

SAFETY DATA SHEET

Section 1: IDENTIFICATION

Product Name:	RYDER® Turf Pigment
Design Code:	A22884A
Recommended Use:	Colouring agents, pigments
Company Details:	Syngenta Crop Protection Limited
Address:	Level 4, 60 Parnell Road, Parnell AUCKLAND 1052 NEW ZEALAND
Telephone number:	(weekdays) 09 306 1500
Emergency Telephone number:	(24 Hours) 0800 734 607
National Poisons & Hazchem Information Centre :	0800 POISON (0800 764 766)

Section 2: HAZARDS IDENTIFICATION

GHS classification:	Category 1
Serious eye damage:	Category 1
Skin sensitisation:	Category 1
Long-term (chronic) aquatic hazard:	Category 3
GHS label elements:	
Hazard pictogram:	
Signal word:	Danger
Hazard statements:	H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H412 Harmful to aquatic life with long lasting effects.
Precautionary statements:	Prevention: P261 Avoid breathing mist or vapours. P280 Wear protective gloves/ eye protection/ face protection. Response: P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor. P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention. P362 + P364 Take off contaminated clothing and wash it before reuse. Disposal: P501 Dispose of contents/ container to an approved waste disposal plant.
Other hazards which do not result in classification:	None known.

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Mixture:		
Chemical Identity of ingredients:		
Ingredient	CAS no.	Content (% w/w)
alcohols, C12-15, ethoxylated	68131-39-5	>= 10 - < 20
carbon black	1333-86-4	>= 1 - < 10
fatty acids, tall-oil, diesters with polypropylene glycol	68648-12-4	>= 1 - < 10

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	55965-84-9	>= 0.0025 -< 0.025
Other ingredients determined not to be hazardous	-	to 100%

Section 4: FIRST AID MEASURES

Description of First Aid measures:	
General Advice:	For advice contact the National Poisons Centre on 0800 POISON (0800 764 766) or a doctor immediately. Have the product container, label or Safety Data Sheet with you when calling the emergency number, the National Poisons Centre or physician, or going for treatment. Obtain medical attention.
If inhaled:	Move the victim to fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest. Call a Doctor or the National Poisons Centre immediately.
In case of skin contact:	Take off all contaminated clothing immediately. Wash off immediately with plenty of water. If skin irritation persists, call a doctor. Wash contaminated clothing before re-use.
In case of eye contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses (if present). Immediate medical attention is required.
If swallowed:	If swallowed seek medical advice immediately and show the container or label. DO NOT induce vomiting.
Important symptoms and effects, both acute and delayed:	
Symptoms:	No symptoms known or expected.
Indication of any immediate medical attention and special treatment needed:	
	There is no specific antidote available. Treat symptomatically.

Section 5: FIRE-FIGHTING MEASURES

Extinguishing media:	
Suitable extinguishing media:	Small fires: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Large Fires: Alcohol resistant foam or water spray.
Unsuitable extinguishing media:	Do not use a solid water stream as it may scatter and spread fire.
Special hazards arising from the substance or mixture:	
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.
Advice for firefighters:	
Special protective equipment for firefighters:	Wear full protective clothing and self-contained breathing apparatus.
Hazchem Code:	-

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.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Refer to protective measures listed in Sections 7 and 8.

Environmental Precautions:

Prevent further leakage or spillage if safe to do so.
Do not flush into surface water or sanitary sewer system.
If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and material for containment and 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 regulations (see section 13).
Clean contaminated surface thoroughly.
Clean with detergents. Avoid solvents.
Retain and dispose of contaminated wash water.

Reference to other sections:

Refer to disposal considerations listed in Section 13.
Refer to protective measures listed in sections 7 and 8.

Section 7: HANDLING AND STORAGE

Precautions for Safe handling:

Advice on safe handling:

No special protective measures against fire required.
Avoid contact with skin and eyes.
When using do not eat, drink or smoke.
For personal protection see section 8.

Conditions for safe storage, including any incompatibilities:

Requirements for storage area and containers:

No special storage conditions required. 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.

