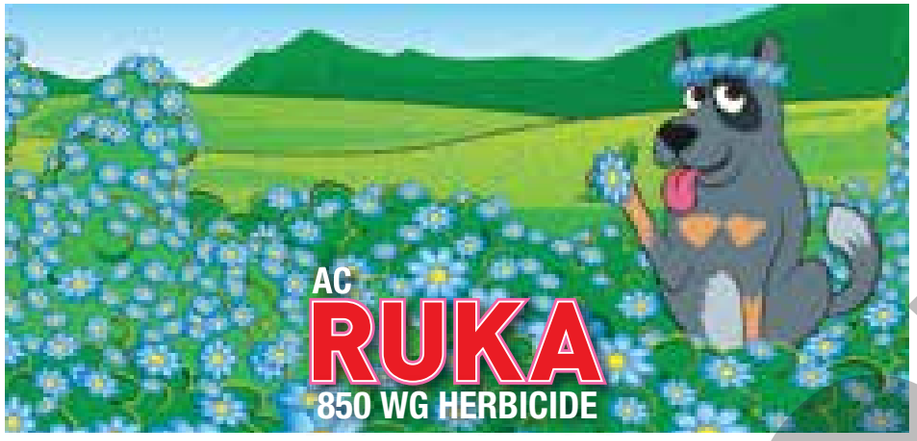
PEEL HERE

POISON

KEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS BEFORE OPENING OR USING



ACTIVE CONSTITUENT: 850 g/kg PYROXASULFONE

GROUP 15 HERBICIDE

For the pre-emergence control of annual ryegrass, barley grass, annual phalaris, silver grass and toad rush and suppression of certain grass weeds in wheat (not durum wheat), triticale and certain winter legume crops as specified in the DIRECTIONS FOR USE

IMPORTANT: READ THIS LEAFLET BEFORE USING THIS PRODUCT

STORAGE AND DISPOSAL

Store in the closed, original container in a dry, cool, well-ventilated area out of direct sunlight.

Triple-rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point.

If not recycling, break, crush, or puncture and deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots, in compliance with relevant local, state or territory government regulations. Do not burn empty containers or product.

SAFETY DIRECTIONS

May irritate the eyes and skin. Repeated exposure may cause allergic disorders. Avoid contact with eyes and skin. When opening the container, preparing spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing), and elbow-length chemical resistant gloves. Wash hands after use.

After each day's use, wash gloves, and contaminated clothing.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26, New Zealand 0800 764 766.

SAFETY DATA SHEET

For further information, refer to the Safety Data Sheet (SDS) which is available from the supplier.

LIMIT OF WARRANTY AND LIABILITY

Seller warrants that the product conforms to its chemical description and is reasonably fit for the purpose stated on the label when used in accordance with directions under normal conditions of use. No warranty of merchantability for a particular purpose, express or implied, extends to the use of the product contrary to label instructions, or under abnormal conditions.

APVMA Approval No: 91986/134083

Batch No:

Date of Manufacture:

IN A TRANSPORT EMERGENCY DIAL 000 POLICE OR FIRE BRIGADE	FOR SPECIALIST ADVICE IN AN EMERGENCY ONLY CALL 1800 039 008 ALL HOURS AUSTRALIA WIDE

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DIRECTIONS FOR USE (FOR ALL STATES)

RESTRAINTS

DO NOT apply with aircraft

DO NOT plant durum wheat (Triticum durum) after the application of AC Ruka 850 WG Herbicide (refer to Crop Rotation Recommendations for further advice). DO NOT apply if heavy rain has been forecast within 48 hours.

DO NOT apply unless incorporation by sowing (IBS) can be performed within 3 days of application. DO NOT apply to waterlogged soil.

DO NOT allow first irrigation tailwater from land treated with AC Ruka 850 WG Herbicide to enter aquatic and wetland areas including aquacultural ponds, surface streams and rivers.

