



SAFETY DATA SHEET

TURAZI

Section 1. Identification

Product identifier : TURAZI
SDS # : 701
Other means of identification : EPA Registration Number: 279-9607-34704
Product type : Solid.

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

Identified uses
Insecticide.
Uses advised against
Not available.

Supplier's details : LOVELAND PRODUCTS, INC.
 P.O. Box 1286
 Greeley, CO 80632-1286
Telephone no. : 1-888-574-2878 (Customer Service)
Email : retail-SDS2@nutrien.com
Emergency telephone number (with hours of operation) : CHEMTREC: 1-800-424-9300 (24 hrs)

Section 2. Hazards identification

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture : Not classified.

GHS label elements

Hazard pictograms : Not applicable.
Signal word : No signal word.
Hazard statements : No known significant effects or critical hazards.
Precautionary statements
 General : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.
 Prevention : Not applicable.
 Response : Not applicable.
 Storage : Not applicable.
 Disposal : Not applicable.

Section 2. Hazards identification

Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	% (w/w)	CAS number
chlorantraniliprole	35	500008-45-7
modified lignin sulfonate salt	5 - 10	-
Other ingredients	55 - 60	-

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 15 minutes. Get medical attention if irritation occurs.
- Inhalation** : Remove person to fresh air and keep comfortable for breathing. Get medical attention if symptoms occur.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- Ingestion** : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : May cause irritation due to mechanical action.
- Inhalation** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : Over-exposure by ingestion is unlikely under normal working conditions.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
redness
watering
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment. Treat symptomatically.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

Section 4. First aid measures

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use dry chemical, CO₂, water spray (fog) or foam.

Unsuitable extinguishing media : Do not use water jet.

Specific hazards arising from the chemical : No specific fire or explosion hazard.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides

Special protective actions for fire-fighters : No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. Contain and collect the water used to fight the fire for later treatment and disposal.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused adverse impacts (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Put on appropriate personal protective equipment (see Section 8). Place spilled material in an appropriate container for disposal. Dispose of via a licensed waste disposal contractor.

Large spill : Put on appropriate personal protective equipment (see Section 8). Approach release from upwind. Use appropriate equipment to put the spilled material in a waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Read label before use. Apply this product only as specified on the label. Do not handle until all safety precautions have been read and understood. Put on appropriate personal protective equipment (see Section 8). Avoid contact with eyes, skin and clothing. Do not ingest. Avoid breathing dust.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store locked up. Must be stored in a dry location. Keep only in the original container in a cool, well-ventilated place. Keep away from food, drink and animal feeding stuffs. Not for use or storage in or around the home.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
chlorantraniliprole	FMC AEL (Acceptable Exposure Limit). TWA: 10 mg/m ³ 8 & 12 hr Total dust TWA: 5 mg/m ³ 8 & 12 hr Respirable dust

Biological exposure indices

No exposure indices known.

- Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Contact your personal protective equipment supplier to verify the compatibility of the equipment for the intended purpose.

- General information** : Refer to product label or packaging for specific PPE requirements.
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when the product label or a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. If contact is possible, the following protection should be worn, unless the product label or risk assessment indicates a higher degree of protection: safety glasses with side-shields.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if the product label or risk assessment indicates this is necessary.

Section 8. Exposure controls/personal protection

- Body protection** : Personal protective equipment for the body must be used as specified on the product label or if a risk assessment indicates this is necessary.
- Other skin protection** : Appropriate footwear and any additional skin protection measures must be used as specified on the product label or if a risk assessment indicates this is necessary.
- Respiratory protection** : A respirator meeting the appropriate standard or certification must be selected based on the product label or the hazard and potential for exposure. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
- For U.S. work sites where respiratory protection is required, ensure that a respiratory protection program meeting 29 CFR 1910.134 requirements is in place.

Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

- Physical state** : Solid. [Granular.]
- Color** : Brown. [Light]
- Odor** : Sweet. [Slight]
- Odor threshold** : Not available.
- pH** : 7 to 10 [Conc. (% w/w): 1%]
- Melting point/freezing point** : Not available.
- Boiling point, initial boiling point, and boiling range** : Not available.
- Flash point** : Not applicable.
- Flammability** : Not available.
- Lower and upper explosion limit/flammability limit** : Not applicable.
- Vapor pressure** : Not available.
- Relative vapor density** : Not applicable.
- Relative density** : Not available.
- Bulk density** : 0.7 to 0.86 g/cm³
- Solubility in water** : Dispersible.
- Partition coefficient: n-octanol/water** : Not applicable.
- Auto-ignition temperature** : >155°C (>311°F)
- Decomposition temperature** : Not available.
- Viscosity** : Not applicable.

Particle characteristics

- Median particle size** : Not available.

Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

Section 10. Stability and reactivity

Conditions to avoid : Extremes of temperature and direct sunlight. Keep away from incompatible materials.

Incompatible materials : Strong oxidizing materials, strong acids, strong alkalis.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
TURAZI	LC50 Inhalation Vapor	Rat	>6.2 mg/l	4 hours
	LD50 Dermal	Rat	>5000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-

Irritation/Corrosion

Not available.

Conclusion/Summary

- Skin** : No known significant effects or critical hazards.
- Eyes** : May cause irritation due to mechanical action.
- Respiratory** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.

Sensitization

Not available.

Conclusion/Summary

- Skin** : No known significant effects or critical hazards.
- Respiratory** : No known significant effects or critical hazards.

Mutagenicity

Not available.

