



SAFETY DATA SHEET

1. Identification

Product Identifier	Trio 1 - Dish Detergent	
Other means of identification		
Product code	TRI-5412	
Recommended use	Premium dish detergent.	
Recommended restrictions	Professional use only.	
Manufacturer information		
Company name	Trio Leasing	
Address	908 Benton Street Valley Park, MO 63088	
Telephone	(314) 778-3190	
Emergency phone number	PERS	(800) 633-8253
	24-hour Emergency	(800) 633-8253

2. Hazard(s) Identification

Physical hazards	Not classified.	
Health hazards	Acute toxicity	Category 4
	Serious eye damage	Category 1
	Skin corrosion	Category 1B
Environmental hazards	Not classified.	
OSHA defined hazards	Not listed.	
Label elements		



Signal word	DANGER
Hazard statement	May be harmful if swallowed. Causes severe skin burns and eye damage.
Precautionary statement	
Prevention	Do not breathe dusts or mists. Wash hands and exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.
Response	Call a POISON CENTER/doctor/medical professional if you feel unwell. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable breathing. Immediately call a POISON CENTER/doctor/medical professional. Specific treatment (see Section 4 on the Safety Data Sheet). IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Storage	Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.



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Hazard(s) not otherwise classified (HNOC) None.
Supplemental information None.

3. Composition/information on ingredients

Mixture Component(s)		
Chemical name	CAS number	%
Sodium hydroxide	1310-73-2	15-25
Other components below reportable levels		75-85

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact 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.
Eye contact Rinse with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Get medical attention. Eye wash stations should be located in work area.
Ingestion Rinse mouth. Get medical attention if symptoms occur. Do not induce vomiting.
Most important symptoms/effects, acute and delayed Dermatitis. Rash.
Indication of immediate medical attention and special treatment needed Provide general support measures and treat symptomatically. 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. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂)
Unsuitable extinguishing media None known.
Specific hazards arising from the chemical During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters Self-contained breathing apparatus and full protecting clothing must be worn in case of fire.
Fire-fighting equipment/instructions Move containers from fire area if you can do so without risk.
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 Wear appropriate protective equipment and clothing during clean-up. Wear eye/face protection.
Environmental precautions Do not release into the environment (see section 12). Avoid discharge into areas not consistent with package labeling.



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7. Handling and storage

Precautions for safe handling	Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store in original tightly closed container. Do not store in extreme conditions.

8. Exposure controls/personal protection

Occupational exposure limits

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

Components	Type	Value
Sodium hydroxide	PEL	2 mg/m ³

US ACGIH Threshold Limit Values

Components	Type	Value
Sodium hydroxide	STEL	2 mg/m ³

Biological limit values No data available.

Appropriate engineering controls Emergency eye wash stations and showers should be readily accessible. Provide natural or mechanical ventilation.

Individual protection measures, such as personal protective equipment

Eye/face protection Avoid contact with eyes. Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear appropriate chemical resistant gloves. Nitrile, butyl rubber, Santoprene, neoprene, PVC

Other None.

Respiratory protection Respiratory protection not required.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations When using do not smoke or use chewing tobacco. 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.
Color	Red.
Odor	Characteristic.
Odor threshold	Not available.
pH	13-14
Melting/freezing point	Not available.
Initial boiling point and boiling range	>212°F (100°C)
Flash point	>385°F (196°C)



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Evaporation rate	Not available.
Flammability	Not available.
Flammability Limits	
Upper	Not available.
Lower	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Specific gravity (water=1)	1.24
Solubility in water	Soluble.
Partition coefficient (n-octanol/water)	Not applicable.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.

10. Stability and reactivity

Reactivity	This product is stable and non-reactive under normal conditions of use.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Heat, flames can cause product to decompose.
Incompatible materials	Strong acids, strong bases, strong oxidizing agents.
Hazardous decomposition products	Aldehydes, ketones, organic acids, carbon dioxide, carbon monoxide.

