

 **BASF**

The Chemical Company

# Stellar® Star

Reg. No.: L9391

Act No. 36 of 1947

**HRAC HERBICIDE GROUP CODES F2 and O**

**A Soluble liquid herbicide, for control of early post-emergent grasses and broadleaf weeds (as specified), in maize.**

Active ingredient: Topramezone (pyrazolone) .....50 g / ℓ

Aktiewe bestanddeel: Dicamba (benzoic acid compound).. .....160 g / ℓ

Reg. Nr: L9391

Wet Nr 36 van 1947

**HRAC ONKRUIDDODER GROEPKODES F2 en O**

**'n Wateroplosbare-onkruidoder, vir die beheer van vroeë na-opkoms grasse en breëblaaronkruid (soos aangetoon), in mielies.**

**Registered by / Geregistreer deur:**

BASF South Africa (Pty) Ltd. / BASF Suid-Afrika (Edms) Bpk.

Co. Reg. No. / Mpy Reg. Nr 66/10235/07

P.O. Box / Posbus 2801

Halfway House / Halfweghuis 1685

**UN Number / VN Nummer: 3082**

**EMERGENCY NUMBER / NOODNOMMER: 083 265 3805**

**Approval code: 18 / 10 / 2013**

®Registered Trade Mark of BASF /

Geregistreerde Handelsmerk van BASF

**5 ℓ**

8108xxxxZA



**CAUTION  
VERSIGTIG**



## WARNINGS

**ALLOW THE FOLLOWING MINIMUM NUMBER OF DAYS, BETWEEN LAST APPLICATION AND HARVEST OR GRAZING:**

Maize	14
-------	----

- Handle with care.
- Harmful when swallowed.
- Store under lock and key out of reach of children, uninformed persons and animals.
- Toxic to aquatic organisms.
- Store away from food and feedstuffs and in a cool place.
- May cause harm to the unborn child

**Although this remedy has been tested under a large variety of conditions, the registration holder does not warrant that it will be efficacious under all conditions, because the action and effect thereof may be affected by factors such as, abnormal soil, climatic- and storage conditions; quality of dilution water, compatibility with other substances not indicated on the label and the occurrence of resistance of the weeds against the remedy concerned, as well as by the method, time and accuracy of application. The registration holder furthermore does not accept responsibility for damage to crops, vegetation, the environment, harm to man or animal, or for lack of performance of the remedy concerned, due to the occurrence of conditions, which could not have been foreseen, in terms of the registration. Consult the supplier in the event of any uncertainty.**

## PRECAUTIONS

- Do not inhale spray mist.
- Wear suitable protective clothing and face shield, when handling the concentrate.
- Wash contaminated clothing daily.
- Wash with soap and water, after accidental skin contact.
- Prevent contamination of food, feed, drinking water and eating utensils.
- Do not smoke, eat or drink during mixing and spraying operations, before washing hands and face thoroughly.
- Avoid spray drift onto other crops, grazing, rivers, dams and areas not under treatment.
- TRIPLE RINSE empty containers in the following manner: Invert the empty container over the spray or mixing tank and allow to drain for at least 30 seconds, after the flow has slowed down to a drip. Thereafter, rinse the container three times with a volume of water, equal to a minimum of 10 %, of that of the container. Add the rinsings to the contents of the spray tank, before destroying the container in the prescribed manner.

- Destroy empty container, by perforation and flattening and dispose of it in a safe way and never re-use for any other purpose.

### RESISTANCE WARNING

For resistance management, Stellar® Star is a HRAC Herbicide Group Codes F2 and O herbicide. Any weed population, may contain individuals, naturally resistant to Stellar® Star and other Group Code F2 and O herbicides. The resistant individuals can eventually dominate the weed population, if these herbicides are used repeatedly and exclusively in programmes. These resistant weeds may not be controlled by Stellar® Star, or any other Group Codes F2 and O herbicides.

To delay herbicide resistance:

- Avoid exclusive repeated use of herbicides from the same Herbicide Group Code. Alternate or tank-mix with products, from different Herbicide Group Codes.
- For tank mixing or alternation with products in other Herbicide Group Codes, refer to applicable individual product labels.
- Integrate other control methods (chemical and cultural), into weed control programmes.

FOR SPECIFIC INFORMATION ON RESISTANCE MANAGEMENT, CONTACT THE REGISTRATION HOLDER, BASF SA (Pty) Ltd.

### WAITING PERIOD FOR FOLLOW-UP CROPS

- To avoid possible damage to follow-up crops, the waiting periods as indicated below, should be adhered to after the last application of Stellar® Star and the planting of the follow-up crop.
- However, the waiting periods mentioned here, will only be valid if the standard recommended Stellar® Star rate was applied.
- Refer to atrazine / terbuthylazine labels, for restrictions on those labels.
- A test planting is however recommended.

CROP	WAITING PERIOD IN MONTHS
Wheat and barley	1
Grain sorghum	2
Potatoes	6
Soya beans, dry beans, groundnuts, sunflowers and cotton	6
All other crops	10

## DIRECTIONS FOR USE

USE ONLY AS DIRECTED

### Compatibility:

**Stellar® Star** is compatible with known atrazine 500 g / ℓ and atrazine / terbutylazine (300 / 300 g / ℓ) containing formulations, **Basagran®** (L2916), halosulfuron and **Fastac® SC** (L4992). Do not apply products containing cyanazine, with **Stellar® Star**.

**Stellar® Star** can be used sequentially, or in combination with, soil or foliar applied insecticides, registered for use in maize.

**IMPORTANT: Stellar® Star** is ready formulated with an advanced adjuvant system. Additional spray adjuvants should not be used, as crop selectivity could be negatively influenced.

