



Material Safety Data Sheet
SPECTICLE 20 WSP HERBICIDE

MSDS Number: 102000014590
MSDS Version 1.3
Revision Date: 08/19/2010

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product name SPECTICLE 20 WSP HERBICIDE
MSDS Number 102000014590
EPA Registration No. 432-1499

Bayer Environmental Science
2 T.W. Alexander Drive
Research Triangle PK, NC 27709
USA

For MEDICAL, TRANSPORTATION or other EMERGENCY call: 1-800-334-7577 (24 hours/day)
For Product Information call: 1-800-331-2867

SECTION 2. HAZARDS IDENTIFICATION

NOTE: Please refer to Section 11 for detailed toxicological information.

Emergency Overview Caution! Hazards to humans. Harmful if swallowed or absorbed through skin. Causes eye irritation. Avoid contact with skin, eyes and clothing. Wash thoroughly with soap and water after handling. Remove and wash contaminated clothing before re-use.

Physical State powder

Odor weak characteristic

Appearance beige

Exposure routes Ingestion, Inhalation, Skin Absorption

Immediate Effects

Eye Moderate eye irritation. Do not get in eyes.

Skin Harmful if absorbed through skin. Avoid contact with skin, eyes and clothing.

Ingestion Harmful if swallowed. Do not take internally.

**Medical Conditions
Aggravated by Exposure**

No specific medical conditions are known which may be aggravated by exposure to this product.

**Potential Environmental
Effect**

Toxic to fish and aquatic invertebrates. This product may cause adverse effects on non-target plants.



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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous Component Name</u>	<u>CAS-No.</u>	<u>Average % by Weight</u>
Indaziflam	950782-86-2	20.00
Lignosulfonic acid, sodium salt, sulfomethylated	68512-34-5	10.00
Alkylaryl sulfonate	91078-64-7	4.00
Titanium dioxide	13463-67-7	0.67

SECTION 4. FIRST AID MEASURES

General	When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.
Eye	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician or poison control center immediately.
Skin	Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center immediately.
Ingestion	Call a physician or poison control center immediately. Rinse out mouth and give water in small sips to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Do not leave victim unattended.
Inhalation	Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a physician or poison control center immediately.
Notes to physician Treatment	Treat symptomatically.

SECTION 5. FIRE FIGHTING MEASURES

Fire and Explosion Hazards	Accumulation of fine dust may entail the risk of a dust explosion in the presence of air.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	High volume water jet



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Fire Fighting Instructions Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.

Dust Explosion Class St1

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions Remove all sources of ignition. Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.

Methods for cleaning up Avoid dust formation. Sweep up or vacuum up spillage and collect in suitable container for disposal. Clean contaminated floors and objects thoroughly, observing environmental regulations.

Additional advice Use personal protective equipment. Material can create slippery conditions. Do not allow to enter soil, waterways or waste water canal.

SECTION 7. HANDLING AND STORAGE

Handling procedures Handle and open container in a manner as to prevent spillage.

Use only in area provided with appropriate exhaust ventilation. Avoid dust formation.

Keep away from heat and sources of ignition. Dust may form explosive mixture in air.

Storing Procedures Store in a cool, dry place and in such a manner as to prevent cross contamination with other crop protection products, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

Work/Hygienic Procedures Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.

Remove Personal Protective Equipment (PPE) immediately after handling this product. Before removing gloves clean them with soap and water. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.

Min/Max Storage Temperatures Recommended minimum transport/storage temperature: -20 °C / -4 °F
 Recommended maximum transport/storage temperature: 40 °C / 104 °F



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SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- General Protection** Follow all label instructions. Train employees in safe use of the product.
 Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water.
- Eye/Face Protection** Safety glasses with side-shields
- Hand protection** Chemical-resistant gloves (barrier laminate, butyl rubber, nitrile rubber or Viton)
- Body Protection** Wear long-sleeved shirt and long pants and shoes plus socks.
- Respiratory protection** When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.

Exposure Limits

Indaziflam Kaolin	950782-86-2 1332-58-7	OES BCS*	TWA	0.14 mg/m3
		ACGIH	TWA	2 mg/m3
		NIOSH	REL	5 mg/m3
		NIOSH	REL	10 mg/m3
		US CA OEL	TWA PEL	2 mg/m3
		TX ESL	ST ESL	20 ug/m3
		TX ESL	AN ESL	2 ug/m3
		TX ESL	ST ESL	20 ug/m3
		TX ESL	AN ESL	2 ug/m3
			TWA	10 mg/m3
Synthetic amorphous silica	112926-00-8	OSHA Z1A	TWA	5 mg/m3
			TWA	6 mg/m3
		TX ESL	ST ESL	40 ug/m3
		TX ESL	AN ESL	4 ug/m3
			TWA	6 mg/m3
Titanium dioxide	13463-67-7	ACGIH	TWA	10 mg/m3
		OSHA Z1	PEL	15 mg/m3
		OSHA Z1A	TWA	10 mg/m3
		TX ESL	ST ESL	50 ug/m3
		TX ESL	AN ESL	5 ug/m3
			TWA	10 mg/m3

*OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"



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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	beige
Physical State	powder
Odor	weak characteristic
pH	8 - 11 (1 %) at 23 °C
Bulk density	195 - 229 kg/m ³
Minimum Ignition Energy	> 0.3 - < 1 J
Decomposition temperature	> 250 °C , Heating rate: 5 K/min
Other information	The product is capable of dust explosions.

