

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 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. May cause an allergic skin reaction.
Indication of immediate medical attention and special treatment needed	Provide widespread 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 (CO ₂).
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.
Methods and materials for containment and cleaning up	<p>Caution – spillages may be slippery.</p> <p>Large spills: Stop the flow of material if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements, or confined areas.</p> <p>Small spills: Wipe up with absorbent material (e.g., cloth, fleece). Clean surface thoroughly to remove residual contamination.</p> <p>Never return spills to original container for re-use. For waste disposal, see section 13 of the SDS.</p>
Environmental precautions	Do not release into the environment (see section 12). Avoid discharge into areas not consistent with package labeling.

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.
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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
2-butoxyethanol	PEL	50 ppm

US ACGIH Threshold Limit Values

Components	Type	Value
2-butoxyethanol	STEL	20 ppm

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Species	Sampling Time
2-butoxyethanol	200 mg/g	Creatinine	Urine	End of shift.

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.

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 managing 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 Milky liquid.

Color White.

Odor Cherry

Odor threshold Not available.

pH 4.5-5.5

Melting/freezing point Not available.

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

Flash point >385°F (196°C)

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)	1.0
Solubility in water	Soluble.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Decomposes on heating.
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	Carbon dioxide, carbon monoxide.

11. Toxicological information

Information on routes of exposure

Ingestion	Expected to be a low ingestion hazard.
Inhalation	Expected to be a low inhalation hazard.
Skin contact	Repeated and/or prolonged skin contact may cause slight irritation.
Eye contact	Repeated and/or prolonged eye contact may cause slight irritation.

Symptoms related to the physical, chemical, and toxicological characteristics Dermatitis. Rash. May cause an allergic skin reaction.

Acute toxicity Not established.

Product Renew (CAS mixture)		
Exposure Classification	Route and Species	LD ₅₀ /LC ₅₀
Acute	Oral, rat	>5,000 mg/kg (estimated)
*Estimates for product may be based on additional component data not shown		

Skin corrosion/irritation	May cause mild skin irritation.
Serious eye damage/irritation	Not classified.
Respiratory sensitization	Not classified.
Skin sensitization	May cause an allergic skin reaction.
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 Renew (CAS mixture)		
Aquatic Receptor	Species	Test Thresholds
Crustacea	Daphnia magna	EC ₅₀ (48hr): 2,000 mg/L estimated
Fish	Oncorhynchus mykiss	LC ₅₀ (96hr): 295 mg/L estimated
*Estimates for product may be based on additional component data not shown		

Persistence and degradability 2-butoxyethanol is considered readily biodegradable.
Bioaccumulative potential Potential to bioaccumulate is low.
Mobility in soil Not available.
Other adverse effects Not 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.
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

DOT
 Not regulated as dangerous goods.

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)
 2-butoxyethanol (Glycol ether category)

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 (3/2021).

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

Issue date 4/17/2015
Revision date 12/3/2021
Version # 2
HMIS® ratings Health: 1
 Flammability: 0
 Physical hazard: 0



NFPA ratings Health: 1
 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 General format update; Refine composition table, amend physical data; Update toxicology thresholds and environmental fate information; Text clarification amendments Sections 5,6,8,9 and 12. PPE recommendation updated; California Proposition 65 notice; HMIS and NFPA pictograms added.