

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 03.02.2014

Revision: 03.02.2014

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

**Trade name:** Korit 420 FS

**Registration number** Pl.Reg.No. 2037

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

**Application of the substance / the mixture** Seed dressing product

### 1.3 Details of the supplier of the safety data sheet

**Manufacturer, registration owner and responsible for labelling:**

Kwizda Agro GmbH

Universitätsring 6

A-1010 Vienna

Tel.: +43 (0) 59977 10

### 1.4 Further information obtainable from:

Manufacturing plant Kwizda Leobendorf, Tel: +43 (0) 59977 40

E-Mail: lw.leobdf@kwizda-agro.at

**Information in case of emergency:** Call local emergency information.

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Classification according to Regulation (EC) No 1272/2008**

Acute Tox. 2      H330 Fatal if inhaled.

STOT RE 2      H373 May cause damage to organs through prolonged or repeated exposure.

Aquatic Acute 1      H400 Very toxic to aquatic life.

Aquatic Chronic 1      H410 Very toxic to aquatic life with long lasting effects.

Skin Sens. 1      H317 May cause an allergic skin reaction.

STOT SE 3      H335 May cause respiratory irritation.

**Classification according to Directive 67/548/EEC or Directive 1999/45/EC**

T; Toxic

R23:      Toxic by inhalation.

Xn; Harmful

R48/22:      Harmful: danger of serious damage to health by prolonged exposure if swallowed.

Xi; Irritant

R37:      Irritating to respiratory system.

Xi; Sensitising

R43:      May cause sensitisation by skin contact.

N; Dangerous for the environment

R50/53:      Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### Classification system:

The classification complies with the actual legally binding EU Directives and is supplemented by company and literature data.

### 2.2 Label elements

**Labelling according to Regulation (EC) No 1272/2008**

The substance is classified and labelled according to the CLP regulation.

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**Hazard pictograms**

GHS06 GHS08 GHS09

**Signal word** Danger**Hazard-determining components of labelling:**

ziram (ISO)

**Hazard statements**

H330 Fatal if inhaled.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

H410 Very toxic to aquatic life with long lasting effects.

**Precautionary statements**

P284 Wear respiratory protection.

P260 Do not breathe mist/vapours/spray.

P280 Wear protective gloves / protective clothing.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P310 Immediately call a POISON CENTER or doctor/physician.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P391 Collect spillage.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local official regulations.

**Additional information:**

To avoid risks to human health and the environment, comply with the instructions for use.

**2.3 Other hazards** No further relevant information available.

### SECTION 3: Composition/information on ingredients

**3.2 Mixtures****Description:** Suspension concentrate based on ziram (420 g/l).**Dangerous components:**

CAS: 137-30-4 EINECS: 205-288-3 Index number: 006-012-00-2	ziram (ISO) T+ R26; Xn R22-48/22; Xi R37-41; Xi R43; N R50/53 Acute Tox. 2, H330; STOT RE 2, H373; Eye Dam. 1, H318; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302; Skin Sens. 1, H317; STOT SE 3, H335	36.7%
CAS: 56-81-5 EINECS: 200-289-5	glycerol substance with a Community workplace exposure limit	2.5-10%
CAS: 119432-41-6	ammonium salt of polyarylphenyl ether sulphate Xi R36 R52/53 Eye Irrit. 2, H319; Aquatic Chronic 3, H412	≤ 2.5%

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**Trade name: Korit 420 FS****Additional information:** For the wording of the listed risk phrases refer to section 16. (Contd. of page 2)**SECTION 4: First aid measures**

First aid

**4.1 Description of first aid measures****General information:**

In case of accident or if you feel unwell seek medical advice immediately (show label or MSDS where possible).

In case of irregular breathing or respiratory arrest provide artificial respiration.

**After inhalation:**

Supply fresh air or oxygen; call for doctor.

In case of unconsciousness place patient stably in side position for transportation.

**After skin contact:**

Remove all contaminated clothing immediately. Drench the affected skin with plenty of soap and water. In case of redness or irritation, consult a doctor.

**After eye contact:** Rinse opened eye for several minutes under running water. Consult a doctor.

**After swallowing:**

Rinse out mouth and then drink plenty of water.

Call for a doctor immediately.

Never try to induce vomiting or give anything by mouth to an unconscious person.

**4.2 Most important symptoms and effects, both acute and delayed**

No further relevant information available.

**4.3 Indication of any immediate medical attention and special treatment needed**

No specific antidot. Alcohol enhances poisonous effect. Consumption of alcohol should be forbidden for at least 1 to two weeks.

**SECTION 5: Firefighting measures****5.1 Extinguishing media**

**Suitable extinguishing agents:** CO<sub>2</sub>, dry chemical powder, foam or water spray

**For safety reasons unsuitable extinguishing agents:** Water with full jet

**5.2 Special hazards arising from the substance or mixture**

Can be released in case of fire: Sulphur dioxide (SO<sub>2</sub>)

**5.3 Advice for firefighters****Protective equipment:**

In the case of fire wear self-contained respiratory equipment and full protective suit.

