLP Y/N	Reference	Acceptability / comments												
Minimum content after heat stability testing (KCP 2.7.3)	-	-	See point 2.7.1.			-												
Effect of low temperatures on stability (KCP 2.7.4)	CIPAC MT 39.3	Propaquizafop 10% EC SCL-86421	At the bottom of the tube, a precipitate was observed in volume of 0.025 mL; besides this immediately after storage and after equilibration at room temperature – sample was transparent liquid <b>Emulsifiability/emulsion stability/re-emulsification (1.2 mL/L aqueous solution)</b> <b>CIPAC MT 36.6 – standard water D</b> 0 h after dilution – initial emulsification complete 0.5 h after dilution – there was no cream or free oil 2 h after dilution - there was no cream or free oil 24 h after dilution – re-emulsification complete 24.5 h after dilution - there was no cream or free oil <b>Emulsifiability/emulsion stability/re-emulsification (6.0 mL/L aqueous solution)</b> <b>CIPAC MT 36.6 – standard water D</b> 0 h after dilution – initial emulsification complete 0.5 h after dilution – there was no cream or free oil 2 h after dilution - there was no cream or free oil 24 h after dilution – re-emulsification complete 24.5 h after dilution - there was no cream or free oil	Y	Krzysiak-Warzała B., 2017 100/2017/BA-AD	Accepted.												
Ambient temperature shelf life (KCP 2.7.5)	OPPTS 830.6302 OPPTS 830.6303 OPPTS 830.6304 CIPAC MT 75.3 EEC A.3 CIPAC MT 36.3 (Standard water D) Technical Monograph CropLife No 17	Propaquizafop 10% EC SCL-86421	<table border="1"> <thead> <tr> <th></th> <th>After 6 months</th> <th>After 1 year</th> <th>After 2 years</th> </tr> </thead> <tbody> <tr> <td><b>Active substance content</b></td> <td>9.6 % (w/w) 96 g/kg 9.9 % (w/v) 99 g/L</td> <td>9.7 % (w/w) 97 g/kg 10.0 % (w/v) 100 g/L</td> <td>9.6 % (w/w) 96 g/kg 9.9 % (w/v) 99 g/L</td> </tr> <tr> <td><b>Relevant impurity content (Toluene)</b></td> <td>0.01 % (w/w) 0.15 g/kg 0.02 % (w/v) 0.15 g/L</td> <td>0.02 % (w/w) 0.16 g/kg 0.02 % (w/v) 0.17 g/L</td> <td>0.02 % (w/w) 0.17 g/kg 0.02 % (w/v) 0.17 g/L</td> </tr> </tbody> </table>		After 6 months	After 1 year	After 2 years	<b>Active substance content</b>	9.6 % (w/w) 96 g/kg 9.9 % (w/v) 99 g/L	9.7 % (w/w) 97 g/kg 10.0 % (w/v) 100 g/L	9.6 % (w/w) 96 g/kg 9.9 % (w/v) 99 g/L	<b>Relevant impurity content (Toluene)</b>	0.01 % (w/w) 0.15 g/kg 0.02 % (w/v) 0.15 g/L	0.02 % (w/w) 0.16 g/kg 0.02 % (w/v) 0.17 g/L	0.02 % (w/w) 0.17 g/kg 0.02 % (w/v) 0.17 g/L	Y	Krzysiak-Warzała B., 2020 101/2017/BA-AD	Accepted.  The study doesnot reflect the intended highest and lowest concentration (1.66-7.5). The concentrations used in the study are however similar and taken into account thtat the safety margin is
	After 6 months	After 1 year	After 2 years															
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Annex point	Method used / deviations	Test material	Findings			GLP Y/N	Reference	Acceptability / comments	
			<b>Appearance</b>	Yellow brown liquid with aromatic odor					wide, the study can be accepted.
<b>pH value (1% aqueous dilution)</b>	5.65	5.58	5.63						
<b>Relative density (20°C sample / 4°C water), pure number</b>	1.0293	1.0297	1.0289						
<b>Density (20°C). g/mL</b>	1.0293	1.0297	1.0289						
<b>Emulsifiability/emulsion stability/re-emulsification (1.2 mL/L aqueous solution)</b>	0 h after dilution – initial emulsification complete 0.5 h after dilution – there was no cream or free oil 2 h after dilution - there was no cream or free oil 24 h after dilution – re-emulsification complete 24.5 h after dilution - there was no cream or free oil								
<b>Emulsifiability/emulsion stability/re-emulsification (6.0 mL/L aqueous solution)</b>	0 h after dilution – initial emulsification complete 0.5 h after dilution – there was no cream or free oil 2 h after dilution - there was no cream or free oil 24 h after dilution – re-emulsification complete 24.5 h after dilution - there was no cream or free oil								
<b>Stability of packaging and packaging/preparation interactions</b>	No significant effect of the formulation on pack was observed; after accelerated storage procedure no changes in appearance of packaging was observed No significant effect of the pack on formulation was observed; after accelerated storage procedure no changes in appearance of sample was observed No significant effect on the weight of the package with sample was observed; after accelerated storage procedure weight loss was 0.009 % (w/w).								

