



# SAFETY DATA SHEET

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) Annex II

## Activus Super

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H-0423-12747-RAII 12747 AG-DP2-440 SC

## Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identifier

#### Activus Super

Synonyms

Pendimethalin/Diflufenican 400/40 SC

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

Recommended Use

Herbicide

Uses advised against

No information available

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

Supplier Address

ADAMA Northern Europe B.V  
P.O. Box 355  
3830 AK Leusden, The Netherlands  
Tel: (+31) (0) 33 4453 160  
Fax: (+31) (0) 33 4321 598

For further information, please contact

Email address

msds.ane@adama.com

### 1.4. Emergency telephone number

Emergency Telephone

Call local Poison Control Centre for assistance  
BE : +32 70 245 245  
NL : +31 30 274 88 88 This service is only available to health professionals.  
DE : +49 30 19240  
General emergency service 112

## Section 2: HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute aquatic toxicity Category 1 - (H400)

Hazardous to the Aquatic Environment - Chronic Hazard Category 1 - (H410)

### 2.2. Label elements

Labeling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms



<b>Signal word</b>	Warning
<b>Hazard Statements</b>	H410 - Very toxic to aquatic life with long lasting effects
<b>Precautionary Statements</b>	P102 - Keep out of reach of children P501 - Dispose of contents/ container to an approved waste disposal plant
<b>EU Specific Hazard Statements</b>	EUH208 - Contains Pendimethalin, 1,2-Benzisothiazolin-3-one. May produce an allergic reaction EUH401 - To avoid risks to human health and the environment, comply with the instructions for use
<b>Additional phrases for PPP</b>	SP1 - 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).

### 2.3. Other hazards

No information available

## Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Weight-%	CAS No	EC No	Index No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	M-Factor	REACH Registration Number
Pendimethaline	33-38	40487-42-1	254-938-2	609-042-00-X	Skin Sens. 1 (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	M = 100 M= 10	-
Diflufenican	2-5	83164-33-4	-	616-032-00-9	Aquatic Chronic 3 (H412)		-
Poly(oxy-1,2-ethanediy l), .alpha.-[tris(1-phenylet hyl)phenyl]-.omega.-hydroxy-	2-5	99734-09-5	-	-	Aquatic Chronic 3 (H412)		-
1,2-Benzisothiazolin-3-one	< 1	2634-33-5	220-120-9	613-088-00-6	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Skin Sens. 1 (H317) Aquatic Acute 1 (H400)		-

Full text of H- and EUH-phrases: see section 16

## Section 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

<b>General advice</b>	In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). First aider: Pay attention to self-protection!.
<b>Inhalation</b>	Remove to fresh air. If symptoms persist, call a physician.
<b>Skin Contact</b>	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists,

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call a physician. Wash off immediately with soap and plenty of water.

**Eye contact** Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. If symptoms persist, call a physician.

**Ingestion** Rinse mouth. Drink plenty of water. If symptoms persist, call a physician.

**Self-protection of the first aider** Use personal protective equipment as required.

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

**Symptoms** None known

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

**Note to physicians** Treat symptomatically.

## **Section 5: FIRE-FIGHTING MEASURES**

### **5.1. Extinguishing media**

**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media**

No information available.

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

No specific hazard known.

### **5.3. Advice for firefighters**

In the event of fire, wear self-contained breathing apparatus  
In the event of fire and/or explosion do not breathe fumes.

## **Section 6: ACCIDENTAL RELEASE MEASURES**

### **6.1. Personal precautions, protective equipment and emergency procedures**

**Personal precautions**

Use personal protective equipment as required. Avoid contact with eyes and skin.

**For emergency responders**

Use personal protection recommended in Section 8.

### **6.2. Environmental precautions**

Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system.

### **6.3. Methods and material for containment and cleaning up**

**Methods for cleaning up**

Take up mechanically, placing in appropriate containers for disposal.

### **6.4. Reference to other sections**

**Other Information**

See also section 8,13

**Section 7: HANDLING AND STORAGE**

**7.1. Precautions for safe handling**

**Advice on safe handling**

Use personal protective equipment as required. Use only with adequate ventilation.

**General Hygiene Considerations**

When using do not eat, drink or smoke. Wash contaminated clothing before reuse.

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

**Storage Conditions**

Keep out of the reach of children. Keep container tightly closed. Keep containers tightly closed in a cool, well-ventilated place.

**7.3. Specific end use(s)**

**Risk Management Methods (RMM)**

The information required is contained in this Material Safety Data Sheet.

**Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1. Control parameters**

**8.2. Exposure controls**

**Engineering Controls**

Ensure adequate ventilation, especially in confined areas.

**Personal protective equipment**

**Eye/face protection**

Tight sealing safety goggles.

**Hand Protection**

Gloves made of plastic or rubber.

**Body Protection**

Suitable protective clothing.

**General Hygiene Considerations**

When using do not eat, drink or smoke. Wash contaminated clothing before reuse.

**Environmental exposure controls**

Do not allow into any sewer, on the ground or into any body of water.

**Section 9: PHYSICAL AND CHEMICAL PROPERTIES**

**9.1. Information on basic physical and chemical properties**

<u>Property</u>	<u>Property</u>	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
Appearance				
Physical state		: Liquid		
Color		: orange, brown		
Odor		: Organic Solvent		
Odor threshold		: No data available		
pH		: 5.5 - 7.5	CIPAC MT 75.3	solution (1 %)
Melting point/freezing point	°C	: ----		Not Applicable
Boiling point/boiling range	°C	: ----		Not Applicable
Flash point	°C	: > 100	EEC A.9	
Evaporation rate		: Not Applicable		
Flammability (solid, gas)		: Not Applicable		
Upper/lower flammability or explosive limits		: No data available		
Vapor pressure	kPa	: ----		Not Applicable
Vapor density		: No data available		
Relative density		: 1.0725 - 1.1725	EEC A.3	

<b>Solubility(ies)</b> mg/l	: ----		Not Applicable
<b>Partition Coefficient</b>	:		See Section 12 for more information
<b>(n-octanol/water) Log Pow</b>			
<b>Autoignition temperature</b> °C	: 395	EEC A.15	
<b>Decomposition temperature</b> °C	: ----		No data available
<b>Kinematic viscosity</b> mm <sup>2</sup> /s 40 °C	: 65	OECD 114	
<b>Explosive properties</b>	: Not an explosive	EEC A.14	
<b>Oxidizing properties</b>	: Not oxidizing	EEC A.21	

**9.2. Other information**

<b>Bulk density</b> g/ml	: ----		Not Applicable
<b>Surface tension</b> mN/m	: 40.3	EEC A.5	

**Section 10: STABILITY AND REACTIVITY**

**10.1. Reactivity**

No data available.

**10.2. Chemical stability**

Stable under normal conditions.

**10.3. Possibility of hazardous reactions**

None under normal processing.

**10.4. Conditions to avoid**

Heat, flames and sparks.

**10.5. Incompatible materials**

No information available

**10.6. Hazardous decomposition products**

None under normal use conditions.

**Section 11: TOXICOLOGY INFORMATION**

**11.1. Information on toxicological effects**

**Acute toxicity**

	<u>Values</u>	<u>Species</u>	<u>Method</u>	<u>Remarks</u>
<b>Oral LD50</b> mg/kg	: > 2000	Rat	OECD 423	
<b>Dermal LD50</b> mg/kg	: > 2000	Rat	OECD 402	
<b>Inhalation LC50</b> mg/l/4h	: ----			No data available
<b>Skin corrosion/irritation</b>	: Non-irritating to the skin	Rabbit	OECD 404	
<b>Serious eye damage/eye irritation</b>	: Not irritating to eyes	Rabbit	OECD 405	
<b>Respiratory/skin sensitization</b>	: Not a skin sensitizer	Guinea pig	OECD 406	

**Chronic toxicity**

**Germ cell mutagenicity**

<b>Chemical Name</b>	
Pendimethaline	: Not classified

Diflufenican : Not classified

**Carcinogenicity**  
**Chemical Name**  
 Pendimethaline : Not Carcinogenic  
 Diflufenican : Not Carcinogenic

**Reproductive toxicity**  
**Chemical Name**  
 Pendimethaline : Not toxic for the reproductive system  
 Diflufenican : Not toxic for the reproductive system

**STOT - single exposure**  
**Chemical Name**  
 Pendimethaline : No data available  
 Diflufenican : No data available

**STOT - repeated exposure**  
**Chemical Name**  
 Pendimethaline : No data available  
 Diflufenican : No data available

