

Safety data sheet

BASF Safety data sheet
Date / Revised: 12.09.2014
Product: **SYSTIVA**

(Ref: ID no. 30549788/SDS_CPA_EU/EN; Version 3.1, 06.02.2012)

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

Product identifier

SYSTIVA®

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

Relevant identified uses: crop protection product, fungicide

Details of the supplier of the safety data sheet

Company:

BASF New Zealand Limited
Level 4, 4 Leonard Isitt Drive, Auckland Airport, Auckland 2022
P.O. Box 407, Auckland 1140
Phone: + 64 9 255 4300
Fax: + 64 9 255 4307
E-mail address: reception@basf-nz.co.nz

Emergency telephone number

National Poisons Centre: 0800 764 766

BASF Emergency Advice Number: 0800 944 955 (24 Hour Advice in an Emergency Only)

2. Hazards Identification

Hazard Classification:

6.9B, 9.1B



Priority Identifier:

Warning. Keep out of reach of children

BASF Safety data sheet
Date / Revised: 12.09.2014
Product: **SYSTIVA**

(Ref: ID no. 30549788/SDS_CPA_EU/EN; Version 3.1, 06.02.2012)

Secondary Identifiers:

- 6.9B HARMFUL. May cause liver damage through prolonged or repeated oral exposure at high doses.
- 9.1B TOXIC TO AQUATIC LIFE. May cause long term adverse effects in the aquatic environment.

Hazard determining component(s) for labelling: FLUXAPYROXAD

For the classifications not written out in full in this section the full text can be found in section 16.

Other hazards

According to Regulation (EC) No 1272/2008 [CLP]

See section 12 - Results of PBT and vPvB assessment.

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

3. Composition/Information on Ingredients

Mixtures

Chemical nature

Crop protection product, fungicide, suspension concentrate for seed treatment (SC)

Hazardous ingredients

Fluxapyroxad

Content (W/W): 28.7 %
CAS Number: 907204-31-3
REACH registration number: 04-2119400076-54

Glycerol

Content (W/W): < 10 %
CAS Number: 56-81-5
EC-Number: 200-289-5

Propane-1,2-diol

Content (W/W): < 3 % CAS Number: 57-55-6
EC-Number: 200-338-0
REACH registration number: 01-2119456809-23

4. First-Aid Measures

Description of first aid measures

Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention.

On skin contact:

Wash thoroughly with soap and water.

On contact with eyes:

BASF Safety data sheet
Date / Revised: 12.09.2014
Product: **SYSTIVA**

(Ref: ID no. 30549788/SDS_CPA_EU/EN; Version 3.1, 06.02.2012)

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

On ingestion:

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., Further important symptoms and effects are so far not known.

Indication of any immediate medical attention and special treatment needed

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:

Water spray, carbon dioxide, foam, dry powder

Special hazards arising from the substance or mixture

Carbon monoxide, Carbon dioxide, hydrogen fluoride, nitrogen oxides

The substances/groups of substances mentioned can be released in case of fire.

Advice for fire-fighters

Special protective equipment:

Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:

Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations. In case of fire and/or explosion do not breathe fumes. Keep containers cool by spraying with water if exposed to fire.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Avoid contact with the skin, eyes and clothing. Do not breathe vapour/spray. Use personal protective clothing.

Environmental precautions

Do not discharge into drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

Methods and material for containment and cleaning up

For small amounts: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr).

For large amounts: Dike spillage. Pump off product.

Dispose of absorbed material in accordance with regulations. Collect waste in suitable containers, which can be labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations.

Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

BASF Safety data sheet
Date / Revised: 12.09.2014
Product: **SYSTIVA**

(Ref: ID no. 30549788/SDS_CPA_EU/EN; Version 3.1, 06.02.2012)

7. Handling and Storage

Precautions for safe handling

No special measures necessary if stored and handled correctly. Ensure thorough ventilation of stores and work areas. When using do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift.

Approved Handlers:

Approved handlers are not required for this product.

Refer to the product label for handling precautions and directions for use.

Protection against fire and explosion:

No special precautions necessary. The substance/product is non-combustible. Product is not explosive.

Conditions for safe storage, including any incompatibilities

Segregate from foods and animal feeds.

Further information on storage conditions: Keep away from heat. Protect from direct sunlight.

Storage stability:

Storage duration: 24 Months

AGGREGATE STORAGE VOLUME THRESHOLDS: When stored with substances of the same hazard the aggregate quantity must be considered. For full details refer to the current standard NZS8409 Management of Agrichemicals or the HSNO Regulations.						
Location Certificate*:	Hazardous Atmosphere Zone*:	Fire Extinguishers:	Signage [Hazard Class & Emergency Action]:	Emergency Information:	Emergency Response Plan:	Secondary Containment:
NA	NA	NA	1,000 litres	5 litres	1,000 litres	1,000 litres
* Note: Farms \geq 4 ha are exempt but with controls						
DO NOT STORE OR LOAD WITH:			SEGREGATE FROM:			
NA			Foodstuffs and Food Containers			
Segregation: In store separate by at least 5 metres, on transport separate by at least 3 metres, in both cases horizontally. On vehicles a segregation device may be used: Check the Land Transport Rule Dangerous Goods, Rule 45001 for additional information. Sea transport may require additional segregation. Refer to NZS5433 Sea Segregation for details.						

