

AGRAL

Version 8

Revision Date 15.06.2009

Print Date 15.06.2009

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

PRODUCT INFORMATION

Product name : AGRAL
Design Code : A12712A
Use : Adjuvants
Company : Syngenta Crop Protection AG
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 CH-4002 Basel
 Switzerland
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Harmful



Dangerous for the environment

2. HAZARDS IDENTIFICATION

Flammable liquid and vapour
 Harmful if swallowed.
 May be harmful in contact with skin.
 Causes skin irritation.
 Causes serious eye damage.
 Toxic to aquatic life with long lasting effects.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

Chemical Name	CAS-No.	EC-No. (REACH Registration Number)	Symbol(s)	R-phrase(s)	Concentration
1-propanol, 2-methyl-	78-83-1	201-148-0	Xi	R10 R37/38 R41 R67	5 - 15 % W/W
poly(oxy-1,2-ethanediyl), alpha-(nonylphenyl)-omega-hydroxy-	9016-45-9, 127087-87-0		Xn, N	R22 R41 R51/53	85 - 95 % 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.

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4. FIRST AID MEASURES

- General advice** : Have the product container, label or Material Safety Data Sheet with you when calling the Syngenta emergency number, a poison control center 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.
- Medical advice** : There is no specific antidote available. Treat symptomatically.

5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media** : Extinguishing media - small fires
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Extinguishing media - large fires
Alcohol-resistant foam
- Extinguishing media which shall not be used for safety reasons** : Do not use a solid water stream as it may scatter and spread fire.
- Specific hazards during fire fighting** : 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.
Flash back possible over considerable distance.
- Special protective equipment for fire-fighters** : Wear full protective clothing and self-contained breathing apparatus.
- Further information** : Do not allow run-off from fire fighting to enter drains or water courses.
Cool closed containers exposed to fire with water spray.

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6. ACCIDENTAL RELEASE MEASURES

- Personal precautions** : Refer to protective measures listed in sections 7 and 8.
Keep people away from and upwind of spill/leak.
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
Remove all sources of ignition.
Pay attention to flashback.
- Environmental precautions** : Prevent further leakage or spillage if safe to do so.
Do not flush into surface water or sanitary sewer system.
- Methods for 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).
- Additional advice** : If the product contaminates rivers and lakes or drains inform respective authorities.

7. HANDLING AND STORAGE**HANDLING**

- Advice on safe handling** : Avoid contact with skin and eyes.
When using, do not eat, drink or smoke.
Take precautionary measures against static discharges.
Use only in an area containing flame proof equipment.
For personal protection see section 8.

STORAGE

- Requirements for storage areas and containers** : 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.
Keep away from heat and sources of ignition.
Keep away from combustible material.
Keep in an area equipped with sprinklers.
No smoking.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	Exposure limit(s)	Type of exposure limit	Source
1-propanol, 2-methyl-	1,600 ppm 50 ppm 100 ppm 50 ppm 100 ppm	15 min STEL 8 h TWA 8 h TWA	NIOSH SUVA SUVA ACGIH DFG

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 vapors 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.

PERSONAL PROTECTIVE EQUIPMENT

- 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** : A combination gas, vapor and particulate respirator may be necessary until effective technical measures are installed. Protection provided by air-purifying respirators is limited. Use a self-contained breathing apparatus in cases of emergency spills, when exposure levels are unknown, or under any circumstances where air-purifying respirators may not provide adequate protection.
- Hand protection** : 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. Suitable material
Nitrile rubber
- Eye protection** : If eye contact is possible, use tight-fitting chemical safety goggles and a face shield.

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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

9. PHYSICAL AND CHEMICAL PROPERTIES

Form : liquid
Colour : pale yellowish
Flash point : 47 °C

Oxidizing properties : not oxidizing

Explosive properties : Not explosive

Vapour pressure : 10. mmHg
Density : 1.03 g/cm³ at 20 °C

Solubility in other solvents : soluble
in Water

10. STABILITY AND REACTIVITY

Hazardous decomposition products : Combustion or thermal decomposition will evolve toxic and irritant vapors.

Hazardous reactions : None known.
Hazardous polymerization does not occur.
Stable under normal conditions.