**Aspiration hazard**  
**Chemical Name**  
 Pendimethaline : No data available  
 Diflufenican : No data available

**Section 12: ECOLOGICAL INFORMATION**

**12.1. Toxicity Toxicity**

**Aquatic toxicity**

<b>Acute toxicity</b>	<b>Values</b>	<b>Species</b>	<b>Method</b>	<b>Remarks</b>
<b>Fish 96-hour LC50 mg/l</b>	: 4.91	Oncorhynchus mykiss	OECD 203	
<b>Crustacea 48-hour EC50 mg/l</b>	: 99	Daphnia magna	OECD 202	
<b>Algae 72-hour EC50 mg/l</b>	: 0.0231	D. Subspicatus	OECD 201	
<b>Other plants EC50 mg/l</b>	: ----			No data available

**Terrestrial Toxicity**

**Birds Oral LD50 mg/kg**

<b>Chemical Name</b>		
Pendimethaline	: 1421	Mallard duck
Diflufenican	: > 2150	Bobwhite quail

**Bees Oral LD50 µg/bee**

<b>Chemical Name</b>		
Pendimethaline	: > 101.2	
Diflufenican	: > 100	Apis mellifera EPPO 170

**12.2. Persistence and degradability Persistence and degradability**

**Abiotic Degradation**

**Water DT50 days**

<b>Chemical Name</b>	<b>Values</b>	<b>Method</b>	<b>Remarks</b>
Pendimethaline	: 4 - 28		
Diflufenican	: ----		No

**Soil DT50 days**

**Chemical Name**

Pendimethaline	: 64 - 86	SETAC
Diflufenican	: 128	EPA / SETAC

**Biodegradation**

**Chemical Name**

Pendimethaline	: No information available
Diflufenican	: No information available

**12.3. Bioaccumulative potential Bioaccumulative potential**

<b>Partition Coefficient (n-octanol/water) Log Pow Chemical Name</b>	<b>Values</b>	<b>Method</b>	<b>Remarks</b>
Pendimethaline	: 5.2	EEC A.8	pH 7
Diflufenican	: 4.2	OECD 117	20 ° C

**Bioconcentration factor (BCF)**

**Chemical Name**

Pendimethaline	: 1000	
Diflufenican	: 1276 - 1596	OECD 305

**12.4. Mobility in soil Mobility in soil**

<b>Adsorption/Desorption Chemical Name</b>	<b>Values</b>	<b>Method</b>	<b>Remarks</b>
Pendimethaline	: 15744		Koc
Diflufenican	: 3417		Koc

**12.5. Results of PBT and vPvB assessment Results of PBT and vPvB assessment**

The components in this formulation do not meet the criteria for classification as PBT or vPvB

**12.6. Other adverse effects Other adverse effects**

No information available.

**Section 13: DISPOSAL CONSIDERATIONS**

**13.1. Waste treatment methods**

<b>Waste from residues/unused products</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated packaging</b>	Improper disposal or reuse of this container may be dangerous and illegal.
<b>Other Information</b>	Waste codes should be assigned by the user based on the application for which the product was used.

**Section 14: TRANSPORTATION INFORMATION**

**IMDG/IMO**

<b>14.1 UN/ID No</b>	3082
<b>14.2 Proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( Pendimethalin )
<b>14.3 Hazard Class</b>	9
<b>14.4 Packing Group</b>	III
<b>14.5 Marine pollutant</b>	Yes
<b>14.6 Special precautions for user</b>	

**RID/ADR**

<b>14.1 UN/ID No</b>	3082
<b>14.2 Proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( Pendimethalin )

14.3 Hazard Class 9  
 14.4 Packing Group III  
 14.5 Environmental hazard Yes  
 14.6 Special precautions for user

**ICAO/IATA**

14.1 UN/ID No 3082  
 14.2 Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( Pendimethalin )  
 14.3 Hazard Class 9  
 14.4 Packing Group III  
 14.5 Environmental hazard Yes  
 14.6 Special precautions for user  
 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

NL National Regulations The permissibility of the product was tested against the Dutch pesticide act "Wet Gewasbeschermingsmiddelen en Biociden". The product was approved.

### 15.2. Chemical safety assessment

A chemical safety assessment according to regulation (EC) No. 1907/2006 is not required. A risk assessment was performed according to directive (EC) No. 91/414 or according to regulation (EC) No. 1107/2009.

## Section 16: OTHER INFORMATION

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

H302 - Harmful if swallowed  
 H315 - Causes skin irritation  
 H317 - May cause an allergic skin reaction  
 H318 - Causes serious eye damage  
 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

**Revision Note** \*\*\* - Change from previous version.

**This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006**

### **Disclaimer**

The information provided in this Material 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.

End of Safety Data Sheet