SPRAY DRIFT RESTRAINTS

Specific definitions for terms used in this section of the label can be found at apvma.gov.au/spraydrift

DO NOT allow bystanders to come into contact with the spray cloud.

DO NOT apply in a manner that may cause an unacceptable impact to native vegetation, agricultural crops, landscaped gardens and aquaculture production, or cause contamination of plant or livestock commodities, outside the application site from spray drift. The buffer zones in the relevant buffer zone table/s below provide guidance but may not be sufficient in all situations.

Wherever possible, correctly use application equipment designed to reduce spray drift and apply when the wind direction is away from these sensitive areas.

DO NOT apply unless the wind speed is between 3 and 20 kilometres per hour at the application site during the time of application.

DO NOT apply if there are hazardous surface temperature inversion conditions present at the application site during the time of application. Surface temperature inversion conditions exist most evenings one to two hours before sunset and persist until one to two hours after sunrise.

DO NOT apply by a boom sprayer unless the following requirements are met:

- Spray droplets not smaller than a COARSE spray droplet size category.
- Minimum distances between the application site and downwind sensitive areas (see 'Mandatory buffer zones' section of the following table titled 'Buffer zones for boom sprayers') are observed.

Buffer zones for boom sprayers

Application rate	**Mandatory downwind buffer zones**
	Natural aquatic areas
Up to maximum label rate	80 metres

CROP	WEED	RATE	CRITICAL COMMENTS
Wheat (not durum wheat) and triticale **Chickpeas, field peas, lentils, lupins**	Annual ryegrass (*Lolium rigidum*), annual phalaris or paradoxa grass (*Phalaris paradoxa* only), barley grass (*Hordeum leporinum*), silver grass (*Vulpia bromoides*, *Vulpia myuros*), toad rush (*Juncus bufonius*)	118 g/ha	Apply pre-sowing and incorporate by sowing (IBS) using knife points and press wheels, or narrow points and harrows. For best results apply just before sowing (refer to **Interval between Application and Sowing** in **GENERAL INSTRUCTIONS**). Avoid throwing treated soil into adjacent crop rows when sowing with knife points and press wheels. To reduce the risk of crop effects refer to **Crop Safety** in **GENERAL INSTRUCTIONS.** *Cultivation:* To optimise weed control apply directly to uncultivated soil. Weed control may be greatly reduced where weed seeds have been buried by cultivation prior to sowing. *Rainfall soon after application*: • Weed control may be adversely affected by insufficient rainfall within 7 to 10 days after application. Adequate rainfall is necessary to facilitate uptake of the product by the germinating weed seeds, however the quantity of rainfall required will depend on many factors including stubble load, soil type, the existing soil moisture at sowing, the pattern of rainfall and other considerations. • In soils prone to leaching, rainfall which is sufficiently heavy to cause movement of the herbicide out of the weed seed zone may lead to reduced weed control.
	Suppression* of: Great brome (*Bromus diandrus*), wild oat (*Avena fatua*) *Refer **Suppression of great brome and wild oat** in GENERAL INSTRUCTIONS forfurther details		*Other factors which may adversely affect weed control include;* • uneven application, • application to ridged or cloddy soil, • stubble, plant residue or other ground cover particularly where this exceeds 50%, • germinated and emerged weeds that are not controlled by a knockdown herbicide. The factors above, when combined, may substantially reduce weed control.
			Competition provided by the crop can assist with the final weed control achieved by AC Ruka 850 WG Herbicide. Chickpea, field pea, lentil and lupin crops may provide less competition than cereal crops, hence weeds that survive the application of AC Ruka 850 WG Herbicide may grow taller (relative to the height of the crop), tiller more and generally give the appearance that weed control is poorer compared to weed control in wheat or triticale.

NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.

