

RESCUE

Version 4 - This version replaces all previous versions.

Revision Date 09.09.2014

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name : RESCUE

Design code : A15245A

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use : Herbicide

1.3 Details of the supplier of the safety data sheet

Company Syngenta UK Limited
CPC4, Capital Park
Fulbourn, Cambridge
CB21 5XE

Telephone : (01223) 883400

Telefax : (01223) 882195

Website : www.greencast.co.uk

1.4 Emergency telephone number

: (0) 1484 538444

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EU) 1272/2008

Aspiration hazard	Category 1	H304
Skin sensitisation	Category 1A	H317
Reproductive toxicity	Sub-category 1B	H360Df
Chronic aquatic toxicity	Category 2	H411

For the full text of the H-Statements mentioned in this Section, see Section 16.

Classification according to EU Directives 67/548/EEC or 1999/45/EC

T, Toxic

N, Dangerous for the environment

R38: Irritating to skin.

R43: May cause sensitisation by skin contact.

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R61: May cause harm to the unborn child.

R62: Possible risk of impaired fertility.

R65: Harmful: may cause lung damage if swallowed.




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2.2 Label elements



Labelling: Regulation (EC) No. 1272/2008

Hazard pictograms		
		
Signal Word	:Danger	
Hazard Statements	:H304 :H317 :H360Df :H411	May be fatal if swallowed and enters airways. May cause an allergic skin reaction. May damage the unborn child. Suspected of damaging fertility. Toxic to aquatic life with long lasting effects.
Precautions Statements	:P102 :P201 :P280 :P301/P310 :P308/P313 :P331 :P391 :P501	Keep out of reach of children. Obtain special instructions before use. Wear protective gloves/protective clothing. IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. IF exposed or concerned: Get medical advice/attention. Do NOT induce vomiting Collect spillage. Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.
Supplemental Information	:EUH401 :EUH066	To avoid risks to human health and the environment comply with the instructions for use. Repeated exposure may cause skin dryness or cracking.

Hazardous components which must be listed on the label:

- solvent naphtha (petroleum), highly arom.
- pinoxaden
- cloquintocet-mexyl
- Tetrahydrofurfuryl alcohol

Labelling: EU Directives 67/548/EEC or 1999/45/EC

Symbol(s)		
		
TOXIC	DANGEROUS FOR THE ENVIRONMENT	
R-phrase(s)	R38 R43 R51/53 R61 R62 R65	Irritating to skin. May cause sensitisation by skin contact. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. May cause harm to the unborn child. Possible risk of impaired fertility. Harmful: may cause lung damage if swallowed.

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S-phrase(s)	S2	Keep out of the reach of children
	S13	Keep away from food, drink and animal feedingstuffs
	S20/21	When using do not eat, drink or smoke
	S35	This material and its container must be disposed of in a safe way
	S36/37	Wear suitable protective clothing and gloves.
	S57	Use appropriate containment to avoid environmental contamination
	S62	If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.
Special labelling of certain mixtures	To avoid risks to man and the environment, comply with instructions for use.	

Hazardous components which must be listed on the label:

- cloquintocet-mexyl
- solvent naphtha (petroleum), highly arom.
- Pinoxaden
- Tetrahydrofurfuryl alcohol

2.3 Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration
solvent naphtha (petroleum), highly arom.	64742-94-5 265-198-5 01-2119451097-39	Xn, N R51/53 R65 R66	Asp. Tox.1; H304 Aquatic Chronic2; H411	25 - 40 % W/W
Tetrahydrofurfuryl alcohol	97-99-4 202-625-6	T R36 R61 R62	Repr.1B; H360Df Eye Irrit.2; H319	15 - 25 % W/W
pinoxaden	243973-20-8	Xn R20 R36/37/38 R43 R52/53	Acute Tox.4; H332 Skin Irrit.2; H315 Skin Sens.1; H317 Eye Irrit.2; H319 STOT SE3; H335 Aquatic Chronic3; H412	4.59 % W/W
cloquintocet-mexyl	99607-70-2 01-2119381871-32-0 000 01-2119387592-28-0 000	Xi, N R43 R50 /53	Skin Sens.1; H317 Aquatic Acute1; H400 Aquatic Chronic1; H410	1.15 % W/W

Substances for which there are Community workplace exposure limits.