SECTION 10. STABILITY AND REACTIVITY

Hazardous reactions	No hazardous reactions when stored and handled according to prescribed instructions.
Chemical Stability	Stable under recommended storage conditions.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	male/female combined rat: LD50: > 900 mg/kg female rat: LD50: > 2,000 mg/kg
Acute dermal toxicity	male/female combined rat: LD50: > 2,000 mg/kg
Acute inhalation toxicity	rat: LC50: > 5.165 mg/l Exposure time: 4 h Determined in the form of a respirable fine dust. highest concentration tested rat: LC50: > 20.66 mg/l Exposure time: 1 h Determined in the form of a respirable fine dust. Extrapolated from the 4 hr LC50.
Skin irritation	rabbit: No skin irritation
Eye irritation	rabbit: No eye irritation



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Sensitisation

Assessment Carcinogenicity

ACGIH

Titanium dioxide 13463-67-7 Group A4

NTP

None.

IARC

Titanium dioxide 13463-67-7 Overall evaluation: 2B

OSHA

None.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity to fish Oncorhynchus mykiss (rainbow trout)
 LC50: 0.572 mg/l
 Exposure time: 96 h
 The value mentioned relates to the active ingredient.

Toxicity to aquatic plants Pseudokirchneriella subcapitata
 Growth rate
 IC50: 0.134 mg/l
 Exposure time: 96 h
 The value mentioned relates to the active ingredient.

Acute Toxicity to Aquatic Invertebrates Water flea (Daphnia magna)
 EC50: > 9.88 mg/l
 Exposure time: 48 h
 The value mentioned relates to the active ingredient.

Environmental precautions Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Do not allow to get into surface water, drains and ground water.

SECTION 13. DISPOSAL CONSIDERATIONS

General Disposal Guidance Dispose in accordance with all local, state/provincial and federal regulations.

Container Disposal Follow advice on product label and/or leaflet. Do not re-use empty containers. Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State/Provincial and local authorities, by burning. If burned, stay out of smoke.



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RCRA Information Characterization and proper disposal of this material as a special or hazardous waste is dependent upon Federal, State and local laws and are the user's responsibility. RCRA classification may apply.

SECTION 14. TRANSPORT INFORMATION

CFR Not dangerous goods / not hazardous material

IMDG

UN-Number **3077**
 Class **9**
 Packaging group **III**
 Marine pollutant **Marine Pollutant**
 Description of the goods **ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (INDAZIFLAM MIXTURE)**

IATA

UN-Number **3077**
 Class **9**
 Packaging group **III**
 Description of the goods **ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (INDAZIFLAM MIXTURE)**

This transportation information is not intended to convey all specific regulatory information relating to this product. It does not address regulatory variations due to package size or special transportation requirements.

SECTION 15. REGULATORY INFORMATION

EPA Registration No. 432-1499

US Federal Regulations

TSCA list

Lignosulfonic acid, sodium salt, sulfomethylated 68512-34-5
 Titanium dioxide 13463-67-7

US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)
 None.

SARA Title III - Section 302 - Notification and Information
 None.

SARA Title III - Section 313 - Toxic Chemical Release Reporting
 None.

US States Regulatory Reporting

CA Prop65

This product does not contain any substances known to the State of California to cause cancer.



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This product does not contain any substances known to the State of California to cause reproductive harm.

US State Right-To-Know Ingredients

Titanium dioxide 13463-67-7 IL, MN, RI
None.

Canadian Regulations

Canadian Domestic Substance List

Lignosulfonic acid, sodium salt, sulfomethylated 68512-34-5
Alkylaryl sulfonate 91078-64-7
Titanium dioxide 13463-67-7

Environmental

CERCLA

None.

Clean Water Section 307 Priority Pollutants

None.

Safe Drinking Water Act Maximum Contaminant Levels

None.

International Regulations

European Inventory of Existing Commercial Substances (EINECS)

Titanium dioxide 13463-67-7

SECTION 16. OTHER INFORMATION

NFPA 704 (National Fire Protection Association):

Health - 1 Flammability - 1 Reactivity - 0 Others - none

HMIS (Hazardous Materials Identification System, based on the Third Edition Ratings Guide)

Health - 1 Flammability - 1 Physical Hazard - 0 PPE -

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

Reason for Revision: Updated for general editorial purposes. The following sections have been revised:
Section 2: Hazards Identification. Section 14: Transport Information.

Revision Date: 08/19/2010

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