### Mixing instructions:

Three-quarter fill the spray tank with clean water. Shake the **Stellar® Star** container well. Measure the required volume of **Stellar® Star** and pre-mix this with at least 10 ℓ of water, before adding to the spray tank. Similarly, pre-mix other products individually i.e. atrazine or atrazine combinations, as stated above, **Basagran®**, halosulfuron, **Fastac® SC** and add these diluted mixtures to the spray tank. Fill the spray tank with water to the required level, while maintaining agitation, to ensure thorough mixing of the spray mixture, before spraying commences. Maintain agitation while spraying. The prepared spray mixture must not be left in the spray tank, for any length of time, e.g. overnight.

It is recommended that **Frontier® Optima (L7011)** be applied, as a post-plant, pre-emergent application, before **Stellar® Star** is used (refer to **Frontier® Optima** label). **Stellar® Star** should be used in a programme with **Frontier® Optima**, for optimum results.

## USE RESTRICTIONS

### Do not apply Stellar® Star in the following situations:

- On soils with a compaction layer, on lands where water logging often occurs, or soils with a nutrient deficiency.
- On inbred parent plants of maize hybrids, or experimental or newly released cultivars, without first consulting the advice of the distributor or manufacturer.
- Do not apply, after the maize has reached a height of 800 mm.

### Ground application:

- **Stellar® Star** can be applied as an overall application, using in 200 - 300 ℓ of water / hectare, or as a band application, using the corresponding amount of water, per hectare.
- Any medium or high volume tractor-mounted sprayer can be used, as long as it is fitted with an effective tank agitation system. Ensure that the sprayer can be properly calibrated and that the

spray-boom is fitted with suitable spray nozzles (hollow-cone), to facilitate an even distribution of the herbicide on the weeds.

- **Stellar® Star** should be applied during favourable growing conditions, for optimum crop tolerance and weed control. Apply **Stellar® Star** as a post-emergent treatment to maize, when weeds are actively growing.
- Avoid disturbing (e.g. cultivation) treated areas, for at least seven days, following an application of **Stellar® Star**, to allow optimum herbicide uptake, translocation and weed control.
- Weeds must be thoroughly covered with the spray. Dense leaf canopies, shelter small weeds and can prevent adequate spray coverage. Where crop canopy formation is advanced, drop arms with wide angle nozzles are recommended, to ensure proper coverage of the target area.

All spray applications must be made with suitable equipment, that is in good working order and correctly calibrated, to give the desired coverage for that particular method of application.

CROP	WEED	DOSAGE	DIRECTIONS FOR APPLICATION
MAIZE	Annual grass and broadleaf weeds (as listed in TABLES 1 & 2 below)	Refer to <b>Frontier® Optima</b> label, for dosage recommendations	<b>Frontier® Optima should be applied before Stellar® Star</b> (refer to <b>Frontier® Optima</b> label).
		700 mℓ / ha + 1,5 ℓ / ha atrazine 500 <b>OR</b> 1,25 ℓ / ha atrazine / terbuthylazine	Apply <b>Stellar® Star</b> as an <b>Early Post-Emergent</b> application, at the 3 - 4 leaf stage of the weeds. <b>Do not apply, after the maize has reached 800 mm height.</b>  Use <b>Basagran®</b> or halosulfuron, in a tank mixture with <b>Stellar® Star</b> , where a moderate population of yellow nutsedge ( <i>Cyperus esculentus</i> ), occurs. Under heavier infestations of yellow nutsedge, apply EPTC as a <b>Pre-plant</b> incorporated application (refer to relevant labels of <b>DIRECTIONS FOR USE</b> , for details of recommendations and additional weeds controlled).

## WEEDS CONTROLLED

The following weed species are normally controlled by a pre-emergent application of **Frontier® Optima**, followed by a post-emergent application of **Stellar® Star**, plus recommended atrazine / atrazine + terbuthylazine combinations, in a tank mixture (refer to **DIRECTIONS FOR APPLICATION**, in the table above).

TABLE 1

GRASS WEEDS			
<i>Brachiaria eruciformis</i>	Sweet signal grass	<i>Eragrostis curvula</i>	Weeping lovegrass
<i>Chloris gayana</i>	Rhodes grass	<i>Eragrostis tef</i>	Tef grass
<i>Chloris virgata</i>	Feathertop Chloris	<i>Lolium multiflorum</i>	Italian Ryegrass
<i>Dactyloctenium aegyptium</i>	Crowfoot	<i>Panicum maximum</i>	Common Buffalo Grass
<i>Digitaria eriantha</i>	Common finger grass	<i>Panicum schinzii</i>	Sweet Buffalo Grass
<i>Digitaria sanguinalis</i> *	Crab Finger Grass	<i>Tragus berteronianus</i>	Small Carrotseed grass
<i>Echinochloa colona</i>	Marsh grass	<i>Urochloa mosambicensis</i> *	Bushveld herringbone grass
<i>Echinochloa crusgalli</i>	Barnyard Grass	<i>Urochloa panicoides</i> *	Herringbone Grass
<i>Eleusine coracana</i>	Goose Grass		

\* These grasses are regarded as late germinators and variable control may occur, when the weed germination period is extended, during sub-optimal climatic conditions

