MAXX 454

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Issue date: 5/29/2024 Revision date: 5/5/2026 Supersedes: 5/29/2024 Version: 1.1

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Product name : MAXX 454
Product code : 3006

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture : Laundry detergent
Restrictions on use : For professional use only

1.4. Supplier's details

Christeyns North America, LLC
311 Staton Road
Greenville, NC 27834
USA
T 252-756-8616 / 800.869.6171
info@christeyns.us - www.christeyns.com

1.5. Emergency phone number

Emergency number : VELOCITY EHS (800) 255-3924 (24 HOURS)
(For use only in the event of emergencies involving a spill, leak, fire, exposure, or accident involving chemicals)

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

Serious eye damage/eye irritation, Category 1	H318	Causes serious eye damage.

Full text of H statements : see section 16

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US) :

Signal word (GHS US) : Danger
Hazard statements (GHS US) : H318 - Causes serious eye damage
Precautionary statements (GHS US) : P280 - Wear eye protection.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a poison center or doctor.

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Alcohols, C10-16, ethoxylated	CAS-No.: 68002-97-1	5 - 10
Isopropanol	CAS-No.: 67-63-0	3 - 7
Alcohols, C12-15, ethoxylated	CAS-No.: 68131-39-5	3 - 7
Benzenesulfonic acid, C10-16-alkyl derivs.	CAS-No.: 68584-22-5	1 - 5
Tetrasodium ethylenediamine tetraacetate	CAS-No.: 64-02-8	1 - 5

Full text of hazard classes and H-statements : see section 16

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Treat symptomatically. Get medical attention if symptoms occur.

First-aid measures after skin contact : Rinse skin with plenty of water or shower. If irritation persists, get medical attention.

First-aid measures after eye contact : Rinse immediately with water for 15 minutes, occasionally lifting upper and lower eyelids. Remove contact lenses, if present, and easy to do. Continue rinsing. Get medical attention immediately.

First-aid measures after ingestion : Rinse mouth with water if the person is conscious. Do not induce vomiting unless directed by medical personnel. Get medical attention if you feel unwell.

4.2. Most important symptoms/effects, acute and delayed

No additional information available

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

No additional information available

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Do not use a water jet as this can spread the fire and may cause the splattering of corrosive liquid.

5.2. Specific hazards arising from the chemical

Fire hazard : Decomposition products may include carbon oxides.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. In case of fire, do not breathe fumes. Move containers from the fire area if you can do so without risk. Prevent firefighting water from entering the environment.

Protection during firefighting : Wear a self-contained breathing apparatus. Do not attempt to take action without suitable protective equipment.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Protective equipment : For spills or leaks, contact a supervisor and/or emergency responder. Avoid contact with spilled material and keep unnecessary personnel away.

For emergency responders

Protective equipment : See Section 8 for recommended personal protective equipment. Ventilate the area and restrict access to the spill or leak zone. Have emergency procedures in place for treating exposures or incidents. Only trained and authorized personnel equipped with proper protective equipment should perform cleanup.

Environmental precautions : Avoid release onto the ground, into storm sewers, or bodies of water.

6.2. Methods and materials for containment and cleaning up

Methods for cleaning up : Stop leak if safe to do so. Contain spillage, soak up with non-combustile absorbent material (e.g. sand, earth, diatomaceous earth, vermiculite) and collect all waste in suitable, labeled, and closed containers. Dispose according to local legislation (See Section 13).

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Handle in accordance with good industrial hygiene and safety practices. Use only with adequate ventilation. Avoid contact with skin, eyes, and clothing. Use appropriate personal protection equipment (PPE). Wash thoroughly after handling.

7.2. Conditions for safe storage, including incompatibilities

Storage conditions : Store upright in a tightly closed, suitably labeled container. Store in a dry, cool, well-ventilated area with appropriate designated containment measures. Keep out of reach of children. Have readily available spill kits with appropriate absorbent materials. Protect from sunlight. Store in original labeled containers.

Incompatible products : Keep away from strong acids, strong bases, flammables/combustibles, oxidizers, and reactive metals (aluminum, zinc, magnesium, iron filings).

