Industrial Química Key,	Química Key, 1907/2006/CE			№ rev.: 1
S.A.	Product:	INSECTOIL KEY	Replaces : -	Page 1/8

1. Product & Company Identification

Company: Address:	INDUSTRIAL KEY S.A. Avda. Cervera, 17 25300 Tárrega, Lleida (Spain) Telephone: 00 34 973 31 01 02 Fax: 00 34 973 31 14 16 e-mail: key@key.es
Commercial name: Registration number: Use: Effects:	INSECTOIL KEY - insecticide contact insecticide. Insects die due to hypoxia so that resistances are difficult to develop.

Emergence telephone in case of accident: 91 562 04 20

2. Hazards Identification

2.1 Classification of the substance or mixture:

Classification according the Regulation (EC) nº 1272/2008 (CLP/GHS) Asp. Tox. 1, H304

2.1.1 Information about main physic-chemical adverse effects on human health and the environment.

Adverse effects on human health: May be fatal if swallowed and enters airways.

2.2 Label elements

Pictograms and signal word



Danger

Hazard Statement: H304 May be fatal if swallowed and enters airways.

Precautionary Statements:

Other hazards:	P102 Keep out of the reach of children.		
	P270 Do not eat, drink or smoke when using this product.		
	P301 +P310: IF SWALLOWED: Immediately call a POSION CENTER or doctor/physician.		
	P331: Do not induce vomiting.		
	P401 Keep away from food, drink and animal feedingstuffs.		
	P273 Avoid release to the environment		
	P391 Collect spillage		

Industrial Química Key,		MATERIAL SAFETY DATA SHEET according to Regulation (EC) 453/2010 and 1907/2006/CE		Nº rev.: 1
S.A.	Product:	INSECTOIL KEY	Replaces : -	Page 2/8

P405: Store locked up.

P501 Dispose of contents/container in accordance with applicable regulations.

3. Composition/Information on Ingredients

General composition:	Paraffini	Paraffinic oil 79.0% w/v				
Hazardous Components:	Einecs		CAS	Classification		
components.	% w/w	No.		Symbols	Hazard Statement	Observations
White mineral oil	95	232-455-8	8042-47- 5	GHS08	H304	-

4. First Aid Measures

	Symptoms and effects	First aid		
Skin Contact	No pain is produced in short lasting expositions. In long expositions, it may dry the skin and produce an irritation.	Wash the area with water and soap. Remove contaminated clothes and wash before re-use.		
Eye contact	Temporal redness and stinging.	Rinse with water during several minutes. If wearing contact lenses - remove them as long as it can be done without any difficulties. Continue rinsing.		
Ingestion	Ingestion of large quantities may produce a laxative action as well as digestive tract irritation, nausea and vomits. It can get into the lungs due to its low viscosity and produce serious lung injuries.	In case of ingestion, do not induce vomiting. If the person is unconscious, lay him down with the head lower than the rest of the body and the knees semi-flex. Keep the patient at rest. Get medical attention to practise gastric lavage. Symptomatic treatment.		
Inhalation	Inhalation at the room temperature is improbable due to the low vapour pressure of the substance.	Remove to fresh air. If the affected individual is breathing, place him into a position that allows him to recuperate. Administer oxygen if necessary.		
General measures				
* DO NOT LEAVE THE VICTIM ALONE IN ANY CASE				

* DO NOT LEAVE THE VICTIM ALONE IN ANY CASE.

* In case of ingestion, contact with eyes and/or inhalation get medical attention immediately and show the label or this Material safety Data Sheet.