Annex point	Method used / deviations	Test material	Findings			GLP Y/N	Reference	Acceptability / comments
				No significant effect on the weight of the package with sample was observed; after accelerated storage procedure weight loss was 0.04 % (w/w).	No significant effect on the weight of the package with sample was observed; after accelerated storage procedure weight change loss was +0.01 % (w/w).	No significant effect on the weight of the package with sample was observed; after accelerated storage procedure weight loss was 0.03 % (w/w).		
Shelf life in months (if less than 2 years) (KCP 2.7.6)	-	-	Not required.			-	-	-
Wettability (KCP 2.8.1)	-	-	Not required.			-	-	-
Persistence of foaming (KCP 2.8.2)	CIPAC MT 47.2 (Standard water C)	Propaquizafop 10% EC SCL-86421	1.2 mL/L aqueous solution 28 mL foam after 1 minute  6.0 mL/L aqueous solution 28 mL foam after 1 minute			Y	Krzysiak-Warzała B., 2017 100/2017/BA-AD	Accepted.  The study doesnot reflect the intended highest and lowest concentration (1.66-7.5). The concentrations used in the study are however similar and taken into account thtat the safety margin is wide, the study can be accepted.
Suspensibility (KCP 2.8.3.1)	-	-	Not required.			-	-	-

Annex point	Method used / deviations	Test material	Findings	GLP Y/N	Reference	Acceptability / comments
Spontaneity of dispersion (KCP 2.8.3.2)	-	-	Not required.	-	-	-
Dispersion stability (KCP 2.8.3.3)	-	-	Not required.	-	-	-
Degree of dissolution and dilution stability (KCP 2.8.4)	-	-	Not required.	-	-	-
Particle size distribution / nominal size range of granules (KCP 2.8.5.1.1)	-	-	Not required.	-	-	-
Wet sieve test (KCP 2.8.5.1.2)	-	-	Not required.	-	-	-
Dust content (KCP 2.8.5.2.1)	-	-	Not required.	-	-	-
Particle size of dust (KCP 2.8.5.2.2)	-	-	Not required.	-	-	-
Attrition (KCP 2.8.5.3)	-	-	Not required.	-	-	-
Hardness and integrity (KCP 2.8.5.4)	-	-	Not required.	-	-	-
Emulsifiability (KCP 2.8.6.1)	CIPAC MT 36.3 (Standard water C)	Propaquizafop 10% EC SCL-86421	<b>1.2 mL/L aqueous solution</b> 0 h after dilution – initial emulsification complete 0.5 h after dilution – there was no cream or free oil 2 h after dilution - there was no cream or free oil 24 h after dilution – re-emulsification complete 24.5 h after dilution - there was no cream or free oil  <b>6.0 mL/L aqueous solution</b>	Y	Krzysiak-Warzała B., 2017 100/2017/BA-AD	Accepted  The study doesnot reflect the intended highest and lowest concentration (1.66-7.5). The concentrations used in the study are

Annex point	Method used / deviations	Test material	Findings	GLP Y/N	Reference	Acceptability / comments
			0 h after dilution – initial emulsification complete 0.5 h after dilution – there was no cream or free oil 2 h after dilution - there was no cream or free oil 24 h after dilution – re-emulsification complete 24.5 h after dilution - there was no cream or free oil			however similar and taken into account that the safety margin is wide, the study can be accepted.
Emulsion stability (KCP 2.8.6.2)	-	-	See point 2.8.6.1	-	-	-
Re-emulsifiability (KCP 2.8.6.3)	-	-	See point 2.8.6.1	-	-	-
Flowability (KCP 2.8.7.1)	-	-	Not required.	-	-	-
Pourability (KCP 2.8.7.2)	-	-	Not required.	-	-	-
Dustability following accelerated storage (KCP 2.8.7.3)	-	-	Not required.	-	-	-
Physical compatibility of tank mixes (KCP 2.9.1)	-	-	Not required.	-	-	-
Chemical compatibility of tank mixes (KCP 2.9.2)	-	-	Not required.	-	-	-
Adhesion to seeds (KCP 2.10.1)	-	-	Not required.	-	-	-
Distribution to seed (KCP 2.10.2)	-	-	Not required.	-	-	-
Other/special studies (KCP 2.11)	-	-	Not required.	-	-	-

### **3                    Section 3 is presented as a separate document**

Please refer to the separate file “dRR Part B3”.