TABLE 2

BROADLEAF WEEDS			
<i>Acanthospermum hispidum</i>	Upright starbur	<i>Euphorbia helioscopia</i>	Umbrella milkweed
<i>Amaranthus deflexus</i>	Perennial pigweed	<i>Fallopia convolvulus</i>	Climbing knotweed
<i>Amaranthus hybridus</i>	Common pigweed	<i>Flaveria bidentis</i>	Smelter's bush
<i>Amaranthus spinosus</i>	Thorny pigweed	<i>Gisekia pharnacoides</i>	Gisekia
<i>Amaranthus thunbergii</i>	Red pigweed	<i>Helianthus annua</i>	Sunflower (Volunteer)
<i>Bidens pilosa</i>	Blackjack	<i>Hibiscus trionum</i>	Bladderweed
<i>Chenopodium album</i>	White goosefoot	<i>Ipomoea purpurea*</i>	Morning glory
<i>Chenopodium carinatum</i>	Green goosefoot	<i>Nicandra physaloides</i>	Apple of Peru
<i>Citrullus lanatus</i>	Wild watermelon	<i>Physalis angulata</i>	Wild gooseberry
<i>Cleome gynandra</i>	Spider wisp	<i>Portulaca oleracea</i>	Purslane
<i>Cleome monophylla</i>	Spindlepod	<i>Richardia brasiliensis</i>	Tropical Richardia
<i>Commelina benghalensis*</i>	Wandering Jew	<i>Schkuhria pinnata</i>	Dwarf Marigold
<i>Crotalaria sphaerocarpa</i>	Mealie Crotalaria	<i>Tagetes minuta</i>	Tall Khakiweed
<i>Datura ferox*</i>	Large thorn apple	<i>Tribulus terrestris</i>	Devil's Thorn
<i>Datura stramonium*</i>	Common thorn apple	<i>Xanthium strumarium*</i>	Cocklebur
<i>Emex australis**</i>	Spiny Emex		

\* Plants of these species can originate from rhizomes or seed germinating, deep in the soil and may emerge some time after the majority of other weeds have emerged. In such cases, they may not be adequately controlled.

\*\* Only plants emerged from germinated seed, will be adequately controlled.

**Basagran®**, **Frontier® Optima** and **Fastac® SC** are Registered Trade Marks of BASF.

## WAARSKUWINGS

**LAAT DIE VOLGENDE MINIMUM AANTAL DAE TOE, TUSSEN DIE LAASTE TOEDIENING EN OES OF BEWEIDING:**

Mielies	14
---------	----

- Hanteer versigtig.
- Skadelik indien ingesluk.
- Bêre agter slot en grendel buite bereik van kinders, ongeligte persone en diere.
- Giftig vir waterorganismes.
- Bêre weg van kos en voer in 'n koel plek.
- Mag skadelik wees vir 'n ongebore kind.

**Alhoewel hierdie middel omvattend en onder 'n groot verskeidenheid toestande getoets is, waarborg die registrasiehouer nie dat dit onder alle toestande doeltreffend sal wees nie, aangesien die werking en effek daarvan beïnvloed kan word, deur faktore soos abnormale grond, klimaats- en bergingstoestande, kwaliteit van verdunningswater, verenigbaarheid met ander stowwe wat nie op die etiket aangedui is nie, en die voorkoms van weerstand van 'n onkruid teen die betrokke middel, sowel as die metode, tyd en akkuraatheid van toediening. Verder aanvaar die registrasiehouer nie verantwoordelikheid vir skade aan gewasse, plantegroei, die omgewing, nadelige effek op mens of dier, of vir 'n gebrek aan prestasie, as gevolg van die versuim van die gebruiker om etiketaanwysings na te kom, of as gevolg van die ontstaan van toestande, wat nie kragtens die registrasie voorsien kon word nie. Raadpleeg die verskaffer, in die geval van enige onsekerheid.**

## VOORSORGMAATREËLS

- Moenie spuitnewel inasem nie.
- Dra beskermende klere en gesigmasker wanneer konsentreer hanteer word.
- Was besmette klere, daaglik.
- Was met seep en water indien dit per ongeluk op die vel beland.
- Vermoed besoedeling van voedsel, voer, eetgerei en drinkwater.
- Moenie eet, rook of drink terwyl gemeng of gespuit word nie en alvorens die hande en gesig nie eers gewas is nie.
- Vermoed oorwaai van spuitstof na ander gewasse, damme, riviere en weiveld wat nie tans behandel word nie.



- Leë houers moet DRIEKEER UITGESPOEL word soos volg: Keer die leë houer om oor die spuittenk of mengbak en dreineer vir minstens 30 sekondes, nadat die vloeï tot 'n gedrup verminder het. Spoel die houer daarna driekeer uit met 'n volume water gelykstaande aan 'n minimum van 10 %, van die houer. Gooi die spelwater by die inhoud van die spuittenk, voordat die houer op die voorgeskrewe wyse vernietig word.
- Vernietig leë houer, deur gate in te kap en plat te slaan en raak op 'n veilige wyse daarvan ontslae en moenie vir enige ander doel hergebruik nie.

#### **WEERSTANDBIEDENHEIDSWAARSKUWING**

**Stellar® Star** is 'n HRAC Onkruidodergroepkodes F2 en 0 onkruidodder. Enige populasie van 'n spesifieke onkruid mag individue insluit, wat 'n natuurlike weerstand teen **Stellar® Star**, of enige ander Groepkode F2 en 0 onkruidodders het. Indien hierdie onkruidodders in herhaaldelike en eksklusiewe programme aangewend word, kan die weerstandbiedende individue uiteindelik die onkruidpopulasie, oorheers. Hierdie weerstandbiedende onkruid, sal waarskynlik nie deur **Stellar® Star** of enige ander Groepkode F2 en 0 onkruidodders, beheer word nie.

**Om weerstand teen onkruidodders te vertraag:**

- Vermy die eksklusiewe herhaaldelike gebruik van onkruidodders, in dieselfde Onkruidodergroepkode. Wissel af met, of gebruik tenkmengsels van produkte, in verskillende Onkruidodergroepkodes.
- Sien toepaslike individuele produketikette wanneer daar afgewissel word, of tenkmengsels gebruik word, met produkte in ander Onkruidodergroepkodes.
- Integreer ander beheermaatreëls (chemies en verbouing), in onkruidodderprogramme.