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

Isopropanol (67-63-0)	
USA - ACGIH® - Threshold Limit Values	
Local name	2-Propanol
ACGIH® TLV® TWA	491 mg/m³
	200 ppm
ACGIH® TLV® STEL	984 mg/m³
	400 ppm
Remark (ACGIH®)	TLV® Basis: Eye & URT irr; CNS repair. Notations: A4 (Not classifiable as a Human Carcinogen); BEI

Isopropanol (67-63-0)	
Regulatory reference	ACGIH 2025
USA - ACGIH® - Biological Exposure Indices	
Local name	2-Propanol
BEI (BLV)	40 mg/l Parameter: Acetone - Medium: urine - Sampling time: End of shift at end of workweek - Notations: B, Ns
Regulatory reference	ACGIH 2025
USA - OSHA - Occupational Exposure Limits	
Local name	Isopropyl alcohol
OSHA PEL TWA	980 mg/m³
	400 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
USA - NIOSH - Occupational Exposure Limits	
Local name	Isopropyl alcohol
NIOSH REL 10h TWA	400 ppm
NIOSH REL (STEL)	500 ppm
Regulatory reference (US-NIOSH)	OSHA Annotated Table Z-1 (NIOSH Pocket Guide to Chemical Hazards (NPG))

8.2. Appropriate engineering controls

Appropriate engineering controls : Maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable guidelines, use only with adequate ventilation. Eye wash facilities and emergency showers must be available when handling this product.

8.3. Individual protection measures, such as personal protective equipment

Hand protection:
Chemical resistant PVC gloves

Eye protection:
Safety glasses with side shields.

SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state : Liquid
Color : Brown
Odor : Citrus
Odor threshold : No data available
pH : 8 – 9
Melting point : No data available
Freezing point : No data available
Boiling point : No data available
Flash point : > 200 °F
Flammability (solid, gas) : No data available
Vapor pressure : No data available
Relative vapor density at 20°C : No data available

Relative density	:	No data available
Density	:	8.35 lb/gal
Solubility	:	No data available
Log Pow	:	No data available
Autoignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity, kinematic	:	105.942 mm²/s
Viscosity, dynamic	:	106 cP
Explosion limits	:	No data available
Particle characteristics	:	No data available

Alcohols, C10-16, ethoxylated	
Particle characteristics	No data available

Isopropanol	
Particle characteristics	No data available

Alcohols, C12-15, ethoxylated	
Particle characteristics	No data available

Tetrasodium ethylenediamine tetraacetate	
Particle characteristics	No data available

Benzenesulfonic acid, C10-16-alkyl derivs.	
Particle characteristics	No data available

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

10.1. Reactivity

Not reactive under normal conditions of use, storage, and transport.

10.2. Chemical stability

Stable under recommended handling and storage conditions. Decomposes when overheated or exposed to strong oxidizers or acids/bases.

10.3. Possibility of hazardous reactions

No hazardous polymerization expected. Contact with incompatible materials (strong acids, alkalis, oxidizers) may cause degradation with release of vapors or mild exothermic reactions.

10.4. Conditions to avoid

Avoid excessive heat, open flames, and prolonged exposure to direct sunlight.

10.5. Incompatible materials

Incompatible with strong oxidizing agents, strong acids, and strong bases.

10.6. Hazardous decomposition products

Thermal decomposition may produce carbon oxides (CO, CO_2) and minor irritating vapors.

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Isopropanol (67-63-0)	
LD50 oral rat	5840 mg/kg Source: ECHA
LD50 dermal rabbit	12800 mg/kg Source: ECHA

Alcohols, C12-15, ethoxylated (68131-39-5)	
LD50 oral rat	2000 mg/kg Source: Corporate Solution From Thomson Micromedex
LD50 dermal rat	> 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	> 1.6 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)

Tetrasodium ethylenediamine tetraacetate (64-02-8)	
LD50 oral rat	1700 – 1913 mg/kg Source: EU RAR
ATE US (oral)	1806.5 mg/kg body weight

Benzenesulfonic acid, C10-16-alkyl derivs. (68584-22-5)	
LD50 oral rat	1350 mg/kg Source: IUCLID;
LD50 dermal rat	530 – 1060 mg/kg Source: IUCLID;
LD50 dermal rabbit	> 5000 mg/kg body weight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	> 1.9 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)

Skin corrosion/irritation : Not classified
pH: 8 – 9

Serious eye damage/irritation : Causes serious eye damage.
pH: 8 – 9

Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Isopropanol (67-63-0)	
IARC group	3 - Not classifiable

Reproductive toxicity : Not classified
STOT-single exposure : Not classified

Isopropanol (67-63-0)	
STOT-single exposure	May cause drowsiness or dizziness.

STOT-repeated exposure : Not classified.

Alcohols, C12-15, ethoxylated (68131-39-5)	
NOAEL (oral,rat,90 days)	≥ 1000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

Tetrasodium ethylenediamine tetraacetate (64-02-8)	
LOAEL (oral,rat,90 days)	60 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
LOAEC (inhalation, rat, dust/mist/fume, 90 days)	0.015 mg/l air Animal: rat, Animal sex: female, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)
NOAEL (oral,rat,90 days)	6 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Benzenesulfonic acid, C10-16-alkyl derivs. (68584-22-5)	
NOAEL (oral,rat,90 days)	500 mg/kg body weight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents)
NOAEL (dermal,rat/rabbit,90 days)	> 1000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)

