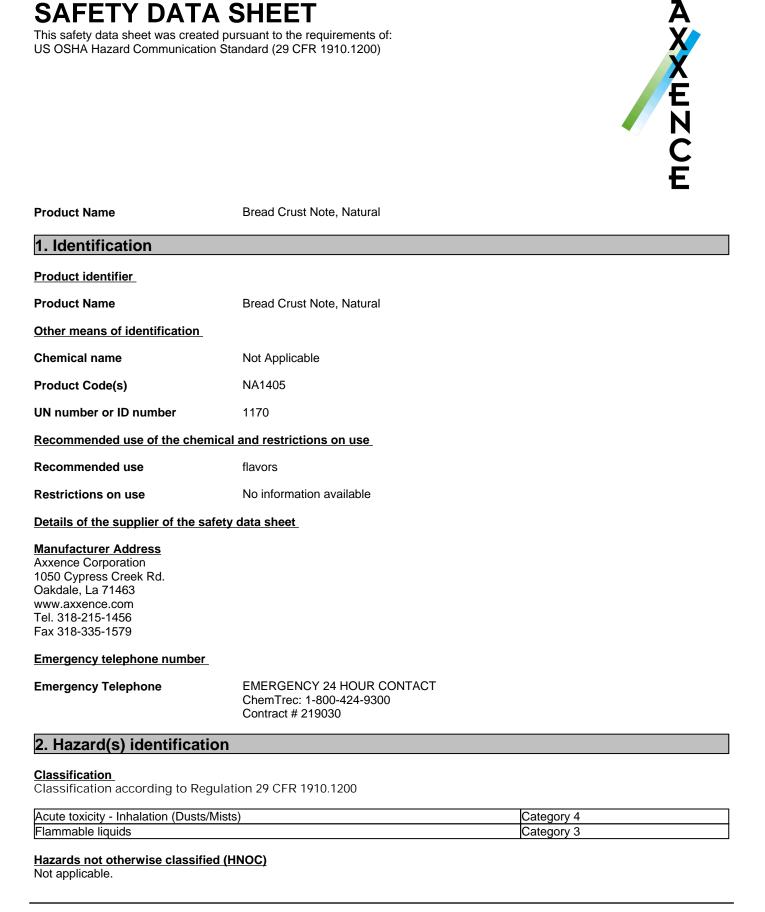
SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: US OSHA Hazard Communication Standard (29 CFR 1910.1200)



Label elements



Flammable liquid and vapor. Harmful if inhaled.

Precautionary Statements - Prevention

Use explosion-proof electrical/ventilating/lighting/equipment. Avoid breathing dust, fume, gas, mist, vapors and spray. Use only outdoors or in a well-ventilated area. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use only non-sparking tools. Take action to prevent static discharges. Wear protective gloves, eye protection and face protection.

Precautionary Statements - Response

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. In case of fire: Use CO2, dry chemical, or foam to extinguish.

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool.

Precautionary Statements - Disposal

Dispose of contents and container in accordance with local, regional, national, and international regulations as applicable.

Unknown acute toxicity

37.04 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Other information

3. Composition/information on ingredients

Product Name

Bread Crust Note, Natural

Substance

Not applicable.

Mixture

Formula Not Applicable

Not Applicable

Chemical name	CAS No.	EC No (EU Index No)	Weight-%	Trade secret
Glycerin	56-81-5	200-289-5	50.0-53.0	-

Ethanol	64-17-5	200-578-6	10.25-10.75	-
		(603-002-00-5)		

4. First-aid measures	
<u>4. FIISt-ald measures</u> <u>Description of first aid measures</u>	
General advice Inhalation	Show this safety data sheet to the doctor in attendance. Remove to fresh air. If symptoms persist, call a physician. If breathing has stopped, give artificial respiration. Get medical attention immediately.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
Ingestion	Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Get medical attention.
Self-protection of the first aider	Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information. Avoid breathing vapors or mists.
Most important symptoms and effect	ets, both acute and delayed
Symptoms	Coughing and/ or wheezing. Difficulty in breathing.
Indication of any immediate medica	I attention and special treatment needed
Note to physicians	Treat symptomatically.
5. Fire-fighting measures	
Flash point	28 °C / 82.4 °F
Flammability Limit in Air Upper flammability or explosive limits	No data available
Lower flammability or explosive limits	No data available
Suitable Extinguishing Media Large Fire Unsuitable extinguishing media	Dry chemical. Carbon dioxide (CO2). Water spray. Alcohol resistant foam. CAUTION: Use of water spray when fighting fire may be inefficient. Do not scatter spilled material with high pressure water streams.
Specific hazards arising from the chemical	Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Explosion data Sensitivity to mechanical impact Sensitivity to static discharge	t None. Yes.
Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.
Special attention to fire and explosion	None