**VIR SPESIFIEKE INLIGTING OOR WEERSTANDBIEDENDHEIDSBESTUUR, KONTAK DIE REGISTRASIEHOUER, BASF SA (Edms) Bpk.**

#### **WAGPERIODES VIR OPVOLGGEWASSE**

- Om moontlike skade aan opvolggewasse te voorkom, moet wagperiodes soos hieronder aangedui, in ag geneem word.
- Die wagperiodes soos hieronder genoem, geld slegs indien die standaard aanbevole dosis **Stellar® Star**, toegedien was.
- Verwys na die onderskeie atrasien / terbutielasien etikette, vir gebruiksbepelings.
- 'n Toetsaanplanting word egter aanbeveel.

GEWAS	WAGPERIODE IN MAANDE
<b>Koring en gars</b>	1
Graansorghum	2
Aartappels	6
Sojabone, droëbone, grondbone, sonneblomme en katoen	6
Alle ander gewasse	10

#### GEBRUIKSAANWYSINGS:

GEBRUIK SLEGS SOOS VOORGESKRYF

#### Verenigbaarheid:

**Stellar® Star** is verenigbaar met atrasiene 500 g / ℓ en atrasien / terbutielasien (300 / 300 g / ℓ) bevattende formulasies, **Basagran®** (L2916), halosulfuron en **Fastac® SC** (L4992). Moenie produkte wat sianasien bevat, met **Stellar® Star** toedien nie.

**Stellar® Star** kan opeenvolgend, of in kombinasie, met insektemiddels wat as grond- of blaartoedienings gespuit word, toegedien word.

**BELANGRIK: Stellar® Star** is reeds geformuleer met 'n bevorderingsmiddel. Die byvoeging van addisionele bevorderingsmiddels, word nie aanbeveel nie, aangesien dit die risiko van gewasskade, mag verhoog.

#### Menginstruksies:

Maak die spuittenk driekwart vol met skoon water. Skud die **Stellar® Star** houer goed. Meet die benodigde hoeveelheid **Stellar® Star** af en meng dit vooraf met minstens 10 ℓ water. Voeg hierdie mengsel by die water in die spuittenk, terwyl die mengsel geroer word. Meet op soortgelyke manier ander produkte individueel, soos atrasien, atrasien kombinasies, soos hierbo genoem, **Basagran®**, halosulfuron, **Fastac® SC** en voeg die verdunde mengsels in die spuittenk. Vul die spuittenk met water, terwyl daar nog steeds geroer word, ten einde deeglike vermenging van die spuitmengsel te verseker, alvorens daar begin word met bespuiting. Handhaaf roering gedurende die hele spuitproses. Aangemaakte spuitmengsel, moenie in die spuittenk gelaat word vir enige bepaalde tydperk, bv. oornag, nie.

**Vóór Stellar® Star** gespuit word, word dit aanbeveel dat **Frontier® Optima (L7011)** as 'n na-plant-, voor-opkomsbespuiting, toegedien word (verwys na die **Frontier® Optima** etiket). **Stellar® Star** behoort in 'n programbespuiting met **Frontier® Optima**, toegedien te word, vir optimale resultate.

## GEBRUIKSBEPERKINGS

### Moenie Stellar® Star, onder die volgende situasies toedien nie:

- Op saamgepakte grondlae, waar versuip toestande op lande voorkom, of arm grond.
- Op ingeteelde ouerplante, of mieliehibriede, of nuut vrygestelde kultivars, sonder dat advies van die verspreider of vervaardiger ingewin is.
- Moenie toedien, nadat die mielies 800 mm hoog is nie.

### Grondtoediening:

- **Stellar® Star** kan as 'n breedwerpig toediening aangewend word, met 200 - 300 ℓ water / hektaar, of 'n bandplasing, waar dit met die ooreenkomstige hoeveelheid volume water per hektaar, toegedien word.
- Enige medium- of hoë volume trekkegemonteerde spuitapparaat kan gebruik word, mits dit toegerus is met 'n effektiewe roermeganisme. Verseker dat die spuitpomp korrek gekalibreer is en dat die regte spuitkoppe (holkeël), aan die spuitarm gekoppel is, sodat die onkruid eweredig deur die onkruiddoder bedek word.
- **Stellar® Star**, moet tydens gunstige groei toestande toegedien word, om optimum gewastoleransie en onkruidbeheer te verkry. Dien **Stellar® Star** as 'n na-opkomsbehandeling op mielies toe, wanneer die onkruid aktief groei.
- Vermo grondversteurings (bv. skoffel), vir ten minste sewe dae, nadat **Stellar® Star** toegedien is, om optimale onkruiddoderopname te verseker, sowel as translokasie in die plant, vir verbeterde onkruidbeheer.
- Benat onkruid deeglik met onkruiddoder. Digte onkruidafskerming, kan die kleiner onderste onkruid bedek en kan verhoed dat hulle voldoende benat word. Wanneer die gewas dig ontwikkel en afskerming bied, moet valarms met wye hoek spuitpunte gebruik word, om te verseker dat die teikengebied, deeglik bedek word.

Alle toedienings moet gemaak word, met geskikte toerusting, wat in goeie werkende toestand en korrek gekalibreer is, ten einde die verlangde bedekking te gee, vir die betrokke toedieningsmetode.