Specific end use(s)

Specific use(s)

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

Section 8: EXPOSURE CONTROL / PERSONAL PROTECTION

Control Parameters

Occupational Exposure Limits:

Components	CAS No	Value type (form of exposure)	Control parameters	Basis
carbon black	1333-86-4	WES-TWA	3 mg/m ³	NZ OEL
		TWA (Inhalable particulate matter)	3 mg/m ³	ACGIH

Exposure controls

Engineering measures:

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION AND PACKAGING OF THE PRODUCT. FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM

	<p>APPLICATIONS CONSULT THE PRODUCT LABEL.</p> <p>Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated.</p> <p>The extent of these protection measures depends on the actual risks in use.</p> <p>If airborne mists or vapours are generated, use local exhaust ventilation controls.</p> <p>Assess exposure and use any additional measures to keep airborne levels below any relevant exposure limit.</p> <p>Where necessary, seek additional occupational hygiene advice.</p>
Personal Protective Protection:	
Eye protection:	No special protective equipment required.
Hand protection:	<p>Wear protective gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other.</p> <p>Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves.</p> <p>Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. The break through time depends amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each case. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.</p> <p>Material : Nitrile rubber Break through time : > 480 min Glove thickness : 0.5 mm</p>
Skin and body protection:	<p>Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.</p> <p>Remove and wash contaminated clothing before re-use.</p> <p>Wear as appropriate: Impervious clothing</p>
Respiratory protection:	<p>No personal respiratory protective equipment normally required.</p> <p>When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.</p> <p>Suitable respiratory equipment: Respirator with a particle filter</p> <p>The filter class for the respirator must be suitable for the maximum expected contaminant concentration (gas/vapour/aerosol/ particulates) that may arise when handling the product. If this concentration is exceeded, self-contained breathing apparatus must be used.</p> <p>Filter type: Particulates type (P)</p>
Protective measures:	<p>The use of technical measures should always have priority over the use of personal protective equipment.</p> <p>When selecting personal protective equipment, seek appropriate professional advice.</p> <p>Personal protective equipment should be certified to appropriate standards.</p>

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties:

Appearance:	Liquid
Colour:	Green
Odour:	Characteristic
Odour threshold:	No data available
pH value	7.7

Melting point / freezing point:	Concentration: 100 % w/v No data available
Initial boiling point and boiling range:	>= 100°C
Flash point:	Does not flash Method: Seta closed cup
Flammability (solid, gas):	No applicable
Upper flammability / explosive limits:	No data available
Lower flammability / explosive limits:	No data available
Vapour pressure:	No data available
Vapour Density:	No data available
Density:	1.33 – 1.35 g/cm ³ (20°C)
Solubility in water:	Soluble
Solubility in other solvents:	No data available
Partition co-efficient: n-octanol / water:	No data available
Autoignition temperature:	433°C
Decomposition temperature:	No data available
Viscosity, kinematic:	No data available
Explosive properties:	Not explosive
Oxidising properties:	Not classified as oxidizing
Surface tension:	No data available
Minimum ignition energy:	No data available

Section 10: STABILITY AND REACTIVITY

Reactivity:	None reasonably foreseeable.
Chemical Stability:	The product is stable when used in normal conditions.
Possibility of Hazardous Reactions:	No hazardous reactions known under conditions of normal use.
Conditions to Avoid	No decomposition if used as directed.
Incompatible Materials:	No substances are known which lead to the formation of hazardous substances or thermal reactions.
Hazardous Decomposition Products:	Combustion or thermal decomposition will evolve toxic and irritant vapours.

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity (product)	
Swallowed:	LD ₅₀ >2000 mg/kg (calculated acute toxicity estimate)
Dermal absorption:	LD ₅₀ >5000 mg/kg (calculated acute toxicity estimate)
Inhaled:	No data
Aspiration hazard:	No data
Respiratory irritation:	Not classified
Skin corrosion / irritation:	No data for the product
	<p>Components: Fatty acids, tall-oil, diesters with polypropylene glycol: Result : Irritating to skin.</p> <p>reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1): Result : Corrosive after 1 to 4 hours of exposure</p>