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity : LD50 Rat, ca. 2,000 mg/kg
Derived from components.
GHS-Classification
Category 4

Acute dermal toxicity : LD50 Rabbit, > 2,000 mg/kg
Derived from components.
GHS-Classification
Category 5

Skin irritation : Rabbit: irritating
Derived from components.
GHS-Classification
Category 2

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Eye irritation	: Rabbit: Risk of serious damage to eyes. Derived from components. GHS-Classification Category 1
Sensitisation	: : Unlikely to cause skin sensitization. Derived from components. GHS-Classification None

12. ECOLOGICAL INFORMATION

ELIMINATION INFORMATION (PERSISTENCE AND DEGRADABILITY)

Biodegradability : Expected to be biodegradable

ECOTOXICITY EFFECTS

Toxicity to fish : LC50 , 1 - 10 mg/l , 96 h
Derived from components.
GHS-Classification
Category 2

Toxicity to daphnia and other aquatic invertebrates. : EC50 , 1 - 10 mg/l , 48 h
Derived from components.
GHS-Classification
Category 2

Toxicity to algae : EC50 , 1 - 10 mg/l , 72 h
Derived from components.
GHS-Classification
Category 2

13. DISPOSAL CONSIDERATIONS

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 to an approved waste handling site for recycling or disposal.
Do not re-use empty containers.

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14. TRANSPORT INFORMATION**Land transport***ADR/ RID:*

UN-Number:	1993
Class:	3
Labels:	3
Packaging group	III
Proper shipping name :	FLAMMABLE LIQUID, N.O.S. (ISOBUTANOL AND NONYLPHENOL ETHOXYLATE)

Sea transport*IMDG:*

UN-Number:	1993
Class:	3
Labels:	3
Packaging group:	III
Proper shipping name :	FLAMMABLE LIQUID, N.O.S. (ISOBUTANOL AND NONYLPHENOL ETHOXYLATE)

Air transport*IATA-DGR*

UN-Number:	1993
Class:	3
Labels:	3
Packaging group:	III
Proper shipping name :	FLAMMABLE LIQUID, N.O.S. (ISOBUTANOL AND NONYLPHENOL ETHOXYLATE)

15. REGULATORY INFORMATION**Labelling according to EC Directives**

Hazardous components which must be listed on the label:

- poly(oxy-1,2-ethanediyl), alpha-(nonylphenyl)-omega-hydroxy-

Symbol(s) : Xn Harmful
N Dangerous for the environment

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R-phrase(s)	:	R10 R22 R38 R41 R51/53	Flammable. Harmful if swallowed. Irritating to skin. Risk of serious damage to eyes. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S-phrase(s)	:	S 2 S13 S20/21 S26 S35 S39 S57	Keep out of the reach of children. Keep away from food, drink and animal feedingstuffs. When using do not eat, drink or smoke. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. This material and its container must be disposed of in a safe way. Wear eye/face protection. Use appropriate container to avoid environmental contamination.
Note	:	The product is classified and labelled in accordance with Directive 1999/45/EC.	

GHS-Labeling

Globally Harmonized System of Classification and Labelling of Chemicals (GHS), 2nd revised edition

Pictogram



Signal Word	:	Danger	
Hazard Statements	:	H226 H302 H313 H315 H318 H411	Flammable liquid and vapour Harmful if swallowed. May be harmful in contact with skin. Causes skin irritation. Causes serious eye damage. Toxic to aquatic life with long lasting effects.
Precautionary Statements	:	P210 P273 P280 P302 + P352 P305 + P351 + P338	Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

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Remarks	:	P391 lenses, if present and easy to do. Continue rinsing. Collect spillage.
	:	Classified using all GHS hazard classes and categories. Where the GHS contains options, the most conservative option has been chosen. Regional or national implementations of GHS may not implement all hazard classes and categories.

Hazardous components which must be listed on the label:

- poly(oxy-1,2-ethanediyl), alpha-(nonylphenyl)-omega-hydroxy-

16. OTHER INFORMATION**Further information**

Text of R-phrases mentioned in Section 3:

R10	Flammable.
R22	Harmful if swallowed.
R37/38	Irritating to respiratory system and skin.
R41	Risk of serious damage to eyes.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R67	Vapours may cause drowsiness and dizziness.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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