GEWAS	ONKRUID	DOSIS	GEBRUIKSAANBEVELINGS
MIELIES	Eenjarige grasse en breëblaaronkruid (soos gelys in TABELLE 1 & 2 hieronder)	Verwys na die <b>Frontier® Optima</b> etiket, vir dosisaanbevelings	<b>Frontier® Optima behoort toegedien te word, voordat Stellar® Star gespuit word</b> (verwys na die <b>Frontier® Optima</b> etiket).
		700 ml / ha + 1,5 l / ha atrasion 500 <b>OF</b> 1,25 l / ha atrasion / terbutielasion	Dien <b>Stellar® Star</b> , as 'n <b>vroëe na-opkomstoediening</b> toe, tydens die 3 - 4 blaarstadium van die onkruid. <b>Moenie toedien, nadat die mielies 800 mm hoog is nie.</b>  Gebruik <b>Basagran®</b> of halosulfuron in 'n tenkmengsel met <b>Stellar® Star</b> , waar 'n matige populasie van geeluintjies ( <i>Cyperus esculentus</i> ) voorkom. Met swaar besmettings van geeluintjies dien EPTC toe as 'n <b>voor-plant</b> ingewerkte toediening (verwys na die relevante etikette vir besonderhede van <b>GEBRUIKSAANWYSINGS</b> om bykomende onkruid te beheer).

#### BEHEER VAN ONKRUIDE

Die volgende spesies, word normaalweg beheer deur 'n voor-opkomstoediening van **Frontier® Optima**, opgevolg deur 'n na-opkomstoediening van **Stellar® Star**, plus die aanbevole atrazine / atrazine + terbutylazine kombinasies, in 'n tenkmengsel (verwys na **TOEDIENINGSVOORSKRIFTE** in die tabel hierbo).

TABEL 1

GRASSE			
<i>Brachiaria eruciformis</i>	Litjiesinjalgras	<i>Eragrostis curvula</i>	Oulandsgras
<i>Chloris gayana</i>	Rhodes Chloris	<i>Eragrostis tef</i>	Tefgras
<i>Chloris virgata</i>	Witpluim chloris	<i>Lolium multiflorum</i>	Italiaanse raaigras
<i>Dactyloctenium aegyptium</i>	Hoenderspoor	<i>Panicum maximum</i>	Gewone buffelsgras
<i>Digitaria eriantha</i>	Gewone vingergras	<i>Panicum schinzii</i>	Soetbuffelsgras
<i>Digitaria sanguinalis</i> *	Kruisvingergras	<i>Tragus berteronianus</i>	Kleinwortelsaadgras
<i>Echinochloa colona</i>	Moerasgras	<i>Urochloa mosambicensis</i> *	Bosveldbeesgras
<i>Echinochloa crusgalli</i>	Hanepootmanna	<i>Urochloa panicoides</i> *	Beesgras
<i>Eleusine coracana</i>	Jongosgras		

\* Hierdie grasse word as laat ontkiemers geklassifiseer en wisselvallige beheer mag voorkom, wanneer die ontkiemingsperiode verleng, onder sub-optimale klimaatstoestande.

TABEL 2

BREËBLAARONKRUIDE			
<i>Acanthospermum hispidum</i>	Regop sterklits	<i>Euphorbia helioscopia</i>	Sambreel melkkruid
<i>Amaranthus deflexus</i>	Meerjarige misbredie	<i>Fallopia convolvulus</i>	Wilde bokwiet
<i>Amaranthus hybridus</i>	Gewone misbredie	<i>Flaveria bidentis</i>	Smelterbossie
<i>Amaranthus spinosus</i>	Doringmisbredie	<i>Gisekia pharmacoides</i>	Gisekia
<i>Amaranthus thunbergii</i>	Roomisbredie	<i>Helianthus annua</i>	Opslag sonneblom
<i>Bidens pilosa</i>	Knapsekerel	<i>Hibiscus trionum</i>	Terblansbossie
<i>Chenopodium album</i>	Withondebos	<i>Ipomoea purpurea*</i>	Purperwinde
<i>Chenopodium carinatum</i>	Groenhondebos	<i>Nicandra physaloides</i>	Basterappelliefie
<i>Citrullus lanatus</i>	Karkoer	<i>Physalis angulata</i>	Wildeappelliefie
<i>Cleome gynandra</i>	Snotterbelletjie	<i>Portulaca oleraceae</i>	Porslein
<i>Cleome monophylla</i>	Rusperbossie	<i>Richardia brasiliensis</i>	Tropiese Richardia
<i>Commelina benghalensis*</i>	Wandelende jood	<i>Schkuhria pinnata</i>	Kleinkakiebos
<i>Crotalaria sphaerocarpa</i>	Mielie Crotolaria	<i>Tagetes minuta</i>	Kakiebos
<i>Datura ferox*</i>	Groot stinkblaar / olieboom	<i>Tribulus terrestris</i>	Gewone dubbeltjie
<i>Datura stramonium*</i>	Gewone stinkblaar / olieboom	<i>Xanthium strumarium*</i>	Kankerroos
<i>Emex australis**</i>	Kaapse dubbeltjie		

\* Hierdie plantspesies, kan van risome of saad opkom, wat diep in die grond is en mag ná die oorgrootheid meerderheid van die onkruid eers opkom en gevolglik nie voldoende beheer, word nie.

\*\* Voldoende beheer kan verkry word, slegs indien ontkiem vanaf saad.