- Conclusion/Summary** : No known significant effects or critical hazards.

Carcinogenicity

Not available.

- Conclusion/Summary** : No known significant effects or critical hazards.

Reproductive toxicity

Not available.

- Conclusion/Summary** : No known significant effects or critical hazards.

Teratogenicity

Not available.

- Conclusion/Summary** : No known significant effects or critical hazards.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Section 11. Toxicological information

Not available.

Information on the likely routes of exposure : Dermal contact. Eye contact. Inhalation.

Potential acute health effects

Eye contact : May cause irritation due to mechanical action.
Inhalation : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
Skin contact : No known significant effects or critical hazards.
Ingestion : Over-exposure by ingestion is unlikely under normal working conditions.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
 redness
 watering
Inhalation : No specific data.
Skin contact : No specific data.
Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : See above.
Potential delayed effects : See below.

Long term exposure

Potential immediate effects : See above.
Potential delayed effects : See below.

Potential chronic health effects

Not available.

Conclusion/Summary : No known significant effects or critical hazards.
General : No known significant effects or critical hazards.
Carcinogenicity : No known significant effects or critical hazards.
Mutagenicity : No known significant effects or critical hazards.
Reproductive toxicity : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

N/A

Other information : Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
TURAZI	EbC50 >5 mg/l	Algae - <i>Pseudokirchneriella subcapitata</i> (green algae)	72 hours
	EC50 0.29 mg/l	Daphnia - <i>Daphnia magna</i> (water flea)	48 hours
	LC50 >3.2 mg/l	Fish - <i>Lepomis macrochirus</i> (bluegill sunfish)	96 hours
	LC50 >3.2 mg/l	Fish - <i>Oncorhynchus mykiss</i> (rainbow trout)	96 hours

Conclusion/Summary : Toxic to aquatic life with long lasting effects. Apply this product only as specified on the label. Do not apply directly to water or wetlands. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent sites.

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.





Section 13. Disposal considerations

Disposal methods : Apply this product only as specified on the label. Follow disposal instructions on label. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Do not contaminate water, food, or feed by storage or disposal. Disposal should be in accordance with applicable regional, national and local laws and regulations. Recycling decontaminated containers is the best option of container disposal. The Agricultural Container Recycling Council (ACRC) operates the national recycling program. To contact your state and local ACRC recycler visit the ACRC web page at <http://www.acrecycle.org/>. Do not contaminate water, food or feed by storage or disposal.

Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	IATA
UN number	(See remarks below)	(See remarks below)	UN3077	UN3077
UN proper shipping name	-	-	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Chlorantraniliprole)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Chlorantraniliprole)

Section 14. Transport information

Transport hazard class(es)	-	-	9  	9  
Packing group	-	-	III	III
Environmental hazards	No.	No.	Yes.	Yes.

Additional information

- DOT Classification** : **Remarks** Not regulated by DOT/49 CFR unless shipped in bulk package or by water.
- TDG Classification** : **Remarks** Non-bulk packages of this product are not regulated as dangerous goods when transported by road or rail.
- IMDG** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.
- IATA** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

- Australia** : Not determined.
- Canada** : Not determined.
- China** : Not determined.
- Eurasian Economic Union** : **Russian Federation inventory:** Not determined.
- Japan** : **Japan inventory (CSCL):** Not determined.
Japan inventory (ISHL): Not determined.
- New Zealand** : Not determined.

Section 15. Regulatory information

Philippines	: Not determined.
Republic of Korea	: Not determined.
Taiwan	: Not determined.
Thailand	: Not determined.
Turkey	: Not determined.
United States	: Not determined.
Viet Nam	: Not determined.
U.S. Federal regulations	: TSCA 8(a) CDR Exempt/Partial exemption: Not determined

[Clean Air Act Section 112](#) : Not listed

[\(b\) Hazardous Air Pollutants \(HAPs\)](#)

[Clean Air Act Section 602 Class I Substances](#) : Not listed

[Clean Air Act Section 602 Class II Substances](#) : Not listed

[DEA List I Chemicals \(Precursor Chemicals\)](#) : Not listed

[DEA List II Chemicals \(Essential Chemicals\)](#) : Not listed

[SARA 304 RQ](#) : Not applicable.

[SARA 311/312](#)

[Classification](#) : Not applicable.

[State regulations](#)

[Massachusetts](#) : None of the components are listed.

[New York](#) : None of the components are listed.

[New Jersey](#) : None of the components are listed.

[Pennsylvania](#) : None of the components are listed.

[California Prop. 65](#)

This product does not require a Safe Harbor warning under California Prop. 65.

[US EPA](#)

[EPA REG. NO.](#) : 100-1492-34704

Section 16. Other information

[History](#)

[Date of issue/Date of revision](#) : 11/29/2023

[Date of previous issue](#) : 11/29/2023

[Version](#) : 1.1

[Key to abbreviations](#)

ATE = Acute Toxicity Estimate
 BCF = Bioconcentration Factor
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 IATA = International Air Transport Association
 IBC = Intermediate Bulk Container
 IMDG = International Maritime Dangerous Goods
 LogPow = logarithm of the octanol/water partition coefficient
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973

Section 16. Other information

as modified by the Protocol of 1978. ("Marpol" = marine pollution)

N/A = Not available

SGG = Segregation Group

UN = United Nations

Procedure used to derive the classification

Not classified.

📌 Indicates information that has changed from previously issued version.

Notice to reader

Supply chain partners must ensure they pass this SDS, and all other relevant safety information to their customers.

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