

SAFETY DATA SHEET

1. Identification

Product identifier	EVITAL® 5G
Other means of identification	
SDS number	303
Product registration number	5481-506
Recommended use	Herbicide.
Recommended restrictions	See product label for restrictions. Keep out of the Reach of Children!
EPA Registration number	EPA: 5481-506

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name	AMVAC Chemical Corporation	
Address	4695 MacArthur Court Suite 1200 Newport Beach, CA 92660	
Telephone	AMVAC Chemical Corp	949-260-1200
	AMVAC Chemical Corp	949-260-6270(FAX)
Website	www.Amvac-Chemical.com	
E-mail	CustServ@Amvac-Chemical.com	
Emergency phone number	Medical	888-681-4261
	CHEMTREC® (USA+Canada)	800-424-9300
	Product Use	888-462-6822
	CHEMTREC® (Outside USA)	+1-703-527-3887

2. Hazard(s) identification

Physical hazards	Not classified.	
Health hazards	Acute toxicity, inhalation	Category 4
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	

Label elements



Signal word	Warning
Hazard statement	Harmful if inhaled.
Precautionary statement	
Prevention	Avoid breathing dust. Use only outdoors or in a well-ventilated area.
Response	If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.
Storage	Store away from incompatible materials.
Disposal	Dispose of waste and residues in accordance with local authority requirements.
Hazard(s) not otherwise classified (HNOC)	None known.

Supplemental information

United States Environmental Protection Agency Labeling Requirements:
This is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced in section 15. The pesticide label also includes other important information, including directions for use.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
NORFLURAZON TECH		27314-13-2	5

Additional components

Chemical name	Common name and synonyms	CAS number	%
Inert ingredients		N/A	95

4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a POISON CENTER or doctor/physician if you feel unwell.
Skin contact	Rinse with water. Get medical attention if irritation develops and persists.
Eye contact	Do not rub eyes. Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Not available.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Not available.
Fire fighting equipment/instructions	Use water spray to cool unopened containers.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of dust. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.
Methods and materials for containment and cleaning up	Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). This product is miscible in water. Stop the flow of material, if this is without risk. Large Spills: Wet down with water and dike for later disposal. Shovel the material into waste container. Following product recovery, flush area with water. Small Spills: If contaminated, shovel, sweep up or vacuum up spillage and collect in suitable container for disposal. Never return spills to original containers for re-use. Shovel up, sweep up or vacuum up the material and place in a container for salvage or disposal.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling Avoid breathing dust. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Additional components	Type	Value	Form
free respirable Crystalline (quartz) Silica (CAS 14808-60-7)	PEL	0.05 mg/m ³	Respirable dust.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Additional components	Type	Value	Form
free respirable Crystalline (quartz) Silica (CAS 14808-60-7)	TWA	0.1 mg/m ³	Respirable.

US. ACGIH Threshold Limit Values

Additional components	Type	Value	Form
free respirable Crystalline (quartz) Silica (CAS 14808-60-7)	TWA	0.025 mg/m ³	Respirable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Additional components	Type	Value	Form
free respirable Crystalline (quartz) Silica (CAS 14808-60-7)	TWA	0.05 mg/m ³	Respirable dust.

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls General ventilation normally adequate.

Individual protection measures, such as personal protective equipment

Eye/face protection If contact is likely, safety glasses with side shields are recommended.

Skin protection

Hand protection For prolonged or repeated skin contact use suitable protective gloves.

Other Wear suitable protective clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards Not available.

General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance Grayish beige granule

Physical state Solid.

Form Granular.

Color Grayish beige

Odor Odorless.

Odor threshold Not established (for Norflurazon)

pH 7 - 9 (1% dispersion)

Melting point/freezing point 345.2 - 356 °F (174 - 180 °C) (345 - 356°F) (for Norflurazon)

Initial boiling point and boiling range Not applicable to product

Flash point Not available.

Evaporation rate	Not established (for Norflurazon)
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	1.00E-05 mm Hg @ 24°C (for Norflurazon)
Vapor density	Not applicable
Relative density	1.3 g/cm3
Solubility(ies)	
Solubility (water)	33.7 ppm @ 25°C (for Norflurazon)
Solubility (solvents)	The active ingredient, Norflurazon, is soluble in acetone and ethanol
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	81 lb/ft3
Specific gravity	1.8 estimated

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Peroxides. Fluorine. Chlorine. Phenols.
Hazardous decomposition products	No hazardous decomposition products are known. This product may emit hazardous fumes of hydrogen chloride, carbon oxides, and unidentified organic compounds when it is heated excessively or burned. WEAR SELF-CONTAINED BREATHING APPARATUS when these conditions are present.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Harmful if inhaled.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity Harmful if inhaled.