**Basagran®**, **Frontier® Optima** en **Fastac® SC** is Geregistreerde Handelsmerke van BASF.

# Safety data sheet

Page: 1/16

BASF Safety data sheet according to Regulation (EC) No. 1907/2006

Date / Revised: 25.09.2012

Version: 4.0

Product: **STELLAR STAR**

(ID no. 30552432/SDS\_CPA\_EU/EN)

Date of print 26.09.2012

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

### Product identifier

## STELLAR STAR

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

Relevant identified uses: crop protection product, herbicide

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

Company:

BASF SE

67056 Ludwigshafen

GERMANY

Operating Division Crop Protection

Telephone: +49 621 60-27777

E-mail address: [Produktinformation-Pflanzenschutz@basf.com](mailto:Produktinformation-Pflanzenschutz@basf.com)

### Emergency telephone number

International emergency number:

Telephone: +49 180 2273-112

---

## 2. Hazards Identification

### Label elements

Globally Harmonized System, EU (GHS)

Pictogram:



BASF Safety data sheet according to Regulation (EC) No. 1907/2006

Date / Revised: 25.09.2012

Version: 4.0

Product: **STELLAR STAR**

(ID no. 30552432/SDS\_CPA\_EU/EN)

Date of print 26.09.2012

Signal Word:

Danger

Hazard Statement:

H411 Toxic to aquatic life with long lasting effects.  
H360D May damage the unborn child.  
EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

Precautionary Statements (Prevention):

P201 Obtain special instructions before use.  
P281 Use personal protective equipment as required.

Precautionary Statements (Response):

P308 + P313 IF exposed or concerned: Get medical advice/attention.  
P391 Collect spillage.

Precautionary Statements (Storage):

P405 Store locked up.

Precautionary Statements (Disposal):

P501 Dispose of contents/container to hazardous or special waste collection point.

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

Hazard determining component(s) for labelling: TOPRAMEZONE

According to Directive 67/548/EEC or 1999/45/EC

EEC Directives

Hazard symbol(s)

T Toxic.



N Dangerous for the environment.



R-phrases(s)

R61 May cause harm to the unborn child.  
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrases(s)



BASF Safety data sheet according to Regulation (EC) No. 1907/2006  
Date / Revised: 25.09.2012  
Product: **STELLAR STAR**

Version: 4.0

(ID no. 30552432/SDS\_CPA\_EU/EN)

Date of print 26.09.2012

S1/2	Keep locked-up and out of reach of children.
S13	Keep away from food, drink and animal feeding stuffs.
S20/21	When using do not eat, drink or smoke.
S29/35	Do not empty into drains, this material and its container must be disposed of in a safe way.
S36/37	Wear suitable protective clothing and gloves.
S45	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S53	Avoid exposure - obtain special instructions before use.
S57	Use appropriate container to avoid environmental contamination.

Hazard determining component(s) for labelling: TOPRAMEZONE

### **Classification of the substance or mixture**

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

Repr. 1B (unborn child)  
Aquatic Chronic 2

According to Directive 67/548/EEC or 1999/45/EC

Repr. Cat. 2

Possible Hazards:

May cause harm to the unborn child.

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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, Soluble concentrate (SL), herbicide

BASF Safety data sheet according to Regulation (EC) No. 1907/2006

Date / Revised: 25.09.2012

Version: 4.0

Product: **STELLAR STAR**

(ID no. 30552432/SDS\_CPA\_EU/EN)

Date of print 26.09.2012

contains: Topramezone (content (W/W): 4,5%) present as Topramezone-Sodium (content (W/W): 4,8%)

Hazardous ingredients (GHS)

according to Regulation (EC) No. 1272/2008

## | sodium 3,6-dichloro-o-anisate

Content (W/W): 15.7 %

CAS Number: 1982-69-0

EC-Number: 217-846-3

INDEX-Number: 607-243-00-7

Aquatic Chronic 3

H412

## | Methanone, [3-(4,5-dihydro-3-isoxazolyl)-2-methyl-4-(methylsulfonyl)phenyl](5-hydroxy-1-methyl-1H-pyrazol-4-yl)-

Content (W/W): 4.5 %

CAS Number: 210631-68-8

Repr. 1B (unborn child)

Aquatic Acute 1

Aquatic Chronic 1

H400, H410, H360D

## | fatty alcohol alkoxyate

Content (W/W): &lt; 30 %

CAS Number: 120313-48-6

Skin Corr./Irrit. 2

H315

## | sodium hydroxide; caustic soda

Content (W/W): &lt; 10 %

CAS Number: 1310-73-2

EC-Number: 215-185-5

REACH registration number: 01-2119457892-27

INDEX-Number: 011-002-00-6

Skin Corr./Irrit. 1A

H314

Hazardous ingredients

according to Directive 1999/45/EC

## | sodium 3,6-dichloro-o-anisate

Content (W/W): 15.7 %

| CAS Number: 1982-69-0

EC-Number: 217-846-3

| INDEX-Number: 607-243-00-7

R-phrases(s): 52/53

## Methanone, [3-(4,5-dihydro-3-isoxazolyl)-2-methyl-4-(methylsulfonyl)phenyl](5-hydroxy-1-methyl-1H-pyrazol-4-yl)-

Content (W/W): 4.5 %

CAS Number: 210631-68-8

Hazard symbol(s): T, N

R-phrases(s): 61, 50/53

fatty alcohol alkoxylate

Content (W/W): < 30 %

CAS Number: 120313-48-6

Hazard symbol(s): Xi

R-phrases: 38

| sodium hydroxide; caustic soda

Content (W/W): < 10 %

CAS Number: 1310-73-2

EC-Number: 215-185-5

REACH registration number: 01-2119457892-27

INDEX-Number: 011-002-00-6

Hazard symbol(s): C

R-phrases: 35

For the classifications not written out in full in this section, including the indication of danger, the hazard symbols, the R phrases, and the hazard statements, the full text is listed in section 16.

---

## 4. First-Aid Measures

### Description of first aid measures

| First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Immediately remove contaminated clothing.

If inhaled:

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

On skin contact:

| Immediately wash thoroughly with soap and water, seek medical attention.

On contact with eyes:

| Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

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

Unsuitable extinguishing media for safety reasons:

water jet

### Special hazards arising from the substance or mixture

carbon monoxide, hydrogen chloride, Carbon dioxide, nitrogen oxides, organochloric compounds

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:

In case of fire and/or explosion do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. 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.