WITHHOLDING PERIODS

Harvest:

All crops	**NOT REQUIRED WHEN USED AS DIRECTED**

Grazing/Stockfood:

Wheat and triticale	**DO NOT GRAZE OR CUT FOR STOCKFOOD FOR 6 WEEKS AFTER APPLICATION**
Chickpeas, field peas, lentils, lupins	**DO NOT GRAZE OR CUT FOR STOCKFOOD FOR 8 WEEKS AFTER APPLICATION**

GENERAL INSTRUCTIONS

AC Ruka 850 WG Herbicide is a residual, soil applied, pre-emergent herbicide. It is absorbed by the roots and to a lesser extent by the shoots of germinating weeds, and works by inhibiting growth in the meristematic area. Weed control is optimised when AC Ruka 850 WG Herbicide is applied evenly to moist soil just prior to incorporation by sowing and there is sufficient rainfall soon after sowing to ensure uptake of the herbicide by germinating weeds. Weed control may be greatly reduced where weed seeds have been buried by cultivation prior to application. Weed control may also be reduced where there is insufficient soil moisture for herbicide uptake or in soils prone to leaching where rainfall is sufficiently heavy to cause movement of the herbicide out of the weed seed zone.

AC Ruka 850 WG Herbicide will not reliably control emerged weeds. A knockdown herbicide should be used to control emerged weeds at sowing.

Crop Safety

AC Ruka 850 WG Herbicide generally shows good crop selectivity when used as directed. The following directions will help minimise the risk of crop effects.

- Do not plant durum wheat after the application of AC Ruka 850 WG Herbicide as it may be severely damaged. Refer to **Crop Rotation Recommendations** for further advice.
- When incorporation is by sowing with knife points and press wheels avoid throwing treated soil into adjacent crop rows.
- Do not use a combination of both press wheels and a covering device such as harrows or chains when sowing.

The potential for crop damage is increased when there is substantial rainfall after the application of AC Ruka 850 WG Herbicide, especially where this leads to temporary waterlogging. Situations which lead to concentration of herbicide in the planting row, or movement of herbicide to the depth of the crop seed, may also increase the potential for crop damage. This includes the following scenarios;

- Where deep furrows are formed by the sowing operation, soil movement into the crop row may occur due to wind or heavy rainfall soon after sowing resulting in concentration of herbicide in the crop row.
- Where soil has a high potential for leaching, heavy rainfall between application and crop emergence may result in movement of herbicide into the crop seed zone.

Other circumstances which may increase the potential for crop damage include where AC Ruka 850 WG Herbicide is applied in tank mixes with other herbicides, where crop vigour is reduced due to factors such as frosts, insect attack or crop disease, when weather damaged seed is used and/or with the use of some fungicide seed treatments especially in conjunction with crop varieties with short coleoptile length. A combination of individual factors which increase the potential for crop damage may increase the extent of crop damage.

Chickpeas, field peas, lentils and lupins:

- AC Ruka 850 WG Herbicide may occasionally delay emergence or flowering of winter legume crops.
- Luxor variety of albus lupin has been identified as potentially more sensitive to AC Ruka 850 WG Herbicide than other lupin varieties, particularly in situations of late sowing and/or wet conditions around the time of sowing.

Incorporation by Sowing

AC Ruka 850 WG Herbicide should be applied prior to sowing, and incorporated by sowing using knife points and press wheels, or narrow points and harrows. When incorporation is by knife points and press wheels, weeds germinating in the seed row may not be controlled. Weeds germinating from depth, weeds just about to emerge, or weeds that have emerged which are not controlled by a knockdown herbicide at sowing may not be controlled by AC Ruka 850 WG Herbicide.

Interval between Application and Sowing

Incorporate by sowing as soon as practicable after the application of AC Ruka 850 WG Herbicide, but no later than 3 days after application.

Sandy Soils

Weed control may be reduced in soil prone to leaching where rainfall after application and sowing is sufficiently heavy to cause movement of the herbicide out of the weed seed zone.