Industrial Química Key,	MATERIAL SAFETY DATA SHEET according to Regulation (EC) 453/2010 and 1907/2006/CE		Reviewed : -	Nº rev.: 1
S.A.	Product:	INSECTOIL KEY	Replaces : -	Page 3/8

5. Fire Fighting Measures

Adequate extinguishing media:	Water spray, chemical powder, foam or carbon dioxide (CO ₂)
Extinguishing media not to use:	Do not use water directly on fire (risk of contamination).
Combustion products:	Incomplete burning may generate carbon monoxide (COX) and irritating vapour/smoke.
Special procedures in case of fire:	Cool the containers/jerricans by spraying water and keep a security distance in case an explosion is produced. Keep bystanders away from the fire, at least 100 metres away. Do not use water directly on fire (risk of contamination). Work always with the wind blowing from the back of the firefighters.
Special hazards:	When heated to high temperatures (higher than 200 °) it can be flammable.
Protective equipment:	Use normal fire fighting personal protective equipments. Self-contained breathing apparatus and protective clothing (work wear coverall, PVC gloves and boots with rubber sole).

6. Accidental Release Measures

Personal precautions	Precautions for the environment
Avoid prolonged contact with the product and with contaminated clothes. Keep a minimum distance of 50 metres. Spillages make the surfaces slippery.	Do not clean the soil with water. Keep away from any fire source or ignition sources.
Personal protection	Methods and materials for containment and cleaning up
Small spillage: normally anti-static work clothing is appropriate. Large spillage: complete body suit and anti- static material	Stop or contain the spillage in its origin point, if it is safe to do so. In case it is spilled on the ground, cover the pond of product with dry soil, sand or similar non-burning materials. Recover the product by
Work gloves that are resistant to chemical products and adequate for hydrocarbon products. Work anti-static shoes or boots. Goggles or face mask if splattering or eye contact is expected. Respiratory protection shall only be necessary in special cases (formation of dust/smoke). Half or full face mask may be used, combined with an organic vapor/dust filter	pumping or absorbing it with adequate non- burning materials. In case the spillage contacts with water, contain the product with floating barrier and other adequate equipment. Pick up spilled product with appropriate absorbing products. Use of the dispersers must be supervised by an expert, and if required, approved by local authorities. In all cases, collect the isolated product and other contaminated material in tanks or containers that are appropriate for recuperation or disposing in a safe matter.

MATERIAL SAFETY DATA SHEET

Industrial Química Key, S.A.

Replaces : -

Product:

INSECTOIL KEY

7. Handling and Storage

Precautions to safe handling

General precautions:

- Keep containers carefully, avoiding, during its transport, crush with other heavier products and avoid falls.

- Before applying the product, make sure that the equipment to be used is an adequate one and is in perfect conditions.

- Observe the preparation instructions showed in the label.

- Avoid the entrance of non authorised persons (without persona protective equipment) to the treated areas.

Specific precautions:

- It is suitable the addition of an organophosphorous insecticide, properly authorized, with the purpose to increase its action against scales, which will be applied in the moment of the application, observing the authorised dose rates and the particular precautions.

- Do not apply this product until 40 days after a sulphur application, calcium polysulphure, captan or folpet, neither when frosts are forecasted or in hot and dry days. - Observe precautions due to the phytotoxicity of the product to herbaceous plants.

Conditions for safe storage, including any incompatibilities

Temperature:	Room temperature
Decomposition products:	NA
Hazard reactions:	NA
Storage conditions:	Store separately from the oxidation agents and protected from direct solar light.
	If the product is provided in containers:
	Store only in the original container or in the containers that are adequate for these types of products.
	Maintain the container tightly shut and duly labelled.
	Empty containers may contain residues of combustible products. Do not weld, drill, cut or perform similar operations unless it has been duly
	cleaned. Keep away from children's and animal's reach. Do not contaminate other pesticides, fertilizers, and water, feed or animal
	stuffs.
Incompatible materials:	Sulphur, Dinocap, Acartop, several miticides, antioidium, urea, corrective fertilizers and high doses of several wettable powders.
	corrective reminizers and high doses of several wettable powders.

