



SAFETY DATA SHEET

Issuing Date 26-Aug-2014

Revision Date 18-Jun-2015

Revision Number 3

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

GHS product identifier

Product Name Liquid Alive® Enzyme Digestant

Other means of identification

Product Code(s) 33401, 33432

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Spot remover

Uses advised against No information available

Supplier's details

Supplier Address
ITW PRO BRANDS
805 E. Old 56 Highway
Olathe, KS 66061
TEL: 1-800-443-9536

Emergency telephone number

Emergency Telephone Number 800-535-5053 Infotrac

2. HAZARDS IDENTIFICATION

Classification

This product is considered hazardous by the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200)

Respiratory Sensitization

Category 1

GHS Label elements, including precautionary statements

Emergency Overview

Signal Word

Danger

Hazard Statements

• May cause allergy or asthma symptoms or breathing difficulties if inhaled



Appearance Colorless to light yellow **Physical State** Liquid. **Odor** Neutra Gamma

Precautionary Statements

Prevention

- Avoid breathing dust/fume/gas/mist/vapors/spray.
- In case of inadequate ventilation wear respiratory protection.

General Advice

- None

Inhalation

- IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing
- If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

Storage

- None

Disposal

- Dispose of contents/container to an approved waste disposal plant.

Hazard Not Otherwise Classified (HNOC)

Not applicable

Other information

1.45% of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %	Trade secret
Diethylene glycol monobutyl ether	112-34-5	1-5	*
Isopropyl alcohol	67-63-0	1-5	*
2-Butoxyethanol	111-76-2	1-5	*
Papain	9001-73-4	0.1-1	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of necessary first-aid measures

General Advice	Show this safety data sheet to the doctor in attendance.
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if irritation persists.
Skin Contact	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
Inhalation	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

Ingestion	Rinse mouth. Do NOT induce vomiting. If swallowed, get medical help or contact a Poison Control Center right away.
Protection of First-aiders	Avoid contact with skin, eyes and clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.

Most important symptoms/effects, acute and delayed

Most Important Symptoms/Effects Difficulty in breathing. Coughing and/ or wheezing.

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

Notes to Physician May cause sensitization by inhalation

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media None

Specific Hazards Arising from the Chemical

Non-combustible

Explosion Data

Sensitivity to Mechanical Impact

None.

Sensitivity to Static Discharge

None.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Use personal protective equipment. Avoid contact with skin, eyes and clothing.

Environmental Precautions

Environmental Precautions Do not flush into surface water or sanitary sewer system. See Section 12 for additional Ecological Information.

Methods and materials for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Cover liquid spill with sand, earth or other noncombustible absorbent material. Clean up promptly by sweeping or vacuum.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists.

Conditions for safe storage, including any incompatibilities

Storage Keep out of the reach of children.

Incompatible Products Acids. Strong oxidizing agents. Chlorinated compounds.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Isopropyl alcohol 67-63-0	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m ³ (vacated) TWA: 400 ppm (vacated) TWA: 980 mg/m ³ (vacated) STEL: 500 ppm (vacated) STEL: 1225 mg/m ³	IDLH: 2000 ppm 10% LEL TWA: 980 mg/m ³ TWA: 400 ppm STEL: 500 ppm STEL: 1225 mg/m ³
2-Butoxyethanol 111-76-2	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m ³ (vacated) TWA: 25 ppm (vacated) TWA: 120 mg/m ³ (vacated) S* S*	IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m ³
Morpholine 110-91-8	TWA: 20 ppm S*	TWA: 20 ppm TWA: 70 mg/m ³ (vacated) TWA: 20 ppm (vacated) TWA: 70 mg/m ³ (vacated) STEL: 30 ppm (vacated) STEL: 105 mg/m ³ (vacated) S* S*	IDLH: 1400 ppm TWA: 20 ppm TWA: 70 mg/m ³ STEL: 30 ppm STEL: 105 mg/m ³

Immediately Dangerous to Life or Health. ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH:

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection

None required for consumer use. Safety glasses with side-shields. If splashes are likely to occur, wear: Goggles.

Skin and Body Protection

None required for consumer use. Wear protective gloves/clothing.

Respiratory Protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures

When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State
Odor

Liquid.
Neutra Gamma.

Appearance
Odor Threshold

Colorless to light yellow.
No information available.

Property

pH

Values

8.50

Melting Point/Range

No data available

Boiling Point/Boiling Range

100 °C / 212 °F

Flash Point

None to boiling

Remarks/ - Method

None known

None known

None known

PMCC

Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limits in Air		
upper flammability limit	No data available	
lower flammability limit	No data available	
Vapor Pressure	No data available	None known
Vapor Density	> 1 (air = 1)	None known
Specific Gravity	1.000	None known
Water Solubility	Miscible with water	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Autoignition Temperature	No data available	None known
Decomposition Temperature	No data available	None known
Viscosity	No data available	None known

Flammable Properties Flammable liquid. Flammable; may be ignited by heat, sparks or flames.