Suppression of great brome and wild oat

AC Ruka 850 WG Herbicide is most effective when grass weed seeds are present on or very close to the soil surface at the time of application. For this reason, it is recommended that AC Ruka 850 WG Herbicide is applied to uncultivated soil. As the depth of weed seeds increases, control from AC Ruka 850 WG Herbicide tends to decrease. It is rare that all great brome and wild oat weed seeds will be on the soil surface at the time of AC Ruka 850 WG Herbicide application, especially considering that these seeds may remain viable in the soil for several seasons. Plants may germinate from seeds buried by the sowing operation in previous seasons, by livestock or by weed seed self-burial mechanisms particularly in some soil types (e.g. cracking clays and sand). **Therefore, only partial control or suppression of the great brome or wild oat population should generally be expected**. In these situations, a follow up application with a suitable post-emergent herbicide may be required to control remaining plants.

Mixing

Ensure sprayer and nozzle filters are clean before preparing the spray mixture. Half fill the spray tank with water and, with the agitators in motion, add the correct amount of AC Ruka 850 WG Herbicide directly to the spray tank. Complete filling the tank with agitators in motion. Agitation must continue before and during spraying. When other products are to be applied in addition to AC Ruka 850 WG Herbicide, always add AC Ruka 850 WG Herbicide to the spray tank first and ensure it is fully dispersed in the spray tank before adding other products.

Application

Ensure complete and even spray coverage of the soil is achieved. Poor spray coverage may result from application to ridged or excessively cloddy soil or in situations of high stubble, plant residue or other ground cover. A significant reduction in weed control may result where stubble, plant residue or other ground cover exceeds 50%, and in situations where a 'cold' or incomplete burn of stubble results in a mass of material which can act as a physical barrier between the herbicide and germinating weeds - this can be exacerbated in header trails where there may be greater weed seed numbers and higher levels of plant residue. Weed control can be particularly affected where AC Ruka 850 WG Herbicide is applied to a barrier of stubble, plant residue or other

ground cover and there is insufficient following rainfall to transfer AC Ruka 850 WG Herbicide to the soil surface and the germinating weed seeds.

Equipment

Ground Sprayers – Standard boom sprayers only are recommended and must be fitted with by-pass or mechanical agitation. It is recommended that 50 to 100 L water/ha is applied with spray droplets of a COARSE droplet size category. In some situations (e.g. high stubble loads) high water volumes may give higher levels of weed control.

Aircraft – DO NOT apply AC Ruka 850 WG Herbicide by aircraft.

COMPATIBILITY

Crop damage seen in adverse conditions, particularly wet or waterlogged conditions (refer **Crop Safety** above) may be exacerbated when AC Ruka 850 WG Herbicide is used in conjunction with other herbicides that may also cause crop damage in such conditions.

Always refer to the crop tolerance, plant back restrictions, rate recommendations and other directions for use on the label of the tank mix partner.

Refer to **Mixing** section above for advice on preparing tank mixtures with AC Ruka 850 WG Herbicide. Mixtures with products containing paraquat (e.g. AC Piston 250) require particular attention to these instructions, including ongoing agitation to ensure AC Ruka 850 WG Herbicide remains in suspension in the spray tank. For advice on compatibilities not listed below, contact Axichem Pty Ltd.

For application prior to planting wheat or triticale

AC Ruka 850 WG Herbicide 850 WG is compatible with any one of the following herbicides;
AC Militia 600, AC Spectre, AC Diffuse 500, AC Dread 900, AC Menace 960, AC Escort 680, AC Carvup 750, glyphosate, AC Piston 250, AC Consort, AC Tulloch 750, AC Carvup 750, AC Oxxel 240, AC Clearoff 480.

AC Ruka 850 WG Herbicide 850 WG is compatible with mixtures of glyphosate with any one of the following herbicides; AC Militia 600, AC Diffuse 500, AC Escort 680, AC Oxxel 240, AC Consort, AC Joust 750.

AC Ruka 850 WG Herbicide 850 WG is compatible with any one of the following insecticides; AC Ferocity 100, AC Omethoate 290.