---

## 6. Accidental Release Measures

### Personal precautions, protective equipment and emergency procedures

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

### Environmental precautions

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

### 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.

Collect waste in suitable containers, which can be labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations. Incinerate or take to a special waste disposal site in accordance with local authority regulations. Dispose of absorbed material in accordance with regulations.

### Reference to other sections

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

---

## 7. Handling and Storage

### Precautions for safe handling

---

BASF Safety data sheet according to Regulation (EC) No. 1907/2006

Date / Revised: 25.09.2012

Version: 4.0

Product: **STELLAR STAR**

(ID no. 30552432/SDS\_CPA\_EU/EN)

Date of print 26.09.2012

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. Remove contaminated clothing and protective equipment before entering eating areas.

Protection against fire and explosion:

Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy. Vapours may form ignitable mixture with air.

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

Segregate from foods and animal feeds.

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

Storage stability:

Storage duration: 24 Months

### **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

| 1310-73-2: sodium hydroxide; caustic soda

### **Exposure controls**

Personal protective equipment

Respiratory protection:

Suitable respiratory protection for lower concentrations or short-term effect: Combination filter for gases/vapours of organic, inorganic, acid inorganic, alkaline compounds and toxic particles (e. g. EN 14387 Type ABEK-P3)

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. Females of childbearing age should not come into contact with the product. Avoid contact with the skin, eyes and clothing. 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:	liquid	
Colour:	brown, clear	
Odour:	alcohol-like	
Odour threshold:	not determined	
pH value:	approx. 6 - 8 (1 %(m), 20 °C)	
Melting point:	0 °C	
Boiling point:	Information applies to the solvent. 100 °C	
Flash point:	Information applies to the solvent. > 105 °C	
Evaporation rate:	not applicable	
Flammability:	not highly flammable	
Lower explosion limit:	not determined	
Upper explosion limit:	not determined	
Ignition temperature:	433 °C	(Directive 92/69/EEC, A.15)
Vapour pressure:	approx. 23 hPa (20 °C)	
Density:	Information applies to the solvent. approx. 1.11 g/cm <sup>3</sup> (20 °C)	
Relative vapour density (air):	not determined	
Solubility in water:	soluble	
<i>Information on: sodium 3,6-dichloro-o-anisate</i>		
<i>Partitioning coefficient n-octanol/water (log Kow): -1.88</i>		
<i>(pH value: 6.8)</i>		
-----		
Thermal decomposition:	280 °C, 100 kJ/kg (DSC (OECD 113)) 390 °C, 70 kJ/kg (DSC (OECD 113))	
Viscosity, dynamic:	not determined	
Explosion hazard:	Based on the chemical structure there is no indicating of explosive properties.	

BASF Safety data sheet according to Regulation (EC) No. 1907/2006  
Date / Revised: 25.09.2012  
Product: **STELLAR STAR**

Version: 4.0

(ID no. 30552432/SDS\_CPA\_EU/EN)

Date of print 26.09.2012  
(Directive 2004/73/EC, A.21)

Fire promoting properties: not fire-propagating

### 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: No corrosive effect on metal.

### 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 bases, strong acids, 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 by inhalation. Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact.

Experimental/calculated data:

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

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

BASF Safety data sheet according to Regulation (EC) No. 1907/2006  
Date / Revised: 25.09.2012  
Product: **STELLAR STAR**

Version: 4.0

(ID no. 30552432/SDS\_CPA\_EU/EN)

Date of print 26.09.2012

(by inhalation): The product has not been tested. The statement has been derived from the properties of the individual components.

LD50 rat (dermal): > 4,000 mg/kg

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

*Information on: Methanone, [3-(4,5-dihydro-3-isoxazolyl)-2-methyl-4-(methylsulfonyl)phenyl](5-hydroxy-1-methyl-1H-pyrazol-4-yl)-*

*Experimental/calculated data:*

*LC50 rat (by inhalation): > 5.05 mg/l 4 h (OECD Guideline 403)*

*Information on: sodium 3,6-dichloro-o-anisate*

*Experimental/calculated data:*

*LC50 rat (by inhalation): > 200 mg/l 4 h*

#### Irritation

Assessment of irritating effects:

Not irritating to the eyes. Skin contact causes slight irritation.

Experimental/calculated data:

Skin corrosion/irritation rabbit: Slightly irritating. (OECD Guideline 404)

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

#### Respiratory/Skin sensitization

Assessment of sensitization:

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. There is no evidence of a skin-sensitizing potential.

Experimental/calculated data:

modified Buehler test guinea pig: Skin sensitizing effects were not observed in animal studies.

#### Germ cell mutagenicity

Assessment of mutagenicity:

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

#### Carcinogenicity

Assessment of carcinogenicity:

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

*Information on: Methanone, [3-(4,5-dihydro-3-isoxazolyl)-2-methyl-4-(methylsulfonyl)phenyl](5-hydroxy-1-methyl-1H-pyrazol-4-yl)-*

*Assessment of carcinogenicity:*



---

BASF Safety data sheet according to Regulation (EC) No. 1907/2006

Date / Revised: 25.09.2012

Version: 4.0

Product: **STELLAR STAR**

(ID no. 30552432/SDS\_CPA\_EU/EN)

Date of print 26.09.2012

*When given in high doses, the substance was carcinogenic in animal studies. Based on its mechanism of action, a carcinogenic potential is not expected after exposure to low doses.*

-----

#### 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.

*Information on: Methanone, [3-(4,5-dihydro-3-isoxazolyl)-2-methyl-4-(methylsulfonyl)phenyl](5-hydroxy-1-methyl-1H-pyrazol-4-yl)-*

*Assessment of teratogenicity:*

*May cause harm to the unborn child.*

-----

#### 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: Methanone, [3-(4,5-dihydro-3-isoxazolyl)-2-methyl-4-(methylsulfonyl)phenyl](5-hydroxy-1-methyl-1H-pyrazol-4-yl)-*