Note: Storage, application and record keeping must be as described in the current version of the New Zealand Standard for the Management of Agrichemicals NZS8409

Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

8. Exposure Controls/Personal Protection

Control parameters

Components with workplace control parameters

57-55-6: Propane-1,2-diol	TWA (NZ)	Vapour & particulates Particulates only	150 ppm	474 mg/m ³ 10 mg/m ³
---------------------------	----------	--	---------	---

BASF Safety data sheet
Date / Revised: 12.09.2014
Product: **SYSTIVA**

(Ref: ID no. 30549788/SDS_CPA_EU/EN; Version 3.1, 06.02.2012)

Exposure controls

Personal protective equipment

Respiratory protection:

Suitable respiratory protection for higher concentrations or long-term effect: Combination filter for gases/vapours of organic, inorganic, acid inorganic and alkaline compounds (e.g. EN 14387 Type ABEK).

Hand protection:

Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) and other

Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures

The statements on personal protective equipment in the instructions for use apply when handling crop-protection agents in final-consumer packing. Wearing of closed work clothing is recommended. Store work clothing separately. Keep away from food, drink and animal feeding stuffs.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Form:	suspension
Colour:	red
Odour:	faintly aromatic
Odour threshold:	not determined
pH value:	approx. 6 - 7 (water, 1 %(m), approx. 20 °C)
Solidification temperature:	approx. -5.1 °C The product has not been tested.
Boiling point:	approx. 100 °C Information applies to the solvent.
Flash point:	approx. 100 °C (Directive 92/69/EEC, A.9) No flash point - Measurement made up to the boiling point.
Evaporation rate:	not applicable
Flammability:	not highly flammable (Directive 92/69/EEC, A.12)
Lower explosion limit:	not determined
Upper explosion limit:	not determined
Ignition temperature:	approx. 449 °C (Directive 92/69/EEC, A.15)
Vapour pressure:	approx. 23 hPa (approx. 20 °C) Information applies to the solvent.
Density:	approx. 1.16 g/cm ³ (20 °C)
Relative density:	approx. 1.16 (20 °C)
Relative vapour density (air):	not determined
Solubility in water:	dispersible
Partitioning coefficient n-octanol/water (log K _{ow}):	not applicable

BASF Safety data sheet
Date / Revised: 12.09.2014
Product: **SYSTIVA**

(Ref: ID no. 30549788/SDS_CPA_EU/EN; Version 3.1, 06.02.2012)

Thermal decomposition:	145 °C, 40 kJ/kg (DSC (OECD 113)) 295 °C, 160 kJ/kg (DSC (OECD 113)) 410 °C, 30 kJ/kg (DSC (OECD 113))
Viscosity, dynamic:	27 mPa.s (20 °C) (OECD 114) 22 mPa.s (40 °C) (OECD 114)
Explosion hazard:	Based on the chemical structure there is no indicating of explosive properties (Directive 92/69/EEC, A.14)
Fire promoting properties:	not fire-propagating (Directive 2004/73/EC, A.21)

Other information

Other Information:

If necessary, information on other physical and chemical parameters is indicated in this section.

10. Stability and Reactivity

Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals: Corrosive effects to metal are not anticipated.

Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

No hazardous reactions if stored and handled as prescribed/indicated.

Conditions to avoid

See MSDS section 7 - Handling and storage.

Incompatible materials

Substances to avoid:
strong acids, strong bases, strong oxidizing agents

Hazardous decomposition products

Hazardous decomposition products:
No hazardous decomposition products if stored and handled as prescribed/indicated.

11. Toxicological Information

Information on toxicological effects

Acute toxicity

Assessment of acute toxicity:

Virtually nontoxic after a single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact.

Experimental/calculated data:

LD50 rat (oral): > 2,000 mg/kg (OECD Guideline 423)

The product has not been tested. The statement has been derived from products of a similar structure or composition. No mortality was observed.

LC50 rat (by inhalation): > 6.2 mg/l 4 h (OECD Guideline 403)

The product has not been tested. The statement has been derived from products of a similar structure or composition. No mortality was observed.

LD50 rat (dermal): > 5,000 mg/kg (OECD Guideline 402)

The product has not been tested. The statement has been derived from products of a similar structure or composition. No mortality was observed.

Irritation

Assessment of irritating effects:

Not irritating to the skin. Not irritating to the eyes.

Experimental/calculated data:

Skin corrosion/irritation rabbit: non-irritant (OECD Guideline 404)

The product has not been tested. The statement has been derived from products of a similar structure or composition.