Eye damage / irritation:	No data for the product Components: alcohols, C12-15, ethoxylated: Species : Rabbit Result : Risk of serious damage to eyes. Remarks : Information given is based on data obtained from similar substances. Fatty acids, tall-oil, diesters with polypropylene glycol: Result : Eye irritation
Respiratory or Skin Sensitisation:	No data for the product Components: reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1): Result : The product is a skin sensitiser, sub-category 1A.
Chronic / Long Term Effects	
Germ cell mutagenicity:	No data for the product
Carcinogenicity:	No data for the product
Reproductive toxicity:	No data for the product
Specific Organ toxicity:	<i>Single exposure:</i> The substance or mixture is not classified as specific target organ toxicant single exposure. <i>Repeated exposure:</i> The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity Effects – Aquatic

Component:

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1):

Acute toxicity to fish: LC₅₀ (96 h) = 0.22 mg/L (*Oncorhynchus mykiss* (rainbow trout))

Toxicity to daphnia and other aquatic invertebrates:

EC₅₀ (48h) = 0.1 mg/L (*Daphnia magna* (water flea))

ErC₅₀ (72h) = 0.048 mg/L (*Raphidocelis subcapitata* (Freshwater green algae))

NOEC (72h) = 0.0012 mg/L (*Raphidocelis subcapitata* (Freshwater green algae)) Endpoint: Growth rate

ErC₅₀ (48h) = 0.00528 mg/L (*Skeletonema costatum* (marine diatom))

NOEC (48h) = 0.00064 mg/L (*Skeletonema costatum* (marine diatom)) Endpoint: Growth rate

M-Factor (Acute aquatic toxicity) :

100

Toxicity to fish (Chronic toxicity):

NOEC (*Oncorhynchus mykiss* (rainbow trout)) = 0.098 mg/L

Exposure time: 28 d

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity):

NOEC (*Daphnia* (water flea)) = 0.004 mg/L

Exposure time: 21 d

M-Factor (Chronic aquatic toxicity) :

10

Persistence and degradability:

Biodegradability:

Components:

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1):

Result : Readily biodegradable

Stability in water:

Not persistent in water.

Bioaccumulative potential:	
Bioaccumulation:	No data available.
Mobility in soil:	
Distribution among environmental compartments:	No data available.
Stability in soil:	No data available.
Other adverse effects:	
Results of PBT and vPvB assessment (product):	This substance/mixture contains no components considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB) at levels of 0.1% or higher.

Section 13: DISPOSAL CONSIDERATIONS

Product Disposal:	DO NOT contaminate ponds, waterways or ditches with chemical or used containers. DO NOT dispose of waste into sewer. Dispose of this product only by using according to the label. Otherwise, dispose of waste at an approved landfill or other approved facility that will ensure the substance does not exceed the tolerable exposure limit (TEL) or environmental exposure limit (EEL), where relevant, or will treat the substance so that it is rendered no longer hazardous.
Container Disposal:	Ensure the container is empty. Triple rinse empty container and add rinsate to the spray tank. Recycle empty container through Agrecovery (0800 247 326, www.agrecovery.co.nz). Otherwise crush and bury in a suitable landfill. DO NOT reuse this container for any other purpose.

Section 14: TRANSPORT INFORMATION

Rail / Road (NZS 5433)	Not regulated as a dangerous good
Sea (IMDG-Code)	Not regulated as a dangerous good
Air (IATA)	Not regulated as a dangerous good

Section 15: REGULATORY INFORMATION

HSNO Approval Number:	HSR002670
Tolerable Exposure Limit or Environmental Exposure Limit:	No TEL or EEL values are set for this substance.
Required Regulatory Controls:	
Certified handler:	No
Tracking:	No
Record Keeping:	No
ACVM Registration:	Not applicable
ACVM Controls:	Not applicable
International Agreements related to the substance (eg, Montreal Protocol, Stockholm Convention or Rotterdam Convention):	Not applicable

Section 16: OTHER INFORMATION

Date of SDS Preparation / Review:	26 September 2022		
Version number of SDS:	1.0		
Key / Legend to abbreviations and acronyms used:			
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; CPR - Controlled Products Regulations; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose);</p> </td> <td style="width: 50%; vertical-align: top;"> <p>MARPOL - International Convention for the Prevention of Pollution from Ships; N.O.S. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WES - Workplace Exposure Standard (Worksafe NZ); WHMIS - Workplace Hazardous Materials Information System</p> </td> </tr> </table>		<p>AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; 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<p>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 test.</p> <p>This version replaces all previous versions. PRODUCT NAMES are a trademark or registered trademark of a Syngenta Group Company.</p>			