Explosive Properties No data available

Oxidizing Properties No data available

Other information

VOC Content (%) 2.80%

10. STABILITY AND REACTIVITY

Reactivity

No data available.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to avoid

None known based on information supplied.

Incompatible materials

Acids. Strong oxidizing agents. Chlorinated compounds.

Hazardous decomposition products

Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	Product does not present an acute toxicity hazard based on known or supplied information.
Inhalation	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Eye Contact	None under normal use.
Skin Contact	None under normal use.
Ingestion	None under normal use.

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Diethylene glycol monobutyl ether	= 3384 mg/kg (Rat)	= 2700 mg/kg (Rabbit)	-
Isopropyl alcohol	= 4396 mg/kg (Rat)	12800 mg/kg (Rat) 12870 mg/kg (Rabbit)	72.6 mg/L (Rat) 4 h
2-Butoxyethanol	= 470 mg/kg (Rat)	= 400 mg/kg (Rabbit) = 2270 mg/kg (Rat)	= 2.21 mg/L (Rat) 4 h = 450 ppm (Rat) 4 h
Papain	> 4 g/kg (Rat)	-	-

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms May cause acute or chronic respiratory sensitization reactions.

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

Sensitization May cause sensitization by inhalation.
Mutagenic Effects No information available.
Carcinogenicity This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B).

Chemical Name	ACGIH	IARC	NTP	OSHA
Isopropyl alcohol		Group 3		
2-Butoxyethanol	A3	Group 3		

ACGIH: (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC: (International Agency for Research on Cancer)

Group 3 - Not Classifiable as to its Carcinogenicity to Humans

Reproductive Toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Target Organ Effects Respiratory system.
Aspiration Hazard No information available.

Numerical measures of toxicity - Product

Acute Toxicity 1.45% of the mixture consists of ingredient(s) of unknown toxicity.

The following values are calculated based on chapter 3.1 of the GHS document:

LD50 Oral 27807 mg/kg; Acute toxicity estimate

LD50 Dermal 39327 mg/kg; Acute toxicity estimate

Inhalation

dust/mist 150 mg/L; Acute toxicity estimate

Vapor 1100 mg/L; Acute toxicity estimate

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Not Classified

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Diethylene glycol monobutyl ether 112-34-5	EC50 96 h: > 100 mg/L (Desmodesmus subspicatus)	LC50 96 h: = 1300 mg/L static (Lepomis macrochirus)		EC50 24 h: = 2850 mg/L (Daphnia magna) EC50 48 h: > 100 mg/L (Daphnia magna)
2-Butoxyethanol 111-76-2		LC50 96 h: = 1490 mg/L static (Lepomis macrochirus) LC50 96 h: = 2950 mg/L (Lepomis macrochirus)		EC50 24 h: 1698 - 1940 mg/L (Daphnia magna) EC50 48 h: > 1000 mg/L (Daphnia magna)

Isopropyl alcohol 67-63-0	EC50 96 h: > 1000 mg/L (Desmodesmus subspicatus) EC50 72 h: > 1000 mg/L (Desmodesmus subspicatus)	LC50 96 h: = 11130 mg/L static (Pimephales promelas) LC50 96 h: = 9640 mg/L flow-through (Pimephales promelas) LC50 96 h: > 1400000 µg/L (Lepomis macrochirus)	EC50 48 h: = 13299 mg/L (Daphnia magna)
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Persistence and Degradability No information available.

Bioaccumulation No information available.

Chemical Name	Log Pow
Isopropyl alcohol	0.05
2-Butoxyethanol	0.81

Other Adverse Effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods Dispose of in accordance with local regulations. This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).

Contaminated Packaging Do not re-use empty containers. Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

14. TRANSPORT INFORMATION

DOT Not regulated

TDG Not regulated

MEX Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
DSL Complies

Legend

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

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

U.S. Federal Regulations

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
Diethylene glycol monobutyl ether	112-34-5	1-5	1.0
2-Butoxyethanol	111-76-2	1-5	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard Yes
Chronic Health Hazard Yes
Fire Hazard No
Sudden Release of Pressure Hazard No

Reactive Hazard

No

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.

U.S. State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Illinois	Rhode Island
Diethylene glycol monobutyl ether	X		X	X	
2-Butoxyethanol	X	X	X	X	X
Isopropyl alcohol	X	X	X		X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

NFPA	Health Hazard 2	Flammability 0	Instability 0	Physical and Chemical Hazards -
HMIS	Health Hazard 2*	Flammability 0	Physical Hazard 0	Personal Protection X

*Indicates a chronic health hazard.

Prepared By

Product Stewardship
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Latham, NY 12110
1-800-572-6501

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18-Jun-2015

Revision Note

Change to composition.

General Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of Safety Data Sheet