

1. Identification of the substance/preparation and the company/undertaking

Identification of the preparation:	Picloram as the potassium salt 240 g/l plus coformulants to 100%, as a suspension concentrate.	
Trade name:	RouteOne Loram 24	
Use of the preparation:	For use only as an agricultural/horticultural/industrial herbicide.	
Company identification:	Albaugh UK Ltd., Manor Farm, Eddlethorpe, Malton. YO17 9QT	
	Telephone:	01653 658657
	Fax:	01653 658050
	Email:	msds@albaughurope.eu
	Web:	
Emergency telephone:	For advice on medical emergencies, fires, spillages or chemical hazards ONLY:	+44 (0) 208 762 8322
	UK National Poisons Information Service:	+ 44 (0)121 507 4123

2. Hazards identification

Hazard classification: Classified as "Xi": Irritant.

R43: May cause sensitisation by skin contact

R52: Harmful to aquatic organisms.

3. Composition / information on ingredients

Chemical Name	CAS-No.	EC-No.	Annex I Index no.	Classification	Concentration
potassium 4-amino-3,5,6-trichloropyridine-2-carboxylate	2545-60-0	219-829-6	-	-	240 g/l
Other ingredients	-	-	-	-	to 100%

For full text of R phrases, refer to Section 16.

4. First aid measures

<i>General advice:</i>	If symptoms occur after exposure to this product, seek medical advice and show the product label or this SDS. Remove to fresh air and keep at rest. Do not allow smoking or eating. Take off all contaminated clothing and footwear. Comply with all the necessary protection and safety measures to avoid contamination in giving first aid.
<i>Eye contact:</i>	Immediately rinse with water. Holding eyes open, continue rinsing for 15 minutes at least. Remove contact lenses as soon as possible. Seek medical attention if irritation persists.
<i>Skin contact:</i>	Remove all contaminated clothing immediately. Wash skin with soap and rinse with plenty of water. Seek medical attention if irritation persists. Wash clothes before re-use.
<i>Inhalation:</i>	Remove to fresh air and keep at rest. Administer artificial respiration if breathing has stopped and seek medical attention.
<i>Ingestion:</i>	If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label. Remove any residues from mouth and rinse it with plenty of water. Never give anything by mouth to an unconscious person.
<i>Information for doctors:</i>	Treat symptomatically. No specific antidote. In case of ingestion, do NOT induce vomiting. Gastric lavage may be necessary (with proper laryngeal control). Before emptying the stomach, assess the potential danger arising from lung aspiration against the product toxicity. Report to Albaugh UK Ltd any unusual symptoms occurring after exposure by any route.

5. Fire fighting measures

<i>Suitable extinguishing media:</i>	Carbon dioxide, water spray, alcohol-resistant foam, dry chemical for small fires, alcohol-resistant foam or water spray for large fires.
<i>Unsuitable extinguishing media:</i>	Solid water jet.
<i>Special hazards:</i>	May evolve toxic and irritant fumes in fire. Avoid breathing smoke or mists when fire fighting.
<i>Protective equipment:</i>	Use a positive pressure, self-contained breathing apparatus and protective clothing.
<i>Further information:</i>	Call the Fire Brigade at once to deal with all fires involving pesticides unless the fire is small and immediately controllable. Spray unopened containers with a mist spray to keep cool. If without risk, remove intact containers from exposure to fire. Contain fire-fighting water, bunding if necessary with sand or earth. Do not allow contamination of public drains or surface or ground waters. Dispose of fire debris and contaminated water as advised in the MAFF/HSE "Pesticides: Code of Practice for the Safe Use of Pesticides on Farms and Holdings".

Version 1 UK

Issue date: 10-03-09

6. Accidental release measures

<i>Personal precautions:</i>	Wear prescribed protective clothing, refer to precautions outlined in Section 8.
<i>Environmental precautions:</i>	Use appropriate containment to avoid environmental contamination. Control the release at its source. Contain the spill to prevent it from spreading, contaminating soil or entering sewage and drainage systems or any body of water. Inform the local water company if the release enters drains and the Environment Agency (England and Wales), the Scottish Environmental Protection Agency (Scotland) or the Environment and Heritage Service (Northern Ireland) if it enters surface or ground waters. Do not allow people or animals to access the contaminated area.
<i>Methods for cleaning up:</i>	Clean up spills immediately. Contain spill by diking with earth, sand or absorbent material and place it into a compatible marked disposal container. Scrub area with a hard water detergent. Soak up wash liquid with additional absorbent material and place into a marked disposal container. Once all material is cleaned up and placed in a container, seal and arrange for disposal according to Section 13.