For the full text of the R-phrases mentioned in this Section, see Section 16.

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

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General Advice	:	Have the product container, label or Material Safety Data Sheet with you when calling the Syngenta emergency number, a poison control centre or physician, or going for treatment.
Inhalation	:	Move the victim to fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest. Call a physician or Poison Control Centre immediately.
Skin Contact	:	Take off all contaminated clothing immediately. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash contaminated clothing before re-use.
Eye Contact	:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Immediate medical attention is required.
Ingestion	:	If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : Aspiration may cause pulmonary oedema and pneumonitis.

4.3 Indication of any immediate medical attention and special treatment needed

Medical advice There is no specific antidote available. Treat symptomatically. Do not induce vomiting: contains petroleum distillates and/or aromatic solvents.

SECTION 5. FIREFIGHTING MEASURES

- 5.1 Extinguishing media**
 Extinguishing media - small fires
 Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
 Extinguishing media - large fires
 Use alcohol-resistant foam or water spray.
 Do not use a solid water stream as it may scatter and spread fire.
- 5.2 Special hazards arising from the substance or mixture**
 As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10). Exposure to decomposition products may be a hazard to health.
- 5.3 Advice for fire-fighters:**
 Wear full protective clothing and self-contained breathing apparatus. Do not allow run-off from fire fighting to enter drains or water courses. Cool closed containers exposed to fire with water spray.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions, protective equipment and emergency procedures**
 Refer to protective measures listed in sections 7 and 8.
- 6.2 Environmental precautions:**
 Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.
- 6.3 Methods and materials for containment and cleaning up**
 Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). If the product contaminates rivers and lakes or drains inform respective authorities.

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- 6.4 Reference to other sections**
 Refer to protective measures listed in sections 7 and 8.
 Refer to disposal considerations listed in section 13.

SECTION 7. HANDLING AND STORAGE

- 7.1 Precautions for safe handling**
 No special protective measures against fire required. Avoid contact with skin and eyes. When using do not eat, drink or smoke. For personal protection see section 8.
- 7.2 Conditions for safe storage, including any incompatibilities**
 No special storage conditions required. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep away from food, drink and animal feedingstuffs.
- 7.3 Specific end use(s)**
 Registered Crop Protection products: For proper and safe use of this product, please refer to the approval conditions laid down on the product label.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components	Exposure limit(s)	Type of exposure limit	Source
cloquintocet-mexyl	10 mg/m ³	8 h TWA	SYNGENTA
Solvent naphtha (petroleum), highly arom.	20 ppm, 100 mg/m ³	8 h TWA	SUPPLIER
pinoxaden	0.1 mg/m ³	Ceiling Limit Value	SYNGENTA

The following recommendations for exposure controls/personal protection are intended for the manufacture, formulation and packaging of the product.

8.2 Exposure controls

- Engineering Measures** : Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated. The extent of these protection measures depends on the actual risks in use. If airborne mists or vapours are generated, use local exhaust ventilation controls. Assess exposure and use any additional measures to keep airborne levels below any relevant exposure limit. Where necessary, seek additional occupational hygiene advice.
- Protective measures** : The use of technical measures should always have priority over the use of personal protective equipment. When selecting personal protective equipment, seek appropriate professional advice. Personal protective equipment should be certified to appropriate standards.
- Respiratory protection** : No personal respiratory protective equipment normally required. A particulate filter respirator may be necessary until effective technical measures are installed.
- Hand protection** : Suitable material: nitrile rubber.
 Break through time: > 480 min
 Glove thickness: 0.5 mm

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	Chemical resistant gloves should be used. Gloves should be certified to an appropriate standard. Gloves should have a minimum breakthrough time that is appropriate to the duration of exposure. The breakthrough time of gloves varies according to the thickness, material and manufacturer. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
Eye Protection	: Eye protection is not usually required. Follow any site specific eye protection policies.
Skin and body protection	: Assess the exposure and select chemical resistant clothing based on the potential for contact and the permeation / penetration characteristics of the clothing material. Wash with soap and water after removing protective clothing. Decontaminate clothing before re-use, or use disposable equipment (suits, aprons, sleeves, boots, etc.). Wear as appropriate: impervious protective suit.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical

properties

Physical State	: Liquid
Form	: clear
Colour	: Yellow-orange to orange brown
Odour	: Aromatic
Odour Threshold	: No data available
pH	: 3-7 at 1.0 % w/v
Melting point/range	: No data available
Boiling point/boiling range	: No data available
Flash point	: 79 °C at 101.5 kPa Pensky-Martens c.c.
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Lower explosion limit	: No data available
Upper explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Density	: 0.98 g/ml at 20 °C
Solubility in other solvents	: No data available
Partition Coefficient n-octanol/water	: No data available
Autoignition temperature	: 300 °C
Thermal decomposition	: No data available
Viscosity, dynamic	: 15.8 mP.a.s at 20 °C 8.2 mP.a.s at 40 °C
Viscosity, kinematic	: No data available
Explosive properties	: Not explosive
Oxidizing properties	: Not oxidising

9.2 Other information

Miscibility	: Miscible
Surface tension	: 31.2 mN/m at 25 °C

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity : See Section 10.3 "Possibility of hazardous reactions"

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10.2 Chemical Stability	:	The product is stable when used in normal conditions
10.3 Possibility of hazardous reactions	:	No hazardous reactions by normal handling and storage according to provisions.
10.4 Conditions to avoid	:	No decomposition if used as directed.
10.5 Incompatible materials	:	No substances are known which lead to the formation of hazardous substances or thermal reactions.
10.6 Hazardous decomposition products	:	Combustion or thermal decomposition will evolve toxic and irritant vapours.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute oral toxicity	:	LD50 female rat, >5,000 mg/kg The toxicological data has been taken from products of similar composition.
Acute inhalational toxicity	:	Acute toxicity estimate, > 5.0 mg/l.
Acute dermal toxicity	:	LD50 male and female rat, > 5,000 mg/kg The toxicological data has been taken from products of similar composition.
Skin corrosion/irritation	:	Rabbit: moderately irritating. The toxicological data has been taken from products of similar composition.
Serious eye damage/eye irritation	:	Rabbit: mild eye irritation The toxicological data has been taken from products of similar composition.
Respiratory or skin sensitisation	:	Buehler Test guinea pig: a skin sensitiser. The toxicological data has been taken from products of similar composition.
Germ cell mutagenicity	:	
solvent naphtha		Did not show mutagenic effects in animal experiments.
pinoxaden		Did not show mutagenic effects in animal experiments.
cloquintocet-mexyl		Did not show mutagenic effects in animal experiments.
Carcinogenicity	:	
solvent naphtha		Did not show carcinogenic effects in animal experiments.
pinoxaden		Did not show carcinogenic effects in animal experiments.
cloquintocet-mexyl		Did not show carcinogenic effects in animal experiments.
Reproductive toxicity	:	
solvent naphtha		Did not show reproductive toxicity effects in animal experiments.
tetrahydrofurfuryl alcohol		May damage the unborn child. Suspected of damaging fertility.
pinoxaden		Did not show reproductive toxicity effects in animal experiments.
cloquintocet-mexyl		Did not show reproductive toxicity effects in animal experiments.
STOT – repeated exposure	:	
solvent naphtha		No adverse effect has been observed in chronic toxicity tests.
pinoxaden		No adverse effect has been observed in chronic toxicity tests.
cloquintocet-mexyl		No adverse effect has been observed in chronic toxicity tests.

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish	:	LC50 <i>Oncorhynchus mykiss</i> (rainbow trout), 24 mg/l, 96 h Based on test results obtained with similar product.
Toxicity to aquatic	:	EC50 <i>Daphnia magna</i> (water flea), 4 mg/l, 48 h

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invertebrates : Based on test results obtained with similar product.
Toxicity to aquatic plants : EbC50 *Pseudokirchneriella subcapitata* (green algae), 3.27 mg/ml, 72 h
 ErC50 *Pseudokirchneriella subcapitata* (green algae), 8.04mg/l, 72 h.
 Based on test results obtained with similar product.