*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) 108 mg/l, *Oncorhynchus mykiss* (OECD 203; ISO 7346; 84/449/EEC, C.1, static)

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

Aquatic invertebrates:

EC50 (48 h) 95.9 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)

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

Aquatic plants:

EC50 (7 d) 1.09 mg/l, Lemna gibba (OECD guideline 221, static)

### **Persistence and degradability**

Assessment biodegradation and elimination (H<sub>2</sub>O):

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

*Information on: sodium 3,6-dichloro-o-anisate*

*Assessment biodegradation and elimination (H<sub>2</sub>O):*

*Not readily biodegradable (by OECD criteria). The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.*

*Information on: Methanone, [3-(4,5-dihydro-3-isoxazolyl)-2-methyl-4-(methylsulfonyl)phenyl](5-hydroxy-1-methyl-1H-pyrazol-4-yl)-*

*Assessment biodegradation and elimination (H<sub>2</sub>O):*

*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: sodium 3,6-dichloro-o-anisate*

*Bioaccumulation potential:*

*Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.*

*Information on: Methanone, [3-(4,5-dihydro-3-isoxazolyl)-2-methyl-4-(methylsulfonyl)phenyl](5-hydroxy-1-methyl-1H-pyrazol-4-yl)-*

*Bioaccumulation potential:*

*Bioconcentration factor: 0.69 (42 d), Lepomis macrochirus (OPPTS 850.1730 (EPA Guideline))*

*Does not significantly 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: sodium 3,6-dichloro-o-anisate*

*Assessment transport between environmental compartments:*

BASF Safety data sheet according to Regulation (EC) No. 1907/2006  
Date / Revised: 25.09.2012  
Product: **STELLAR STAR**

Version: 4.0

(ID no. 30552432/SDS\_CPA\_EU/EN)

Date of print 26.09.2012

*Following exposure to soil, the product trickles away and can - dependant on degradation - be transported to deeper soil areas with larger water loads.  
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.*

*Information on: Methanone, [3-(4,5-dihydro-3-isoxazolyl)-2-methyl-4-(methylsulfonyl)phenyl](5-hydroxy-1-methyl-1H-pyrazol-4-yl)-*

*Assessment transport between environmental compartments:*

*Following exposure to soil, the product trickles away and can - dependant on degradation - be transported to deeper soil areas with larger water loads.*

-----

### 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

### Waste treatment methods

Must be sent to a suitable incineration plant, observing local regulations.

Contaminated packaging:

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

---

## 14. Transport Information

### Land transport

ADR

UN number

UN3082

UN proper shipping name:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S. (contains TOPRAMEZONE)

Transport hazard class(es):

9, EHSM

BASF Safety data sheet according to Regulation (EC) No. 1907/2006

Date / Revised: 25.09.2012

Version: 4.0

Product: **STELLAR STAR**

(ID no. 30552432/SDS\_CPA\_EU/EN)

Date of print 26.09.2012

Packing group: III  
 Environmental hazards: yes  
 Special precautions for user: Tunnel code: E

**RID**

UN number: UN3082  
 UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains TOPRAMEZONE)  
 Transport hazard class(es): 9, EHSM  
 Packing group: III  
 Environmental hazards: yes  
 Special precautions for user: None known

**Inland waterway transport****ADN**

UN number: UN3082  
 UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains TOPRAMEZONE)  
 Transport hazard class(es): 9, EHSM  
 Packing group: III  
 Environmental hazards: yes  
 Special precautions for user: None known  
 Transport in inland waterway vessel: Not evaluated

**Sea transport****IMDG**

UN number: UN 3082  
 UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains TOPRAMEZONE)  
 Transport hazard class(es): 9, EHSM  
 Packing group: III  
 Environmental hazards: yes  
 Marine pollutant: YES  
 Special precautions for user: None known

**Air transport****IATA/ICAO**

UN number: UN 3082

BASF Safety data sheet according to Regulation (EC) No. 1907/2006  
 Date / Revised: 25.09.2012  
 Product: **STELLAR STAR**

Version: 4.0

(ID no. 30552432/SDS\_CPA\_EU/EN)

Date of print 26.09.2012

UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
 N.O.S. (contains TOPRAMEZONE)  
 Transport hazard class(es): 9, EHSM  
 Packing group: III  
 Environmental hazards: yes  
 Special precautions for user: None known

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

Regulation: Not evaluated  
 Shipment approved: Not evaluated  
 Pollution name: Not evaluated  
 Pollution category: Not evaluated  
 Ship Type: Not evaluated

## 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.

## 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:

T	Toxic.
N	Dangerous for the environment.
Xi	Irritant.
C	Corrosive.
52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
61	May cause harm to the unborn child.
50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
38	Irritating to skin.
35	Causes severe burns.
Repr.	Reproductive toxicity
Aquatic Chronic	Hazardous to the aquatic environment - chronic
Aquatic Acute	Hazardous to the aquatic environment - acute

---

BASF Safety data sheet according to Regulation (EC) No. 1907/2006

Date / Revised: 25.09.2012

Version: 4.0

Product: **STELLAR STAR**

(ID no. 30552432/SDS\_CPA\_EU/EN)

Date of print 26.09.2012

Skin Corr./Irrit. Repr. Cat. 2	Skin corrosion/irritation Reprotoxic substances (fertility or development) Category 2: Substances which should be regarded as if they cause developmental toxicity to in humans or substances which should be regarded as if they impair fertility in humans.
H412	Harmful to aquatic life with long lasting effects.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H360D	May damage the unborn child.
H315	Causes skin irritation.
H314	Causes severe skin burns and eye damage.

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.