## 4 Section 4: Further information on the plant protection product

### 4.1 Packaging and Compatibility with the Preparation (KCP 4.4)

**Table 4.1-1: Packaging information for 250 mL**

Type	Description
Material:	COEX (HDPE/EVOH)
Shape/size:	Round bottle / approx. 61 mm diameter x 138.8 mm
Opening:	41.7 mm inner diameter
Closure:	HDPE screw cap
Seal:	Induction heat seal
Manner of construction	extruded
UN/ADR	compliant

**Table 4.1-2: Packaging information for 500 mL**

Type	Description
Material:	COEX (HDPE/EVOH)
Shape/size:	Round bottle / approx. 69.5 mm diameter x 188.5 mm
Opening:	41.7 mm inner diameter
Closure:	HDPE screw cap
Seal:	Induction heat seal
UN/ADR	compliant

**Table 4.1-3: Packaging information for 1 L**

Type	Description
Material:	COEX (HDPE/EVOH)
Shape/size:	Round bottle / approx. 88.5 mm diameter x 239.5 mm
Opening:	41.7 mm inner diameter
Closure:	HDPE screw cap
Seal:	Induction heat seal
UN/ADR	compliant

**Table 4.1-4: Packaging information for 5 L**

Type	Description
Material:	COEX (HDPE/EVOH)
Shape/size:	jerrycan / approx. 136 mm x 192 mm x 285 mm
Opening:	54.7 mm inner diameter
Closure:	HDPE screw cap

Type	Description
Seal:	Induction heat seal
Manner of construction	extruded
UN/ADR	compliant

**Table 4.1-5: Packaging information for 10 L**

Type	Description
Material:	COEX (HDPE/EVOH)
Shape/size:	jerrycan / approx. 174 mm x 226 mm x 368 mm
Opening:	54.7 mm inner diameter
Closure:	HDPE screw cap
Seal:	Induction heat seal
Manner of construction	extruded
UN/ADR	compliant

**Table 4.1-6: Packaging information for 20 L**

Type	Description
Material:	COEX (HDPE/EVOH)
Shape/size:	jerrycan / approx. 400 mm x 245 mm x 294 mm
Opening:	55.8 mm inner diameter
Closure:	HDPE screw cap
Seal:	Induction heat seal
Manner of construction	extruded
UN/ADR	compliant

RMS comment: Proposed packagings are accepted (study conducted in PE/EV packagings).

#### **4.2 Procedures for cleaning application equipment (KCP 4.4.2)**

Experience in use of plant protection products based on Propaquizafop has not indicated any particular problems. Low levels of residues of ALIVE (Propaquizafop 10% EC) in the equipment are not expected to present any particular risk to crops to be treated from a tank that has previously been used for the product.

The efficacy of cleaning of the application equipment with regard to impacts on “other” crops can be estimated on the basis of the PSD Efficacy Guideline 302 (December 2001). As worst case, the following prerequisites were considered:

Application rate: 1.5 L product/ha, (150 g of propaquizafop)  
 Tank volume: 2000 L  
 Volume remaining in spray lines and pump after spraying: 20 L

Spray volume: 200 L/ha (lowest spray volume corresponding to the maximum concentration of ALIVE in diluted spray)

Based on these prerequisites and in consideration of 3 rinses with each 300 – 500 L of water based on good agricultural cleaning procedures, Propaquizafop residues remaining in the tank after spraying will be diluted to the following levels:

Cleaning step	Water volume [L]	Concentration of residues	
		product [mL PPP/L water]	Propaquizafop [g as/L]
Tank filling: Residues after spraying:	2000 20	7.5	0.75
1 <sup>st</sup> step: 1/10 dilution of residual spray volume: Residues after spraying:	200 20	0.75	0.075
2 <sup>nd</sup> step: 20% of tank volume added: Residues after spraying:	400 20	0.0375	0.00375
3 <sup>rd</sup> step: 20% of tank volume added: Residues after spraying:	400 20	$1.875 \times 10^{-3}$	$1.875 \times 10^{-4}$
Addition of fresh spray solution: Residues in the tank filling:	2000	$1.875 \times 10^{-5}$	$1.875 \times 10^{-6}$