Product	Species	Test Results
EVITAL® 5G		
<u>acute</u>		
dermal		
LD50	rabbit	> 2000 mg/kg body weight
inhalation		
LC50	rat	> 2.5 mg/L, 4 hr for Norflurazon

Product	Species	Test Results
oral LD50	rat	> 5000 mg/kg body weight
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.	
Irritation Corrosion - Skin EVITAL® 5G		, Not available for product. The presence of silica in the carrier may cause irritation of the skin. Organ: skin
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.	
Irritation Corrosion - Eye EVITAL® 5G		, Not available for product. The presence of silica in the carrier may cause irritation of the eyes. Organ: eye
Respiratory or skin sensitization		
Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitization	This product is not expected to cause skin sensitization.	
Skin sensitization EVITAL® 5G		, Not available for product (Norflurazon is not a sensitizer). Result: none Species: guinea pig
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	Please note that the carrier is a natural mineral and as such may contain traces of Crystalline Silica (CAS 14808-60-7).	
IARC Monographs. Overall Evaluation of Carcinogenicity		
free respirable Crystalline (quartz) Silica (CAS 14808-60-7)		1 Carcinogenic to humans.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)		
free respirable Crystalline (quartz) Silica (CAS 14808-60-7)		Cancer
US. National Toxicology Program (NTP) Report on Carcinogens		
free respirable Crystalline (quartz) Silica (CAS 14808-60-7)		Known To Be Human Carcinogen.
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.	
Specific target organ toxicity - single exposure	Not classified.	
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	Not an aspiration hazard.	
Chronic effects	Prolonged inhalation may be harmful.	
12. Ecological information		
Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.	
Persistence and degradability	No data is available on the degradability of this product.	
Bioaccumulative potential		
Partition coefficient n-octanol / water (log Kow) EVITAL® 5G		280, @ pH 6.5, 20°C (for Norflurazon)
Mobility in soil	No data available.	
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.	
13. Disposal considerations		
Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose in accordance with all applicable regulations.	
Local disposal regulations	Dispose in accordance with all applicable regulations.	

Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal methods/information).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

Read safety instructions, SDS and emergency procedures before handling.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

US federal regulations This is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

HAZARD TO HUMANS AND DOMESTIC ANIMALS.

CAUTION! Harmful if absorbed through skin. Avoid contact with skin or clothing. Wash thoroughly with soap and water after handling.

ENVIRONMENTAL HAZARDS

Do not contaminate water when disposing of equipment washwater or rinsate. Do not apply directly to water, or to areas where surface water is present (except for application to cranberry bogs) or to intertidal areas below the mean high water mark. Do not allow this material to drift onto neighboring crops or non crop areas or use in a manner or at a time other than in accordance with label directions because animal, plant or crop injury, illegal residues, or other undesirable results may occur. This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. This product is registered under EPA/FIFRA Regulations. It is a violation of Federal Law to use this product in any manner inconsistent with its labeling. Read and follow all label directions. This product is excluded from listing requirements under EPA/TSCA.

Toxic Substances Control Act (TSCA)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

free respirable Crystalline (quartz) Silica
(CAS 14808-60-7)

Cancer

lung effects

immune system effects

kidney effects

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

Classified hazard categories Acute toxicity (any route of exposure)

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
NORFLURAZON TECH	27314-13-2	5

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations

California Proposition 65



WARNING: WARNING: This product contains a chemical known to the State of California to cause cancer.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

free respirable Crystalline (quartz) Silica (CAS 14808-60-7) Listed: October 1, 1988

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

free respirable Crystalline (quartz) Silica (CAS 14808-60-7)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date May-13-2015

Revision date Sep-27-2019

References ACGIH®: American Conference of Governmental Industrial Hygienists
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act
EPA: Environmental Protection Agency
FIFRA: Federal Insecticide, Fungicide, and Rodenticide Act
IARC: International Agency for Research on Cancer
NTP: National Toxicology Program
OSHA: Occupational Safety and Health Agency
SARA: Superfund Amendments and Reauthorization Act
TSCA: Toxic Substances Control Act
DOT: Department of Transportation
IMDG: International Maritime Dangerous Goods
IATA: International Air Transport Association

Version # 2.0

HMIS® ratings Health: 2
Flammability: 0
Physical hazard: 0

NFPA ratings Health: 2
Flammability: 0
Instability: 0

Disclaimer

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NFPA is a trademark of the National Fire Protection Association, Inc.

Revision information

Identification: Recommended restrictions

Hazard(s) identification: Supplemental information

Composition / Information on Ingredients: Disclosure Overrides

Accidental release measures: Methods for cleaning up

Accidental release measures: Methods and materials for containment and cleaning up

Toxicological Information: Toxicological Data

Toxicological information: Carcinogenicity

Disposal considerations: Waste from residues / unused products

Transport information: DOT classification

Transport information: IMDG classification

Transport information: IATA classification

Regulatory information: US federal regulations

Other information, including date of preparation or last revision: Disclaimer

GHS: Classification