**Additional information**

Collect contaminated fire fighting water separately. It must not enter the sewage system.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

Please notice instructions for person-related safety precautions, wear protective equipment (see 8.)

Keep unprotected persons away.

Ensure adequate ventilation.

Do not breathe vapour/spray.

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**6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

**6.3 Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid or universal binders, sawdust).  
Place into lockable, labelled salvage container for disposal according to the regulations.

**6.4 Reference to other sections**

See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See section 13 for disposal information.

## SECTION 7: Handling and storage

**7.1 Precautions for safe handling**

While handling pay attention to the usually precaution for chemicals.  
Comply with instructions for use.  
Provide good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols. Do not breathe fumes/aerosol.  
Avoid any contact with skin, eyes and clothes.  
Wash hands before break and at the end of work.

**Information about fire - and explosion protection:** Keep respiratory protective device available.

**7.2 Conditions for safe storage, including any incompatibilities**

**Requirements to be met by storerooms and receptacles:**

Keep tightly closed in original containers and store in a cool, dry and frost-protected place.

**Information about storage in one common storage facility:**

Do not store food, beverages and animal feeding stuffs in the storage area.

**Further information about storage conditions:**

Keep locked up and unavailable for children and pets.  
Keep container tightly sealed.

**7.3 Specific end use(s)** Plant protection product according to Regulation (EC) No 1107/2009

## SECTION 8: Exposure controls/personal protection

**Additional information about design of technical facilities:**

Provide good ventilation or exhaust at work.

**8.1 Control parameters**

**Ingredients with limit values that require monitoring at the workplace:**

**56-81-5 glycerol**

WEL (Great Britain) Long-term value: 10 mg/m<sup>3</sup>

**Additional information:** Based on actual legally binding lists.

**8.2 Exposure controls**

**Personal protective equipment**

**General protective and hygienic measures:**

Avoid unnecessary contact with the product. Do not eat, drink or smoke at workplace and keep it tidy.  
Remove soiled and/or soaked clothing immediately and wash carefully before reuse.  
Avoid drinking alcohol before, during and at work.

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**Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

**Protection of hands:**

Chemical resistant gloves

Wash when contaminated. Dispose of when contaminated inside, when perforated or when contamination outside cannot be removed.

**Material of gloves**

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

**Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye protection:**

Tightly sealed goggles

**Body protection:** Protective work clothing

**Limitation and supervision of exposure into the environment**

Do not allow to enter sewers/ surface or ground water. Inform respective authorities in case of seepage into water course or sewage system.

## SECTION 9: Physical and chemical properties

**9.1 Information on basic physical and chemical properties****Appearance:**

<b>Form:</b>	Fluid
<b>Colour:</b>	Orange
<b>Odour:</b>	Barely perceptible odour.
<b>Odour threshold:</b>	Not determined

**pH (10 g/l) at 20 °C:** ≈ 8.5 (CIPAC MT 75)

**Change in condition**

<b>Melting point/freezing point:</b>	Not applicable.
<b>Boiling point/boiling range:</b>	100 °C

<b>Flash point:</b>	160 °C (EEC A.9)
<b>Flammability (solid, gas):</b>	Not applicable.
<b>Decomposition temperature:</b>	No data available.
<b>Auto-ignition temperature:</b>	No auto ignition up to 400 °C (EEC A.15 method)

<b>Explosive properties:</b>	Not explosive (EEC A.14 method)
<b>Explosion limits:</b>	Not relevant.

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<b>Oxidising properties:</b>	Not oxidising
<b>Vapour pressure:</b>	No data available.
<b>Evaporation rate:</b>	No data available.
<b>Vapour density:</b>	No data available.
<b>Density at 20 °C:</b>	≈ 1.2 g/ml (EEC A.3)
<b>Solubility in / Miscibility with water:</b>	Dispersible.
<b>Partition coefficient (n-octanol/water):</b>	No data available.
<b>Viscosity</b>	
<b>Dynamic at 20 °C:</b>	382 mPas (OECD 114)
<b>Dynamic at 35 °C:</b>	314 mPas (OECD 114)
<b>Surface tension at 20 °C:</b>	60.4 mN/m (EEC A.5)
<b>9.2 Other information</b>	No further relevant information available.

### SECTION 10: Stability and reactivity

**10.1 Reactivity** No further relevant information available.

**10.2 Chemical stability** Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**

No hazardous reactions known if used according to specifications.

**10.4 Conditions to avoid** No further relevant information available.

**10.5 Incompatible materials:** No further relevant information available.

**10.6 Hazardous decomposition products:** Sulphur dioxide

### SECTION 11: Toxicological information

**11.1 Information on toxicological effects**

**Acute toxicity**

**LD/LC50 values relevant for classification:**

Oral	LD50	>2000 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rat)
Inhalative	LC50/4h	0.38 mg/l (rat, male) 0.44 mg/l (rat, female)

**Primary irritant effect:**

**on the skin:** Not irritating (rabbit, OECD 404)

**on the eye:** Not irritating (rabbit, OECD 405)

**Sensitization:** May cause sensitisation by skin contact.

**Carcinogenicity, Mutagenicity, Teratogenicity**

Ziram shows no reproductiontoxicity, is not mutagene and not cancerogen.