12.2 Persistence and degradability

Biodegradability :

solvent naphtha	Expected to be biodegradable
pinoxaden	Not readily biodegradable
cloquintocet-mexyl	Not readily biodegradable

Stability in water :

Pinoxaden	Degradation half life: 0.3 d. Not persistent in water
cloquintocet-mexyl	Degradation half life: 0.4 d. Not persistent in water

Stability in soil :

Pinoxaden	Degradation half life: 0.1 – 1.8 d. Not persistent in soil
cloquintocet-mexyl	Degradation half life 2.4 d. Not persistent in soil

12.3 Bioaccumulative potential

solvent naphtha : Accumulation in aquatic organisms is expected.
 pinoxaden : Low bioaccumulation potential.
 cloquintocet-mexyl : Does not bioaccumulate.

12.4 Mobility in soil

pinoxaden : Pinoxaden has medium mobility in soil.
 cloquintocet-mexyl : Cloquintocet-mexyl is immobile in soil.

12.5 Results of PBT and vPvB assessment

Pinoxaden, : These substances are not considered to be persistent,
 cloquintocet-mexyl bioaccumulating nor toxic (PBT).
 These substances are not considered to be very persistent nor
 very bioaccumulating (vPvB).

12.6 Other adverse effects

Other information : Classification of the product is based on the summation of the concentrations of classified components.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product : Do not contaminate ponds, waterways or ditches with chemical or used container. Do not dispose of waste into sewer. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations.

Contaminated packaging : Empty remaining contents. Triple rinse containers. Empty containers should be taken for local recycling or waste disposal. Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

Land transport (ADR/RID)

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14.1	UN Number	:	UN 3082
14.2	UN proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CLOQUINTOCET-MEXYL AND SUBSTITUTED BENZENOID HYDROCARBONS)
14.3	Transport hazard class(es)	:	9
14.4	Packing Group	;	III
Labels		:	9
14.5	Environmental hazards	:	Environmentally hazardous

Sea transport(IMDG)

14.1	UN Number	:	UN 3082
14.2	UN proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CLOQUINTOCET-MEXYL AND SUBSTITUTED BENZENOID HYDROCARBONS)
14.3	Transport hazard class(es)	:	9
14.4	Packing Group	;	III
Labels		:	9
14.5	Environmental hazards	:	Marine pollutant

Air transport (IATA-DGR)

14.1	UN Number	:	UN 3082
14.2	UN proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CLOQUINTOCET-MEXYL AND SUBSTITUTED BENZENOID HYDROCARBONS)
14.3	Transport hazard class(es)	:	9
14.4	Packing Group	;	III
Labels		:	9
14.6	Special precautions for user	:	none

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

SECTION 15. REGULATORY INFORMATION

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

GHS Labelling

Hazard pictograms



Signal Word :Danger

Hazard Statements :H304 May be fatal if swallowed and enters airways.
 :H317 May cause an allergic skin reaction.
 :H360Df May damage the unborn child. Suspected of damaging fertility.
 :H411 Toxic to aquatic life with long lasting effects.

Precautions Statements :P102 Keep out of reach of children.
 :P201 Obtain special instructions before use.

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	:P280	Wear protective gloves/protective clothing.
	:P301/P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
	:P308/P313	IF exposed or concerned: Get medical advice/attention.
	:P331	Do NOT induce vomiting
	:P391	Collect spillage.
	:P501	Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.
Supplemental Information	:EUH401	To avoid risks to human health and the environment comply with the instructions for use.
	:EUH066	Repeated exposure may cause skin dryness or cracking.

Hazardous components which must be listed on the label:

- solvent naphtha (petroleum), highly arom.
- pinoxaden
- cloquintocet-mexyl
- tetrahydrofurfuryl alcohol

15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this substance.

SECTION 16. OTHER INFORMATION

Approval number, MAPP 14518.

Use plant protection products safely. Always read the label and product information before use.

Based upon SDS release dated 09/09/2014, version 4 with local amendment.

Full text of R-phrases referred to under sections 2 and 3:

R20	Harmful by inhalation.
R36	Irritating to eyes.
R36/37/38	Irritating to eyes, respiratory system and skin.
R43	May cause sensitisation by skin contact.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R61	May cause harm to the unborn child.
R62	Possible risk of impaired fertility.
R65	Harmful: may cause lung damage if swallowed.
R66	Repeated exposure may cause skin dryness or cracking.

Full text of H-Statements referred to under sections 2 and 3.

H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H360Df	May cause damage to the unborn child.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

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H412 Harmful to aquatic life with long lasting effects.

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