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautionsEvacuate personnel to safe areas. Use personal protective equipment as required. See
section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate
ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources
(no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take
precautionary measures against static discharges. All equipment used when handling the
product must be grounded. Do not touch or walk through spilled material. Avoid breathing

Other information	vapors or mists. Ventilate the area. Refer to protective measures listed in Sections 7 and 8.		
Methods and material for containm	ent and cleaning up		
Methods for containment	Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.		
Methods for cleaning up	Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.		
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.		
7. Handling and storage			
Precautions for safe handling			
Advice on safe handling	Use personal protection equipment. Avoid contact with skin and eyes. Avoid breathing vapors or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product.		
Conditions for safe storage, including any incompatibilities			
Storage Conditions	Cool, Dark area. Purge with Nitrogen after each opening. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Keep out of the reach of children.		

8. Exposure controls/personal protection

Working area parameters, subject to mandatory control (MAC or TSEL)

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Glycerin	-	TWA: 15 mg/m ³ mist, total	-
56-81-5		particulate	
		TWA: 5 mg/m ³ mist, respirable	
		fraction	
		(vacated) TWA: 10 mg/m ³ mist,	
		total particulate	
		(vacated) TWA: 5 mg/m ³ mist,	
		respirable fraction	
Ethanol	STEL: 1000 ppm	TWA: 1000 ppm	TWA: 1000 ppm;
64-17-5		TWA: 1900 mg/m ³	TWA: 1900 mg/m ³ ;
		(vacated) TWA: 1000 ppm	IDLH: 3300 ppm
		(vacated) TWA: 1900 mg/m ³	

Appropriate engineering controls

Engineering controls

Showers Eyewash stations Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection	Tight sealing safety goggles.
Hand protection	Wear suitable gloves. Impervious gloves.
Skin and body protection	Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Antistatic boots.
Respiratory protection	Appropriate respiratory protection should be selected and used according to the chemical nature, hazards and use of this product and safety requirements of the local jurisdiction.
General hygiene considerations	Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

9. Physical and chemical properties

Information on basic physical and che	emical properties		
Physical state L	_iquid		
Appearance \	/iscous		
Color b	brown-red		
	oasted, bread		
Odor threshold	No information available		
Property	Values	R	
рН	No data available	Ν	
Melting point / freezing point	No data available	N	
Boiling point	111 °C / 231.8 °F	Ν	
Flash point	28 °C / 82.4 °F	C	
Evaporation rate	No data available	Ν	
Flammability	No data available	Ν	
Flammability Limit in Air		Ν	
Upper flammability or explosive lim			
Lower flammability or explosive lin			
Vapor pressure	No data available	Ν	
Relative vapor density	>1.0	Ν	
Relative density	1.222 - 1.262	Ν	
Water solubility	Soluble in water	Ν	
Solubility(ies)	Alcohol, Propylene Glycol	Ν	
Partition coefficient	No data available	Ν	
Autoignition temperature	No data available	Ν	
Decomposition temperature		Ν	
Kinematic viscosity	No data available	Ν	
Dynamic viscosity	No data available	Ν	
Refractive Index	1.469 - 1.473		
Other information			
Explosive properties	No information available		
Oxidizing properties	No information available		
Softening point	No information available		
Molecular weight	Not Applicable		
VOC content	No information available		
Liquid Density	No information available		

Remarks • Method

None known None known OCC (closed cup) None known None known None known

None known None known None known None known None known None known None known None known

10. Stability and reactivity

ReactivityNo information available.Chemical stabilityStable under normal conditions.Possibility of hazardous reactionsNone under normal processing.Conditions to avoidHeat, flames and sparks. Excessive heat.Incompatible materialsNone known based on information supplied.Hazardous decomposition productsNone known based on information supplied.

No information available

11. Toxicological information

Information on likely routes of exposure

Product Information

Bulk density

Inhalation	Specific test data for the substance or mixture is not available. Harmful by inhalation. (based on components).
Eye contact	Specific test data for the substance or mixture is not available.
Skin contact	Specific test data for the substance or mixture is not available.
Ingestion	Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms

Coughing and/ or wheezing.