**Experience with humans:**

The active ingredient ziram can cause bradyarrhythmia, headache, eczema, dermatitis, nausea and shortness of breath. (Alcohol enhaces poisonous effect).

**Repeated dose toxicity** No data available.

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**CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)** No data available.**SECTION 12: Ecological information****12.1 Toxicity****Aquatic toxicity:**

For the product there are no ecotoxicological data available. All data refer to the active ingredient(s).

**137-30-4 ziram (ISO)**

EC50/120h	0.066 mg/l (alga, <i>Selenastrum capricornutum</i> )
EC50/48h	0.048 mg/l (water flea, <i>Daphnia magna</i> )
LC50/96h	0.0097-1.7 mg/l (fish)

**12.2 Persistence and degradability** No further relevant information available.**Degradation in soil:** Degradation in soil: halftime <2 days (ziram)**12.3 Bioaccumulative potential** No further relevant information available.**12.4 Mobility in soil** No further relevant information available.**Additional ecological information****General notes:**

Very toxic to aquatic organisms, may cause long-term adverse effects to the aquatic environment. Do not allow product to reach ground water, water course or sewage system.

**Effects on beneficial organisms:****Earthworms:**

LC50/14d	196.7 mg/kg soil (earthworm, <i>Eisenia fetida</i> )
NOEC/14d	31.3 mg/kg soil (earthworm, <i>Eisenia fetida</i> )

**12.5 Results of PBT and vPvB assessment**

The product contains no substances classified as PBT or vPvB.

**12.6 Other adverse effects** No further relevant information available.**SECTION 13: Disposal considerations****13.1 Waste treatment methods****Recommendation**

Do not dispose waste or remains together with domestic waste, do not empty into sink or toilet, hand over to hazardous waste disposers.

**European waste catalogue** 02 01 08: agrochemical waste containing dangerous substances**Uncleaned packaging:****Recommendation:**

Do not reuse empty contaminated packaging for other purposes; dispose according to official regulations.

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**SECTION 14: Transport information****14.1 UN-Number**

ADR UN2902

**14.2 UN proper shipping name**

ADR 2902 PESTICIDE, LIQUID, TOXIC, N.O.S. (ziram (ISO)), ENVIRONMENTALLY HAZARDOUS

**14.3 Transport hazard class(es)**

ADR



Class

6.1 (T6) Toxic substances.

Label

6.1

**14.4 Packing group**

ADR III

**14.5 Environmental hazards:**

Special marking (ADR): Symbol (fish and tree)

**14.6 Special precautions for user**

Warning: Toxic substances.

Danger code (Kemler):

60

**14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

UN "Model Regulation":

UN2902, PESTICIDE, LIQUID, TOXIC, N.O.S. (ziram (ISO)), ENVIRONMENTALLY HAZARDOUS, 6.1, III

**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations:****Additional safetyphrases according to the Austrian plant protection law 1997 and 2011 (Directive 2003/82/EC)**

SP 1 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).

Spe 5 To protect birds/wild mammals the product must be entirely incorporated in the soil; ensure that the product is also fully incorporated at the end of rows.

Spe 6 To protect birds/wild mammals remove spillages.

Keep out of the reach of children and domestic animals.

Avoid unnecessary contact with the product. Misuse can lead to injury of health.

Avoid drinking alcohol before, during and a couple of hours after work.

Do not use original packaging or empty containers for other purposes.

**Waterhazard class:** Water hazard class 3 (Self-assessment): extremely hazardous for water.

**15.2 Chemical safety assessment:**

The mixture is registered as a plant protection product under Regulation (EC) No. 1107/2009.

A Chemical Safety Assessment has not been carried out.

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**SECTION 16: Other information**

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

**Relevant phrases**

- H302 Harmful if swallowed.  
H317 May cause an allergic skin reaction.  
H318 Causes serious eye damage.  
H319 Causes serious eye irritation.  
H330 Fatal if inhaled.  
H335 May cause respiratory irritation.  
H373 May cause damage to organs through prolonged or repeated exposure.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.  
H412 Harmful to aquatic life with long lasting effects.
- R22 Harmful if swallowed.  
R26 Very toxic by inhalation.  
R36 Irritating to eyes.  
R37 Irritating to respiratory system.  
R41 Risk of serious damage to eyes.  
R43 May cause sensitisation by skin contact.  
R48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.  
R50/53 Very 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.

**Abbreviations and acronyms:**

CAS: Chemical Abstracts Service (division of the American Chemical Society)  
EINECS: European Inventory of Existing Commercial Chemical Substances  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
OECD: Organisation for Economic Co-operation and Development  
LC50: Lethal Concentration, 50 percent  
LD50: Lethal Dose, 50 percent  
EC50: maximal Effective Concentration, 50 percent  
IC50: maximal Inhibitory Concentration, 50 percent  
NOEC: No Observed Effect Concentration  
PBT: persistent, bioaccumulative and toxic properties  
vPvB: very persistent and very bioaccumulative properties  
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

**Data compared to the previous version altered. Section 3,8,9**