8. Exposure Control/Personal Protection

Limit exposition values					
VLA-ED: oil fog : 5 mg/m ³ VLA-EC : oil fog : 10 mg/m ³ VLB :					
Professional exposition controls:					
Respiratory protection: adequate respiratory protective equipment. In case of fire, use se contained breathing apparatus.					
Hands protection:	PVC gloves.				
Eyes protection:	protective goggles or total protective face shield.				
Skin protection:	work wears coverall. Boots with rubber sole (wearing trousers over				

Industrial Química Key,	MATERIAL SAFETY DATA SHEET according to Regulation (EC) 453/2010 and 1907/2006/CE		Reviewed : -	Nº rev.: 1
S.A.	Product:	INSECTOIL KEY	Replaces : -	Page 5/8

	the boots).		
Other precautions:	Eyes and skin washing apparatus must be available in case of an accident.		
	Work in well ventilated areas and away from possible ignition sources. Work always with wind behind the operator. Avoid contact with skin and inhalation of the spray. Do not eat, drink or smoke when handling the product.		
	Remove contaminated clothes and wash with water and soap before re-use. Do not wear dirty clothes in the pockets. Avoid contact with the product		
Environmental exposition controls:			
Observe the usual precaution measures when using this kind of products			

9. Physical and Chemical Properties

Appearance:	yellowish liquid	Boiling point *:	300-400 °C
Odour:	Characteristic	Vapour pressure *:	<0.1 kPa (20 °C)
pH (1% in water):	5.5-6.5	Melting point:	n.a
Density:	0.815-0.86 g/mL	Flash point *:	>100 °C
Hydrosolubility:	Emulsifiable	Flammability:	Not flammable
Explosivity:	Non explosive	Auto-flammability *:	> 200 °C
Liposolubility:	Soluble in organic solvents	Comburent properties:	Not comburent
n-octanol/water coefficient:		Viscosity:	18.6 cPs (60 rpm)
Other data:			

* Estimated data

10. Stability and Reactivity

Stability:	The product is stable under normal conditions at least two years.
Conditions to avoid:	Exposure to flames and other ignition sources.
Materials to avoid:	Do not mix with sulphur, Dinocap, Acartop, several miticides, antioidium, corrective fertilizers and high doses of certain wettable powders. Oxidation agents.
Hazardous decomposition products:	Incomplete burning may generate carbon monoxide (COX) and irritating vapor/smoke.

Industrial Química Key,	MATERIAL SAFETY DATA SHEET according to Regulation (EC) 453/2010 and 1907/2006/CE		Reviewed : -	Nº rev.: 1
S.A.	Product:	INSECTOIL KEY	Replaces : -	Page 6/8

11. Toxicological Information

Entrance route:	By ingestion, inhalation and skin and eyes contact.		
Acute and chronic effects:	LD ₅₀ (oral-rat) > 2000 mg LD ₅₀ (skin-rat) > 2000 mg LC ₅₀ (inhalation-rat) > 5 mg/L (4 h)		
Irritation:	Skin: irritant Eyes: non irritant Inhalation: non irritant.		
Sensibiliser potential:	Non sensibiliser.		
Carcinogenicity:	Mineral oil is not classified as carcinogenic under the Regulation (CE) 1272/2008.		
Mutagenicity:	No mutagenic activity.		
Reproductive toxicity:	No evident toxic effects on the fertility; no teratogenic effects.		
Aspiration hazard:	Classification of a substance with an aspiration hazard is made on the basis of reliable human evidence or on the basis of the physical properties. In the specific case of white mineral oil, if its viscosity at 40 °C is lower than 20,5 cSt, it will be classified as toxic for aspiration under category 1.		