Acute toxicity

Numerical measures of toxicity

The following ATE values have been calculated for the mixture

ATEmix (oral)	10,123.80	mg/kg
ATEmix (dermal)	10,000.00	mg/kg
ATEmix (inhalation-gas)	99,999.00	ppm
ATEmix (inhalation-dust/mist)	3.29 mg/l	
ATEmix (inhalation-vapor)	99,999.00	mg/l

Unknown acute toxicity

37.04 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Glycerin	= 12600 mg/kg (Rat)	> 10 g/kg (Rabbit)	> 2.75 mg/L (Rat)4 h
56-81-5			
Ethanol	= 7060 mg/kg (Rat)	-	= 116.9 mg/L (Rat) 4 h
64-17-5			= 133.8 mg/L (Rat) 4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Serious eye damage/eye irritation	No information available. No information available.
Respiratory or skin sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Ethanol	A3	Group 1	Known	Х
64-17-5	A3 - Confirmed Animal			
	Carcinogen with Unknown			
	Relevance to Humans			

Legend

ACGIH (American Conference of Governmental Industrial Hygienists) A3 - Animal Carcinogen IARC (International Agency for Research on Cancer) Group 1 - Carcinogenic to Humans NTP (National Toxicology Program) Known - Known Carcinogen Occupational Safety and Health Administration of the US Department of Labor X - Present

No information available.		
No information available.		

12. Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects.				
Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Glycerin	-	LC50: 51 - 57mL/L (96h,	-	-
56-81-5		Oncorhynchus mykiss)		
Ethanol 64-17-5	-	LC50: 12.0 - 16.0mL/L (96h, Oncorhynchus mykiss) LC50: >100mg/L (96h, Pimephales promelas) LC50: 13400 - 15100mg/L (96h, Pimephales	-	LC50: 9268 - 14221mg/L (48h, Daphnia magna) EC50: =2mg/L (48h, Daphnia magna)
		promelas)		
Persistence and degradal	bility No information	on available.		

Persistence and degradability No information available. Bioaccumulation

PBT and vPvB assessmentNo information available.

Chemical name			PBT and vPvB assessment	
Glycerin			Not PBT/vPvB	
Ethanol			Not PBT/vPvB	
Component Information				
Chemical name		Partition coefficient		
Glycerin 56-81-5		-1.75		
Ethanol 64-17-5		-0.35		
Mobility in soil Other adverse effects	No information available. No information available.			

13. Disposal considerations				
Disposal methods				
Waste from residues/unused products Contaminated packaging	Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.			
California Hazardous Waste Status	This product contains one or more substances that are listed with the State of California as a hazardous waste.			

14. Transport information

DOT

UN number or ID number Proper shipping name Transport hazard class(es) Packing group	1170 Ethanol solution 3 III
IATA UN number or ID number UN proper shipping name Transport hazard class(es) Packing group	1170 Ethanol solution 3 III
IMDG UN number or ID number UN proper shipping name Transport hazard class(es) Packing group	1170 Ethanol solution 3 III

15. Regulatory information

International Inventories

TSCA	Listed
DSL/NDSL EINECS/ELINCS ENCS IECSC KECL PICCS AIIC NZIOC Taiwan	Listed Listed Listed Listed Listed Listed Listed Listed

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AIIC - Australian Inventory of Industrial Chemicals

NZIOC - New Zealand Inventory of Chemicals

TCSI - Taiwan Chemical Substance Inventory

US Federal Regulations

<u>SARA 313</u>

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:.

Chemical name	California Proposition 65	
Ethanol - 64-17-5	Carcinogen	
	Developmental	

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information					
NFPA HMIS	Health hazards 2 Health hazards 2	Flammability Flammability		Instability 0 Physical hazards 0	Special hazards $\ \ -$ Personal protection $\ \ X$
Key or legend to abbreviations and acronyms used in the safety data sheetLegendSection 8: Exposure controls/personal protectionTWATWA (time-weighted average)STELCeilingMaximum limit valueSk*Skin designation					
Ceiling Maximum limit value Sk* Skin designation Key literature references and sources for data used to compile the SDS Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database European Food Safety Authority (EFSA) European Food Safety Authority (EFSA) Environmental Protection Agency Ked Exposure Guideline Level(s) (AEGL(s)) U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act U.S. Environmental Protection Agency High Production Volume Chemicals Food Research Journal Hazardous Substance Database International Uniform Chemical Information Database (IUCLID) National Institute of Technology and Evaluation (NITE) Australia National Institute for Occupational Safety and Health) National Library of Medicine's ChemID Plus (NLM CIP) National Library of Medicine's ChemID Plus (NLM CIP) New Zealand's Chemical Classification and Information Database (CCID) Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development Environment, Health, and Safety Publications					
Revision Number Revision date Revision Note <u>Disclaimer</u>		nation available.	a dha k -	et of our knowledge. Info	median and balled at the
	ovided in this Safety Data on. The information given				

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 text.

End of Safety Data Sheet