

# SAFETY DATA SHEET

## 1. Identification

<b>Product identifier</b>	<b>IMPACT® Herbicide</b>
<b>Other means of identification</b>	
<b>SDS number</b>	323
<b>Product registration number</b>	28141
<b>Synonyms</b>	Topramezone SC Herbicide
<b>Recommended use</b>	Herbicide. For postemergence weed control in all types of field corn, popcorn and seed corn.
<b>Recommended restrictions</b>	Keep out of the Reach of Children!

### Manufacturer/Importer/Supplier/Distributor information

#### Manufacturer

<b>Company name</b>	AMVAC Chemical Corporation	
<b>Address</b>	4685 MacArthur Court Suite 1200 Newport Beach, CA 92660	
<b>Telephone</b>	AMVAC Chemical Corp	949-260-1200
	AMVAC Chemical Corp	949-260-6270(FAX)
<b>Website</b>	www.amvac.com	
<b>E-mail</b>	CustServ@amvac.com	
<b>Emergency phone number</b>	Medical	888-681-4261
	CHEMTREC® (USA+Canada)	800-424-9300
	Product Use	888-462-6822
	CHEMTREC® (Outside USA)	+1-703-527-3887
<b>Supplier</b>	Not available.	

## 2. Hazard identification

<b>Physical hazards</b>	Not classified.	
<b>Health hazards</b>	Sensitization, skin	Category 1
	Reproductive toxicity	Category 2
<b>Environmental hazards</b>	Hazardous to the aquatic environment, acute hazard	Category 1

#### Label elements



<b>Signal word</b>	Warning
<b>Hazard statement</b>	May cause an allergic skin reaction. Suspected of damaging fertility or the unborn child. Very toxic to aquatic life.

#### Precautionary statement

<b>Prevention</b>	Do not handle until all safety precautions have been read and understood. Contaminated work clothing should not be allowed out of the workplace. Use personal protective equipment as required. Avoid release to the environment.
<b>Response</b>	If on skin: Wash with plenty of water. If inhaled: Remove person to fresh air and keep comfortable for breathing. If exposed or concerned: Get medical advice/attention. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

<b>Storage</b>	Store in a well-ventilated place. Keep container tightly closed. Store locked up.
<b>Disposal</b>	Dispose of contents/container (in accordance with related regulations). Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Other hazards</b>	None known.
<b>Supplemental information</b>	This is a pesticide product registered in Canada under the Pest Control Products Act and is subject to certain labeling requirements. These requirements differ from the classification criteria and hazard information required for GHS compliant 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	%
Topramezone		210631-68-8	29.7% (336 g/L)

#### Additional components

Chemical name	Common name and synonyms	CAS number	%
Inert Ingredients		N/A	70.3

### 4. First-aid measures

<b>Inhalation</b>	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.
<b>Skin contact</b>	Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.
<b>Eye contact</b>	Rinse with water. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Direct contact with eyes may cause temporary irritation. May cause an allergic skin reaction. Dermatitis. Rash.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).
<b>Unsuitable extinguishing media</b>	Not available.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Firefighters should wear full protective clothing including self contained breathing apparatus.
<b>Fire fighting equipment/instructions</b>	Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

### 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Local authorities should be advised if significant spillages cannot be contained.
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**Methods and materials for containment and cleaning up** Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Prevent product from entering drains. Siphon the majority of the liquid into drums for use or disposal, depending on the circumstances. Absorb in vermiculite, dry sand or earth and place into containers. Clean surface thoroughly to remove residual contamination.

**Environmental precautions** Never return spills to original containers for re-use.  
Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases. Contact local authorities in case of spillage to drain/aquatic environment.

## 7. Handling and storage

**Precautions for safe handling** Do not handle until all safety precautions have been read and understood. Avoid contact with eyes, skin, and clothing. Pregnant or breastfeeding women must not handle this product. Wear appropriate personal protective equipment. Avoid release to the environment. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities** CAUTION Store locked up. Keep away from heat, sparks and open flame. Store in a closed container away from incompatible materials. Store in original tightly closed container. Keep container tightly closed. Store in a well-ventilated place. Keep out of the reach of children. Use care in handling/storage. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

**Occupational exposure limits** No exposure limits noted for ingredient(s).

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

**Appropriate engineering controls** General ventilation normally adequate. Ensure adequate ventilation, especially in confined areas.