7. Handling and storage

CAUTION: HANDLE WITH CARE.

Handling:	Avoid all contact by mouth, with eyes and skin. Do not breathe spray. Wear personal protective equipment as specified in Section 8. When using, do not eat, drink or smoke. Wash hands and exposed skin before eating and after work. Wash all protective clothing thoroughly after use, especially the insides of gloves.
Storage:	Keep in original container, tightly closed, in a dry, cool and safe place. Store in a locked, suitable pesticide store. Keep out of the reach of children and unauthorised personnel. Keep away from food, drink and animal feeding stuffs. Keep dry and frostproof in a suitable pesticide store.
Specific uses:	For professional use exclusively as a herbicide as directed by the product label, every other use is hazardous.

8. Exposure control/personal protection

Comply with the Health and Safety at Work etc. Act 1974, as amended, the Control of Substances Hazardous to Health Regulations 1999 (COSHH), as amended, and the instructions indicated on the label.

Exposure limit values:	The preparation contains picloram which has a WEL of 10 mg/m ³ (8-hr TWA reference period) and of 20 mg/m ³ (15-min STEL reference period).
Exposure controls:	In order to minimize worker and environmental exposure, use engineering controls and appropriate work processes in preference to personal protective equipment in the areas where the preparation is handled, transported, loaded, unloaded, stored and used.
<i>Occupational exposure controls</i>	Provide adequate ventilation. Use specialized transfer systems if available. Wear suitable protective clothing (coveralls) and suitable protective gloves when handling the concentrate. Wash concentrate from skin or eyes immediately. Do not breathe spray. Wash hands and exposed skin before meals and after work. Wash all protective clothing thoroughly after use, especially the insides of gloves. When using do not eat, drink or smoke.
Respiratory protection:	No special requirement when used as recommended. For exposure to spray particles, wear particle filtering half mask (EN 149) or half mask connected to particle filter (EN 140 + 143).
Hand protection:	Wear suitable protective gloves against chemicals (EN 374 part 1, 2, 3). Nitrile rubber min. 0.5mm thick and 300mm long gloves are the ones proven to be the most suitable according to tests on pesticide products. Wash the gloves thoroughly after each use, especially the insides. Replace gloves if damaged and before exceeding the breakthrough time.
Eye protection:	Avoid contact with eyes. If there is a significant potential for contact, wear suitable eye protection (EN 166).
Skin protection:	Avoid contact with skin. If there is a significant potential for contact, wear suitable coveralls (ISO 13982-1, Type 5, EN 13034, Type 6).
<i>Environmental exposure controls</i>	Implement all applicable local and community environmental protection legislation. Use appropriate containment to avoid environmental contamination. Do not contaminate water with the product or its container. Do not clean application equipment near surface water. Avoid contamination via drains from farmyards and roads. Refer to Section 12 and 13.

9. Physical and chemical properties

General information

<i>Appearance:</i>	Liquid
<i>Colour:</i>	Dark brown
<i>Odour:</i>	Faint

Important health, safety and environmental information

<i>pH:</i>	9.0-11.2
<i>Flash point:</i>	None (water based)
<i>Water solubility:</i>	Completely miscible with water
<i>Relative density:</i>	Approx. 1.14 g/cm ³
<i>Boiling point:</i>	Approx. 100 °C
<i>Vapour pressure:</i>	Approx. 22 mmHg/20 °C

10. Stability and reactivity

Conditions to avoid:	Do not store in proximity of sources of ignition and direct sunlight. Protect from frost.
Materials to avoid:	Strong oxidising agents, strong acids or basis.
Hazardous decomposition products:	None under correct storage and handling conditions. During decomposition evolves toxic and irritating fumes.

11. Toxicological information

<i>Acute oral LD₅₀ (rat):</i>	>2000 mg/kg
<i>Acute dermal LD₅₀ (rabbit):</i>	>2000 mg/kg
<i>Inhalation:</i>	Not determined.
<i>Skin irritation:</i>	Mild irritant (prolonged or repeated exposure).
<i>Eye irritation:</i>	Moderate eye irritant.
<i>Sensitisation (guinea pig):</i>	Sensitising.
<i>Carcinogen status:</i>	No evidence of carcinogenicity.
<i>Mutagenicity:</i>	No evidence of mutagenicity.
<i>Reproductive toxicity:</i>	No evidence of teratogenicity.