12. Ecological Information

Ecotoxicity			
Aquatic toxicity:	LC_{50} , 96 h, rainbow trout > 100 mg/L		
	CE ₅₀ , 48 h, <i>Daphnia magna</i> : > 100 mg/L		
	CE ₅₀ , 72 h, Scenedesmus	s subspicatus > 100 mg/L	
Bees toxicity:	LD_{50} , oral and contact > 1	00 mg/bee	
	own low toxicity to predator tically non toxic to bees.	y mites and, in general, to the beneficial	
-	use long term negative effeo nation. However, it is a high	cts in the environment, due to its high potential ly biodegradable product.	
Mobility bioaccum	ulation		
• Due to its physic-chemical properties, this product shows low mobility in the soil.			
• In water, the product spreads on its surface due to its insolubility.			
• The product does not bioaccumulate in living animals. It has no incidence on the food trophic chain.			
 The bioaccumulation of the product in the environment is very low. 			
Persistence / degradability			
• The product degrades rapidly. Paraffin oil biodegradability in 28 days is 86% (OECD 301F)			
Other data:			
Theoretical DQO: no data available Theoretical COT: no data available			

Industrial Química Key,	MATERIAL SAFETY DATA SHEET according to Regulation (EC) 453/2010 and 1907/2006/CE		Reviewed : -	Nº rev.: 1
S.A.	Product:	INSECTOIL KEY	Replaces : -	Page 7/8

13. Disposal Considerations

Product disposal:	No residues of the product will remain if once finished the preparation of the spray mixture, the container is rinsed three times with water and poured the rising water into the spraying tank.
Disposal of empty containers:	The container, washed as indicated in the point above, constitutes a hazardous residue; the user is obliged to dispose it in a reputable waste disposal company.
Disposal of residues:	Dispose in accordance with federal, state and local requirements.

14.	Transp	ort Info	rmation
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ADR Labelling Packing group: Hazard class number: ONU No.: Description:	- - NC NC
RID Description:	NC
IMDG Description:	NC
IATA Description:	NC

Special precautions: do not transport with feed. Avoid high temperatures. Check that the containers are in good condition and labels are not damaged before distribution.

15. Regulatory Information

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

Within the European Union, the following Directives/Regulations are applicable to the product:

- Regulation (CE) N° 1272/2008 \ldots concerning classification, labeling and packaging of substances and mixtures....

15.2 Chemical safety assessment

"Aspiration" means the entry of the liquid substance directly into the trachea and the lower respiratory tract. Aspiration of substances like mineral oil may cause severe acute effects, such as chemical pneumonia, various degrees of lung damages or death. This property is related with the potential ability of low viscosity materials to rapidly disperse to the bottom of the lungs and cause severe damages in the lung tissue.

Industrial Química Key,		MATERIAL SAFETY DATA SHEET according to Regulation (EC) 453/2010 and 1907/2006/CE		Nº rev.: 1
S.A.	Product: INSECTOIL KEY		Replaces : -	Page 8/8

The objective of the indications provided in Section 8 is to reduce/avoid the contact or incidents with the substance. Nevertheless, the implementation of the risk management measures (RMM) and the conditions of the operations must be proportionate to the health risk presented by the substance.

Exposure must be controlled up to the level when they present at least and acceptable risk level, with an implementation of the selected RMM that assure that the possibility that occurrence of an event due to the hazard of the substance is insignificant, and the risk is considered to be controlled to the degree of no concern.

There is no anticipated usual exposure for the ingestion related with any confirmed use of the substance.

The risk arising from the aspiration hazard may be controlled by the implementation of the risk management measures as per the specific degree of risk.

16. Other Information

Consulted data base

• Agro-Research. Agrichemical Directory and Hazard Response Handbook. Agro-Research enterprises LTd.

• RTECS (Registry of Toxic Effects of Chemical Substances). U.S. Department of Health and Human Services (1981-82).

- ESIS. European chemical Substances Information System.
- Instituto Nacional de Seguridad e Higiene en el Trabajo (INSHT).
- The Pesticide Manual, Fourteenth Edition (2006). Editor: C D S Tomlin.

Farmacología vegetal, Carlos De Liñan y Vicente. 3ª Edición. Ediciones Agrotécnicas, S.L.
Manual Toxicológico de Productos Fitosanitarios para Uso Sanitario.

Other R and S phrases

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Changes performed:

Change in the product classification. New toxicological and ecotoxicological studies.

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