For application prior to planting chickpeas, field peas, lentils or lupins

Knockdown herbicides, some "spike" herbicides and insecticides shown to be compatible with AC Ruka 850 WG Herbicide prior to planting cereals, should also be suitable prior to planting chickpeas, field peas, lentils or lupins e.g. glyphosate, AC Oxxel, AC Piston 250, AC Consort 400, AC Ferocity 100, AC Omethoate 290.
Note that plantback restrictions may render some herbicides unsuitable for mixing with AC Ruka 850 WG Herbicide where legume crops are to be planted.

Limited studies have shown that the following residual herbicides appear to be compatible with AC Ruka 850 WG Herbicide when used according to label directions:
Chickpeas: AC Clearoff, AC Snapper 900, AC Clearoff + AC Snapper 900, AC Tubs 875 WG
Field peas: AC Clearoff, Pendendimethalin 440EC, Cyanazine 900 WG, AC Tubs 875 WG
Lentils: Pendimethalin 440EC, AC Tubs 875 WG.
Lupins:, AC Clearoff, AC Snapper 900, AC Clearoff + AC Snapper 900, AC Snapper 900 + AC Axis 900, AC Axis 900, Pendimethalin 440 EC, AC Tubs 875WG.

Sprayer clean-up

Following the use of AC Ruka 850 WG Herbicide, the spraying equipment should be thoroughly cleaned before it is used for application of other products.

Cleaning should occur immediately following application of AC Ruka 850 WG Herbicide. The spray unit should first be completely emptied. The sprayer, including all filters and lines, should be thoroughly rinsed with water, to remove all traces of product.

Ensure that the sprayer clean-up is carried out in an area that is clear of waterways, desirable vegetation and tree roots. If using AC Ruka 850 WG Herbicide with a tank-mix partner, refer to the sprayer clean-up instructions for the other product, which may be more rigorous than those for AC Ruka 850 WG Herbicide.

Crop Rotation Recommendations

AC Ruka 850 WG Herbicide breaks down by microbial degradation, which is favoured by warm, moist aerobic soil.

Minimum recropping intervals (months after AC Ruka 850 WG Herbicide application) have been established for AC Ruka 850 WG Herbicide to minimise the risk of damage to following crops (see table below). However, environmental and agronomic factors make it impossible to eliminate all risk and therefore the potential for damage to following crops exists.

Rainfall of less than the minimum interim rainfall required (see table below) may result in extended recropping intervals. Interim rainfall is the total rainfall between the application of AC Ruka 850 WG Herbicide and planting of the particular following crop. For recropping with winter crops, where a minimum of 250 mm of interim rainfall is required, if rain from application to the end of spring is less than 125 mm and isolated heavy summer and autumn falls and break rains are required to achieve the 250 mm interim rainfall, then extended recropping intervals may apply.

Crops	**Recropping recommendation**	
	Minimum recropping interval	**Minimum interim rainfall**
Wheat (not durum wheat) and triticale	0 months	0 mm
Cotton, maize, mung beans, sorghum, soybeans and sunflowers	5 months	150 mm
Barley, canola*, chickpeas**, faba beans, field peas**, lentils**, lupins**, vetch and subterranean clover	9 months	250 mm
Durum wheat, oats, lucerne and medic	21 months	550 mm

*For canola sown the year after the application of AC Ruka 850 WG Herbicide there may occasionally be some crop stunting but no yield reductions have been measured.

**Chickpeas, field peas, lentils and lupins can be sown immediately after the application of AC Ruka 850 WG Herbicide where AC Ruka 850 WG Herbicide has not already been incorporated. However, where AC Ruka 850 WG Herbicide has been incorporated into the soil, for example, by a previous sowing operation for a subsequently failed crop, these legume crops should not be sown for at least 9 months after the application of AC Ruka 850 WG Herbicide.

For advice on crops and situations not listed above, contact Axichem Pty Ltd.