PPP = ALIVE

Residues remaining in the last cleaning solution were calculated to be  $1.875 \times 10^{-4}$  g/L of Propaquizafop resulting in residue concentration of  $1.875 \times 10^{-6}$  g/L Propaquizafop after refilling the tank with 2000 L of water for another spray work. Assuming a range of spray volumes of 200 – 600 L/ha applied to succeeding crops, residues of  $3.75 \times 10^{-4}$  –  $1.125 \times 10^{-3}$  g Propaquizafop will be applied per ha.

Compared to the effect levels on non-target plants, these residues are clearly below the  $ER_{50} > 34.4$  g/ha determined for seedling emergence and  $ER_{50} = 26.6$  g/ha and  $ER_{50} = 11.2$  g/ha determined for vigour vegetative in the studies conducted with Agil 100 EC and ALIVE (Propaquizafop 10% EC). Thus, any detrimental effect on plants from tank residues can be excluded.

RMS comment: The study report was not provided.

## Appendix 1 Lists of data considered in support of the evaluation

Tables considered not relevant can be deleted as appropriate.

MS to blacken authors of vertebrate studies in the version made available to third parties/public.

### List of data submitted by the applicant and 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	Owner
KCP 2.1 KCP 2.3.1 KCP 2.3.2 KCP 2.4.2 KCP 2.5.1 KCP 2.5.2 KCP 2.6.1 KCP 2.7.1 KCP 2.7.4 KCP 2.8.2 KCP 2.8.6.1	Barbara Krzysiak- Warzała	2017	Propaquizafop 10% EC: Analysis of active substances content and physicochemical properties pf initial preparation and preparation after accelerated storage procedure (CIPAC MT 46.3) Study Report No.100/2017/BA-AD Institute of Heavy Organic Syntesis "Blachownia" Analytical Department GLP Unpublished	N	Sharda Cropchem LTD
KCP 2.7.5	Barbara Krzysiak- Warzała	2020	Propaquizafop 10% EC: Evaluation of stability of the product after storage in accordance with CropLife Technical Monograph No. 17 (6 months, 1 year, 2 years) Study Report No.101/2017/BA-AD Institute of Heavy Organic Syntesis "Blachownia" Analytical Department GLP Unpublished	N	Sharda Cropchem LTD
KCP 2.2.1	Daniel Buczkowski	2017	Propaquizafop 10% EC: Determination of explosive properties	N	Sharda

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	Owner
			Study Report No. BW-14/17 Institute of Industrial Organic Chemistry, Poland GLP Unpublished		Cropchem LTD
KCP 2.2.2	Przemysław Grojs	2017	Propaquizafop 10% EC: Determination of oxidising properties Study Report No. BW-54/17 Institute of Industrial Organic Chemistry, Poland GLP Unpublished	N	Sharda Cropchem LTD

**List of data submitted or referred to by the applicant and relied on, but already evaluated at EU peer review**

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	Owner
KCP XX	Author	YYYY	Title Company Report No Source GLP/non GLP/GEP/non GEP Published/Unpublished	Y/N	Owner

The following tables are to be completed by MS.

**List of data submitted by the applicant and not relied on**

<b>Data point</b>	<b>Author(s)</b>	<b>Year</b>	<b>Title Company Report No. Source (where different from company) GLP or GEP status Published or not</b>	<b>Vertebrate study Y/N</b>	<b>Owner</b>
KCP XX	Author	YYYY	Title Company Report No Source GLP/non GLP/GEP/non GEP Published/Unpublished	Y/N	Owner

**List of data relied on and not submitted by the applicant but necessary for evaluation**

<b>Data point</b>	<b>Author(s)</b>	<b>Year</b>	<b>Title Company Report No. Source (where different from company) GLP or GEP status Published or not</b>	<b>Vertebrate study Y/N</b>	<b>Owner</b>
KCP XX	Author	YYYY	Title Company Report No Source GLP/non GLP/GEP/non GEP Published/Unpublished	Y/N	Owner

## **Appendix 2 Additional data on the physical, chemical and technical properties of the active substance**

### **A 2.1 Propaquizafof**

No additional data was submitted on the physical chemical and technical properties on the active substance.