Aspiration hazard : Not classified

MAXX 454	
Viscosity, kinematic	105.942 mm²/s

Alcohols, C10-16, ethoxylated (68002-97-1)	
Viscosity, kinematic	No data available

Isopropanol (67-63-0)	
Viscosity, kinematic	No data available

Alcohols, C12-15, ethoxylated (68131-39-5)	
Viscosity, kinematic	16 mm²/s Temp.: '40°C' Parameter: 'kinematic viscosity (in mm²/s)'

Tetrasodium ethylenediamine tetraacetate (64-02-8)	
Viscosity, kinematic	No data available

Benzenesulfonic acid, C10-16-alkyl derivs. (68584-22-5)	
Viscosity, kinematic	No data available

SECTION 12 Ecological information

12.1. Ecotoxicity

Hazardous to the aquatic environment, short–term (acute) : Not classified

Hazardous to the aquatic environment, long–term (chronic) : Not classified

Alcohols, C10-16, ethoxylated (68002-97-1)	
LC50 - Fish [1]	63.704 mg/l Source: ECOSAR

Isopropanol (67-63-0)	
LC50 - Fish [1]	9640 mg/l Source: ECHA
LC50 - Fish [2]	9640 mg/l Test organisms (species): Pimephales promelas

Alcohols, C12-15, ethoxylated (68131-39-5)	
LC50 - Fish [1]	1.03 mg/l Source: The ECOTOXicology database
EC50 - Crustacea [1]	0.302 mg/l Source: The ECOTOXicology database
EC50 - Other aquatic organisms [1]	0.88 mg/l Test organisms (species): other:
EC50 96h - Algae [1]	0.7 mg/l Source: ECOTOX

Tetrasodium ethylenediamine tetraacetate (64-02-8)	
LC50 - Fish [1]	41 mg/l Source: EPA
EC50 - Crustacea [1]	> 114 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	100 mg/l Source: IUCLID
LOEC (chronic)	50 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	≥ 25.7 mg/l Test organisms (species): Duration: '35 d'

Benzenesulfonic acid, C10-16-alkyl derivs. (68584-22-5)	
LC50 - Fish [1]	3 mg/l Source: IUCLID
EC50 - Crustacea [1]	2.9 mg/l Source: IUCLID
EC50 72h - Algae [1]	> 1000 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [1]	170 mg/l Source: IUCLID

12.2. Persistence and degradability

MAXX 454	
Persistence and degradability	Not rapidly degradable

Alcohols, C10-16, ethoxylated (68002-97-1)	
Persistence and degradability	Not rapidly degradable

Isopropanol (67-63-0)	
Persistence and degradability	Not rapidly degradable

Alcohols, C12-15, ethoxylated (68131-39-5)	
Persistence and degradability	Not rapidly degradable

Tetrasodium ethylenediamine tetraacetate (64-02-8)	
Persistence and degradability	Not rapidly degradable

Benzenesulfonic acid, C10-16-alkyl derivs. (68584-22-5)	
Persistence and degradability	Not rapidly degradable

12.3. Bioaccumulative potential

Isopropanol (67-63-0)	
Log Pow	0.05 Source: ICSC

Tetrasodium ethylenediamine tetraacetate (64-02-8)	
Log Pow	-13.17 Source: ChemIDplus

Benzenesulfonic acid, C10-16-alkyl derivs. (68584-22-5)	
Log Pow	2

12.4. Mobility in soil

Benzenesulfonic acid, C10-16-alkyl derivs. (68584-22-5)	
Mobility in soil	1064

12.5. Other adverse effects

No additional information available

SECTION 13 Disposal considerations

Regional legislation (waste) : Avoid unauthorized disposal. Do not dump into any body of water. Comply with federal, state/provincial and local laws/regulations. Do not reuse empty containers.

Waste treatment methods : Do not allow the product to contaiminate any body of water. Refer to Section 8 for personal protection equipment.

SECTION 14 Transport information

In accordance with DOT

DOT
14.1. UN number
Not regulated for transport
14.2. Proper Shipping Name
Not regulated
14.3. Transport hazard class(es)
Not regulated
14.4. Packing group
Not regulated
14.5. Environmental hazards
Not regulated
No supplementary information available

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT
Not regulated

SECTION 15 Regulatory information

15.1. Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.		
Isopropanol	CAS-No. 67-63-0	3 - 7%

Alcohols, C10-16, ethoxylated (68002-97-1)	
SARA Section 311/312 Hazard Classes	Health hazard - Acute toxicity (any route of exposure) Health hazard - Serious eye damage or eye irritation

15.2. International regulations

No additional information available

15.3. State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

Component	State or local regulations
Isopropanol(67-63-0)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New York City - Right to Know Hazardous Substances List; U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16 Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Revision date : 5/5/2026
Issue date : 5/29/2024

Full text of hazard classes and H-statements	
H318	Causes serious eye damage

Safety Data Sheet (SDS), USA ML

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.