RESISTANT WEEDS WARNING

GROUP	15	HERBICIDE

AC Ruka 850 WG Herbicide is a member of the isoxazoline group of herbicides and has the inhibitor of very long chain fatty acids (VLCFA inhibitors) mode of action. For weed resistance management AC Ruka 850 WG Herbicide is a Group 15 herbicide. Some naturally-occurring weed biotypes resistant to AC Ruka 850 WG Herbicide, and other Group 15 herbicides, may exist through normal genetic variability in any weed population. These resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds will not be controlled by AC Ruka 850 WG Herbicide or other Group 15 herbicides.

Do not rely exclusively on AC Ruka 850 WG Herbicide for weed control. Use as part of an integrated weed management program involving herbicides with other modes of action and non-chemical methods of control. CropLife Australia resistance management strategies are available from your local agricultural chemical supplier or at the CropLife Australia website (www.croplife.org.au). Refer to these strategies for details of how to manage the build-up of resistant weeds on your farm.

Since occurrence of resistant weeds is difficult to detect prior to use Axichem Pty Ltd accepts no liability for any losses that may result from the failure of AC Ruka 850 WG Herbicide to control resistant weeds.

PRECAUTIONS

Re-entry Period

Do not allow entry into treated areas until the spray has dried, unless wearing cotton overalls buttoned to the neck and wrist (or equivalent clothing) and elbow-length chemical resistant gloves. Clothing must be laundered after each day's use.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Very toxic to aquatic life.

DO NOT contaminate wetlands or watercourses with this product or used containers. DO NOT apply if heavy rain has been forecast within 48 hours.

DO NOT apply unless incorporation by sowing (IBS) can be performed within 3 days of application. DO NOT apply to waterlogged soil.

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

DO NOT apply under weather conditions, or from spraying equipment, that may cause spray to drift onto non-target plants, cropping lands or pastures.

Undersown Pasture Species

DO NOT undersow with pasture species (legumes or grasses) following the application of AC Ruka 850 WG Herbicide.

STORAGE AND DISPOSAL

Store in the closed, original container in a dry, cool, well-ventilated area out of direct sunlight.

Triple-rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point.

If not recycling, break, crush, or puncture and deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots, in compliance with relevant local, state or territory government regulations. Do not burn empty containers or product.

SAFETY DIRECTIONS

May irritate the eyes and skin. Repeated exposure may cause allergic disorders. Avoid contact with eyes and skin. When opening the container, preparing spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing), and elbow-length chemical resistant gloves. Wash hands after use.

After each day's use, wash gloves, and contaminated clothing.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26, New Zealand 0800 764 766.

SAFETY DATA SHEET

For further information, refer to the Safety Data Sheet (SDS) which is available from the supplier.

LABEL ELEMENTS

GHS Label Elements	
SIGNAL WORD	**WARNING**

Hazard Statement(s)

H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary statement(s) Prevention

P201	Obtain special instructions before use.
P260	Do not breathe dust/fume.
P280	Wear protective gloves, protective clothing, eye protection and face protection.
P273	Avoid release to the environment.
P264	Wash all exposed external body areas thoroughly after handling.
P272	Contaminated work clothing should not be allowed out of the workplace.

Precautionary statement(s) Response

P308+P313	If exposed or concerned: Get medical advice/attention.
P302+P352	IF ON SKIN: Wash with plenty of water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact Lenses, if present and easy to do. Continue rinsing.
P314	Get medical advice/attention if you feel unwell.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P391	Collect spillage.

Precautionary statement(s) Storage

P405	Store locked up.

Precautionary statement(s) Disposal

P501	Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

LIMIT OF WARRANTY AND LIABILITY

Seller warrants that the product conforms to its chemical description and is reasonably fit for the purpose stated on the label when used in accordance with the directions under normal conditions of use. No warranty of merchantability for a particular purpose, express or implied, extends to the use of the product contrary to label instructions, or under abnormal conditions.