Serious eye damage/irritation rabbit: non-irritant (OECD Guideline 405)

The product has not been tested. The statement has been derived from products of a similar structure or composition.

Respiratory/Skin sensitization

Assessment of sensitization:

There is no evidence of a skin-sensitizing potential.

Experimental/calculated data:

Mouse Local Lymph Node Assay (LLNA) mouse: Skin sensitizing effects were not observed in animal studies. (OECD Guideline 429)

The product has not been tested. The statement has been derived from products of a similar structure or composition.

Germ cell mutagenicity

Assessment of mutagenicity:

The product has not been tested. The statement has been derived from the properties of the individual components. Mutagenicity tests revealed no genotoxic potential.

Carcinogenicity

Assessment of carcinogenicity:

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Fluxapyroxad

Assessment of carcinogenicity:

Indication of possible carcinogenic effect in animal tests.

Reproductive toxicity

Assessment of reproduction toxicity:

The product has not been tested. The statement has been derived from the properties of the individual components. The results of animal studies gave no indication of a fertility impairing effect.

Developmental toxicity

Assessment of teratogenicity:

The product has not been tested. The statement has been derived from the properties of the individual components. Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Fluxapyroxad

Assessment of repeated dose toxicity:

Adaptive effects were observed after repeated exposure in animal studies.

Other relevant toxicity information

Misuse can be harmful to health.

12. Ecological Information

Toxicity

Assessment of aquatic toxicity:

Acutely toxic for aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Toxicity to fish:

LC50 (96 h) 2.2 mg/l, *Oncorhynchus mykiss* (OECD 203; ISO 7346; 92/69/EEC, C.1)

The product has not been tested. The statement has been derived from products of a similar structure or composition.

Aquatic invertebrates:

EC50 (48 h) > 100 mg/l, *Daphnia magna* (OECD Guideline 202, part 1)

The product has not been tested. The statement has been derived from products of a similar structure or composition.

Aquatic plants:

EC50 (72 h) 1.54 mg/l, *Pseudokirchneriella subcapitata* (OECD Guideline 201)

The product has not been tested. The statement has been derived from products of a similar structure or composition.

Persistence and degradability

Assessment biodegradation and elimination (H2O):

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Fluxapyroxad

Assessment biodegradation and elimination (H2O):

Not readily biodegradable (by OECD criteria).

Bioaccumulative potential

Assessment bioaccumulation potential:

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Fluxapyroxad

Assessment bioaccumulation potential:

Does not accumulate in organisms.

Mobility in soil (and other compartments if available)

Assessment transport between environmental compartments:

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Fluxapyroxad

Assessment transport between environmental compartments:

Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.

Results of PBT and vPvB assessment

The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

Other adverse effects

The product does not contain substances that are listed in Annex I of Regulation (EC) 2037/2000 on substances that deplete the ozone layer.

Additional information

Other ecotoxicological advice:

Do not discharge product into the environment without control.

13. Disposal Considerations

CONTAINER: Triple rinse empty container and add rinsate to the spray tank. Recycle through Agrecovery (0800 247 326, www.agrecovery.co.nz).

PRODUCT: Dispose of this product only by using according to the label or at an approved landfill. Do NOT burn product. Do NOT contaminate water with product or used container.

Contaminated packaging:

Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

BASF Safety data sheet
Date / Revised: 12.09.2014
Product: **SYSTIVA**

(Ref: ID no. 30549788/SDS_CPA_EU/EN; Version 3.1, 06.02.2012)

14. Transport Information

Commercial transport:
Classified as Dangerous Goods for Land/rail (ADR/RID), sea (IMDG/GGVSee) and air transport (ICAO/IATA):

Transport hazard class(es):	9
Packing Group	III
UN Number	3082
Hazard label:	9, EHS
Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains FLUXAPYROXAD)
HAZCHEM:	2[Z]
Marine Pollutant:	YES

Public transport:
Do NOT carry this product on a passenger service vehicle.

15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

For the user of this plant-protective product applies: 'To avoid risks to man and the environment, comply with the instructions for use.' (Directive 1999/45/EC, Article 10, No. 1.2)

Chemical Safety Assessment

Advice on product handling can be found in sections 7 and 8 of this safety data sheet.

NZ Regulations

Approved pursuant to the HSNO Act 1996, Code HSR100887.
See www.epa.govt.nz for approval conditions.

Registered pursuant to the ACVM Act 1997, Nos. P8183.
See www.foodsafety.govt.nz/acvm for registration conditions.

16. Other Information

For proper and safe use of this product, please refer to the approval conditions laid down on the product label.

Full text of the classifications, including the indication of danger, the hazard symbols, the R phrases, and the hazard statements, if mentioned in section 2 or 3:

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The data do not describe the product's properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

Vertical lines in the left hand margin indicate an amendment from the previous version.