### 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** Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

**Other** Avoid contact with the skin. Wear appropriate chemical resistant clothing (see label). Wear chemical protective equipment that is specifically recommended by the manufacturer. Wear suitable protective clothing. Long-sleeved shirt and long pants or coveralls, socks and closed toe shoes are required.

**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. Contaminated work clothing should not be allowed out of the workplace.

## 9. Physical and chemical properties

### Appearance

**Physical state** Liquid.

**Form** Suspension concentrate.

**Color** Grey to beige opaque

**Odor** Faint odor

**Odor threshold** Not available

**pH** 3 - 3.5 (1% dispersion @ 20 C)

**Melting point/freezing point** 24.8 °F (-4 °C)

**Initial boiling point and boiling range** 212 °F (100 °C)

**Flash point** Not available.

**Evaporation rate** 1 as water

**Flammability (solid, gas)** Not applicable.

### Upper/lower flammability or explosive limits

**Explosive limit - lower (%)** Not available.

<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	Equal to water evaporation
<b>Vapor density</b>	Same as water
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Dispersible
<b>Solubility (solvents)</b>	Not available
<b>Partition coefficient (n-octanol/water)</b>	1.52 (a.i.)
<b>Auto-ignition temperature</b>	700 °F (371 °C) estimated
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Bulk density</b>	9.43 lb/gal
<b>Density</b>	1.03 g/cm <sup>3</sup> estimated
<b>Percent volatile</b>	70 %
<b>Specific gravity</b>	1.13 @ 20°C

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Heat, flames and sparks. Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	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

<b>Inhalation</b>	No adverse effects due to inhalation are expected.
<b>Skin contact</b>	May cause an allergic skin reaction.
<b>Eye contact</b>	Direct contact with eyes may cause temporary irritation.
<b>Ingestion</b>	Expected to be a low ingestion hazard.

<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Direct contact with eyes may cause temporary irritation. May cause an allergic skin reaction. Dermatitis. Rash.
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### Information on toxicological effects

<b>Acute toxicity</b>	May cause an allergic skin reaction.
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Components	Species	Test Results
Topramezone (CAS 210631-68-8)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rat	> 2000 mg/kg
<b>Inhalation</b>		
LC50	Rat	> 5.4 mg/l
<b>Oral</b>		
LD50	Rat	> 2000 mg/kg

\* Estimates for product may be based on additional component data not shown.

<b>Skin corrosion/irritation</b>	Prolonged skin contact may cause temporary irritation.
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<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Due to partial or complete lack of data the classification is not possible. Not a respiratory sensitizer.
<b>Skin sensitization</b>	May cause an allergic skin reaction.
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	Not classifiable as to carcinogenicity to humans.
<b>Reproductive toxicity</b>	Suspected of damaging fertility or the unborn child. Reproductive effects in the rat were seen in both parents and offspring with NOAEL established at 0.4 mg/kg/day.
<b>Specific target organ toxicity - single exposure</b>	Due to partial or complete lack of data the classification is not possible.
<b>Specific target organ toxicity - repeated exposure</b>	Due to partial or complete lack of data the classification is not possible.
<b>Aspiration hazard</b>	Due to partial or complete lack of data the classification is not possible. Not an aspiration hazard.
<b>Chronic effects</b>	Prolonged inhalation may be harmful.

## 12. Ecological information

**Ecotoxicity** Very toxic to aquatic life. May cause long lasting harmful effects to aquatic life.

Components	Species	Test Results
Topramezone (CAS 210631-68-8)		
<b>Aquatic</b>		
Algae	EC50	Pseudokirchnerella subcapitata 67.7 mg/l, 96 hr
Crustacea	EC50	Daphnia magna > 100 mg/l, 48 hr
Fish	LC50	Oncorhynchus mykiss > 100 mg/l, 96 hr nominal concentration
Other	EC50	Lemna gibba (fronds) 0.125 mg/l, 7 days