11. Toxicological information

Information on likely routes of exposure

Ingestion	Corrosive to mucous membranes, will damage tissue if there is prolonged contact.
Inhalation	Expected to be a low inhalation hazard.
Skin contact	Repeated and/or prolonged skin contact will cause burns.
Eye contact	Causes severe eye damage. May cause severe corneal injury.
Symptoms related to the physical, chemical and toxicological characteristics	Dermatitis. Rash.
Acute toxicity	May be harmful if swallowed.

Product Trio 1 - Dish Detergent (CAS mixture)		
	Route and Species	LD ₅₀
Acute	Oral, rat	2,500 mg/kg estimated
Acute	Dermal, rabbit	>2,000 mg/kg

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

Skin corrosion/irritation	Causes severe skin burns.
Serious eye damage/ irritation	Causes serious eye damage.



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Respiratory sensitization Not classified.
Skin sensitization Not classified.
Germ cell mutagenicity Not classified.
Carcinogenicity Not considered a carcinogen.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not Listed.

Reproductive toxicity Not classified.
Specific target organ toxicity – single exposure Not classified.
Specific target organ toxicity – repeated exposure Not classified.
Aspiration hazard Not considered an aspiration hazard.

12. Ecological information

Ecotoxicity		
Product Trio 1- Dish Detergent (CAS mixture)		
Aquatic Receptor	Species	Test Thresholds
Crustacea	Daphnia magna	EC ₅₀ (48hr): 210 mg/L estimated
Fish	Fathead minnow	LC ₅₀ (96hr): 230 mg/L estimated

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

Persistence and degradability No data available. Chemicals of this class are not expected to be persistent in an open aerobic environment
Bio-accumulative potential No data available. Components are highly water-soluble and not expected to accumulate in dynamic biological systems
Mobility in soil Not available. Chemicals of these classes are expected to exhibit moderate to high mobility in saturated and semi-saturated soils as ionic conjugates
Other adverse effects No data available.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations. Do not release to the environment.
Local disposal regulations Dispose in accordance with all applicable regulations. As packaged, this product may meet criteria defining RCRA corrosive (D002) hazardous wastes when disposed. (40 CFR Part 261, Subpart C)
Waste from residues/unused product 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 instructions).
Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may contain product residue, follow label warnings even after container is emptied.

14. Transport information

USDOT Hazardous Material Classification
UN number UN1760
UN proper shipping name Corrosive Liquids, n.o.s. (Contains: Sodium hydroxide)



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Transport hazard class(es)

Class 8

Subsidiary risk -

Packaging group III

Marine pollutant No

Special precautions for user 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 intended to be transported in bulk.

DOT LABEL/PLACARD



15. Regulatory information

US federal regulations

SARA 302 Extremely hazardous substance Not listed.

SARA 304 Emergency release notification Not listed.

SARA 311/312 Hazard Categories

Immediate Hazard - Yes

Delayed Hazard - No

Fire Hazard - No

Pressure Hazard - No

Reactivity Hazard - No

SARA 313 (TRI reporting)

Not listed.

California Proposition 65 California Safe Drinking Water and Toxic Enforcement Act of 1986

This product is not known to contain any chemicals currently listed as carcinogens or reproductive toxins under California Proposition 65 at levels which would be subject to threshold determination and Safe Harbor notification (1/2019)

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

Issue date 3/9/2016

Revision date 6-11-2019, 6-13-2019

Version # 3

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



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HEALTH	2
FLAMMABILITY	0
REACTIVITY	0
PERSONAL PROTECTION	<input type="checkbox"/>
ALKALINE	

NFPA ratings

Health: 2
Flammability: 0
Instability: 0



Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, and have been obtained from resources believed to be reliable. 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 related 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 by the text.

Revision information

Hazard identification, composition/information on ingredients, physical chemical properties.
6/11/2019 Acute oral tox category from 5 to 4 (definition) ; General format update, Prop 65 statement; Update toxicology, PPE and environmental fate information; PPE notations; Composition chart update; Physical data update; miscellaneous text corrections; HMIS and NFPA pictograms inserted.
6-13-2019 – Change product name