12. Ecological information

Data mainly or completely based on a.i.

Ecotoxicity

<i>LC₅₀ Fish:(Cyprinodon variegatus):</i>	>100 mg/l (formulated product)
<i>LC₅₀ Aquatic Invertebrates (Daphnia magna):</i>	68 mg/l (picloram acid)
<i>EC₅₀ Algae (Green algae):</i>	37 mg/l (picloram acid)
<i>LC₅₀ Birds (Mallard duck):</i>	>10 mg/kg (formulated product)
<i>LC₅₀ Birds (Colinus virginianus):</i>	>10 mg/kg (formulated product)
<i>Honey bees:</i>	Non toxic.

Mobility:	Not determined.
Persistence and degradability:	Half-life of picloram acid in soil is 10-278 days.
Bioaccumulative potential:	Not determined.
Other adverse effects:	Not determined.

Version 1 UK

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13. Disposal considerations

Disposal of waste product, contaminated packaging materials and any excess diluted spray should be in accordance with The Hazardous Waste (England and Wales) Regulations 2005 and any other applicable local or national legislation (for guidance refer to the MAFF/HSE "Pesticides: Code of Practice for the Safe Use of Pesticides on Farms and Holdings").

For the handling and management of accidental release, follow the information given under Section 6 and 7.

This material and its container must be disposed of in a safe way.

14. Transport information

The preparation is not classified as dangerous for transport.

15. Regulatory information

This preparation is a herbicide classified as "Xi": Irritant in accordance with The Chemicals (Hazard Information & Packaging for Supply) Regulations 2002 (CHIP 3)¹⁾ and identified with the following symbol:



IRRITANT

Restrictions and health, safety and environmental information on the product label not mentioned elsewhere on this SDS:

Rinse container thoroughly by using an integrated pressure rinsing device or manually rinsing three times. Add washings to sprayer at time of filling and dispose of the container safely
To avoid risks to man and the environment, comply with the instructions for use.

Code letter and hazard designation of the preparation:

"Xi": Irritant

R-phrases:

R43, 52.

S-phrases:

2, 13, 20/21, 24, 35, 37, 57

This product is approved under the UK Control of Pesticides Regulations with MAPP no.13951.

For professional use only.

Comply with the Health and Safety at Work etc. Act 1974, as amended, the Control of Substances Hazardous to Health Regulations 1999 (COSHH), as amended, and the instructions indicated on the label.

¹⁾ implementing, among others:

The Dangerous Preparations Directive 1999/45/EC and its first ATP, 2001/60/EC;

The second Amendment, 2001/58/EC, of the Safety Data Sheet Directive 91/155/EEC;

The relevant parts of 2001/59/EC – the 28th ATP to the Dangerous Substances Directive 67/548/EEC.

16. Other information

References/Sources of data:

- Commission Directive 2000/32/EC on the approximation of the laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances;
- Health and Safety at Work etc. Act 1974 as amended and Control of Substances Hazardous to Health Regulations 1999 as amended (COSHH).
- EH40/2005
- BS EN 347, part 1, 2, 3.

Code letter and hazard designation mentioned in Section 2 and 3:

Xi Irritant

Full text of relevant R and S phrases:

R-phrases:	R43	May cause sensitisation by skin contact
	R52	Harmful to aquatic organisms.
S-phrases:	S2	Keep out of reach of children.
	S13	Keep away from food, drink and animal feeding stuffs.
	S20/21	When using do not eat, drink or smoke.
	S24	Avoid contact with skin.
	S35	This material and its container must be disposed of in a safe way.
	S37	Wear suitable gloves.
	S57	Use appropriate containment to avoid environmental contamination.

The information and recommendations in this publication are, to the best of our knowledge, information and belief, accurate at the date of publication. Nothing herein is to be construed as a warranty, expressed or implied. In all cases it is the responsibility of the user to determine the applicability of such information or the suitability of any products for their own particular purpose.

This Material Safety Data Sheet was compiled on 10/03/2009 in compliance with Regulation (EC) No. 1907/2006. This version replaces all previous versions.

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