**Persistence and degradability** No data is available on the degradability of this product.

### Bioaccumulative potential

<b>Partition coefficient n-octanol / water (log Kow)</b>	
Topramezone	1.52

**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

<b>Disposal instructions</b>	Contract with a disposal operator licensed by the Law on Disposal and Cleaning. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities. Do not discharge into drains, water courses or onto the ground. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations. Dispose in accordance with all applicable regulations. Dispose of contents/container (in accordance with related regulations). When your own wastewater treatment plant is not available, collect entire waste and then charge to a licensed industrial waste management professional with manifests for industrial waste.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	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). Avoid discharge into water courses or onto the ground. Dispose of container and residues in accordance with all applicable regulations.
<b>Contaminated packaging</b>	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

### TDG

<b>UN number</b>	UN3082
<b>UN proper shipping name</b>	Environmentally hazardous substances, liquid, n.o.s.
<b>Transport hazard class(es)</b>	
<b>Class</b>	9
<b>Subsidiary risk</b>	-
<b>Packing group</b>	III
<b>Environmental hazards</b>	Not available.
<b>Special precautions for user</b>	Not available.

### IATA

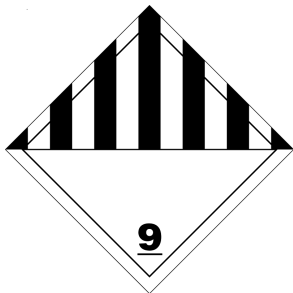
<b>UN number</b>	UN3082
<b>UN proper shipping name</b>	Environmentally hazardous substances, liquid, n.o.s. (Topramezone 29.7%)
<b>Transport hazard class(es)</b>	
<b>Class</b>	9
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	9
<b>Packing group</b>	III
<b>Environmental hazards</b>	No.
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

### IMDG

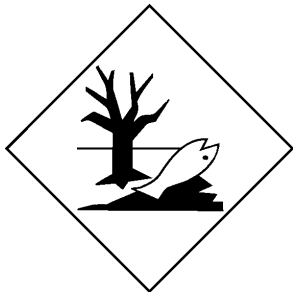
<b>UN number</b>	UN3082
<b>UN proper shipping name</b>	Environmentally hazardous substances, liquid, n.o.s. (Topramezone 29.7%), MARINE POLLUTANT
<b>Transport hazard class(es)</b>	
<b>Class</b>	9
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	9
<b>Packing group</b>	III
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	Yes
<b>EmS</b>	Not available.
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

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

### IATA; IMDG; TDG



### Marine pollutant



## General information

This product is not regulated when shipped by highway, rail, or air in non-bulk packaging (maximum capacity of 400 kg (880 lb) or less). When shipped by vessel or in bulk packaging this product is regulated according to the data shown.  
IMDG Regulated Marine Pollutant.

## 15. Regulatory information

### Canadian regulations

CANADIAN REGULATIONS: This product is registered under the Pest Control Product Act of Canada. It is a violation of Canadian Law to use this product in any manner inconsistent with its labeling. Read and follow all label directions. This product has been classified according to the hazard criteria of the CPR and the SDS contains all the information required by the CPR.

PCP: 28141

Keep Out of Reach Of Children.  
Warning, contains the allergen soy.

Read the label, authorized under the Pest Control Products Act, prior to using or handling the pest control product.

Symbols Required:  
None known.

"There are Canada-specific environmental requirements for handling, use, and disposal of this pest control product that are indicated on the label.

### Controlled Drugs and Substances Act

Not regulated.

### Export Control List (CEPA 1999, Schedule 3)

Not listed.

### Greenhouse Gases

Not listed.

### Precursor Control Regulations

Not regulated.

### International regulations

The product is classified and labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006. Young people under 18 years old are not allowed to work with this product according to EU Directive 94/33/EC on the protection of young people at work. Regulation (EU) No 453/2010 amending Regulation (EC) No 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH). Regulation (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

### Stockholm Convention

Not applicable.

### Rotterdam Convention

Not applicable.

### Kyoto protocol

Not applicable.

### Montreal Protocol

Not applicable.

### Basel Convention

Not applicable.

### International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	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

Issue date Apr-07-2016

Revision date Nov-02-2020

<b>Version #</b>	3.0
<b>References</b>	ACGIH ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices EPA: AQUIRE database HSDB® - Hazardous Substances Data Bank IARC Monographs. Overall Evaluation of Carcinogenicity National Toxicology Program (NTP) Report on Carcinogens NLM: Hazardous Substances Data Base US. IARC Monographs on Occupational Exposures to Chemical Agents
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<b>Revision information</b>	This document has undergone significant changes and should be reviewed in its entirety.