Safety Data Sheet
acc. to OSHA HCS

Date of issue: 08/27/2026 Reviewed on 08/27/2026

*
1 Identification

Product identifier

Trade name: Road Rage
Other means of identification

Product Code: QW-0190
Application of the substance / the mixture: Acidic Cleaner for Commercial Carwash

Details of the supplier of the safety data sheet
Manufacturer/Supplier:
Quest Car Care Products
3331 80th Avenue
Zeeland, MI 49464
USA

Information department: Chemical Department
Emergency telephone number:
Chemtrec
1-800-424-9300 (24 hours)
1-703-527-3887 (24 hours (international))

*
2 Hazard(s) identification

Classification of the substance or mixture


GHS05 Corrosion

Skin corrosion 1A H314 Causes severe skin burns and eye damage.
Eye damage 1 H318 Causes serious eye damage.


GHS07

Acute toxicity - oral 4 H302 Harmful if swallowed.

Label elements
GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
Hazard pictograms



GHS05 GHS07

Signal word Danger

Hazard-determining components of labeling:
Ammonium fluoride
Proprietary Surfactant

(Contd. on page 2)

Safety Data Sheet
acc. to OSHA HCS

Date of issue: 08/27/2026 Reviewed on 08/27/2026

Trade name: Road Rage

(Contd. of page 1)

2-butoxyethanol
Alcohol Ethoxylated
Hazard statements
Harmful if swallowed.
Causes severe skin burns and eye damage.
Precautionary statements
Do not breathe dusts or mists.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear eye protection / face protection.
Wear protective gloves/protective clothing/eye protection/face protection.
If swallowed: Call a poison center/doctor 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 [or shower].
If inhaled: Remove person to fresh air and keep comfortable for breathing.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a poison center/doctor.
Specific treatment (see on this label).
Wash contaminated clothing before reuse.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.
Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable
vPvB: Not applicable
Classification according to (d)(1)(ii) of § 1910.1200
The SDS issuer does not object to the classifications provided by importers or manufacturers of precursor products.
Hazards not otherwise classified
There are no adverse physical or health effects known that are not covered by the hazard classes of the Hazard Communications Standard.

*
3 Composition/information on ingredients

Chemical characterization: Mixtures
Description: Mixture of the substances listed below with nonhazardous additions.

Substances:		
77-92-9	citric acid	10-30%
	Proprietary Surfactant	1-10%
	Proprietary Ingredient	1-10%
111-76-2	2-butoxyethanol	1-10%
	Alcohol Ethoxylated	1-10%
1341-49-7	Ammonium fluoride	1-5%
7664-93-9	Sulfuric acid	1-5%

(Contd. on page 3)

Safety Data Sheet
acc. to OSHA HCS

Date of issue: 08/27/2026 Reviewed on 08/27/2026

Trade name: Road Rage

(Contd. of page 2)

4 First-aid measures

Description of first aid measures
General information:
Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
After inhalation: In case of unconsciousness place patient stably in side position for transportation.
After skin contact: Immediately wash with water and soap and rinse thoroughly.
After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
After swallowing:
Immediately call a doctor.
Drink copious amounts of water and provide fresh air. Immediately call a doctor.
Most important symptoms and effects, both acute and delayed No further relevant information available.
Indication of any immediate medical attention and special treatment needed
No further relevant information available.

5 Fire-fighting measures

Extinguishing media
Suitable extinguishing agents:
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Special hazards arising from the substance or mixture
During heating or in case of fire poisonous gases are produced.
Advice for firefighters
Protective equipment: Mouth respiratory protective device.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
Environmental precautions:
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralizing agent.
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

Precautions for safe handling
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.

(Contd. on page 4)

Safety Data Sheet
acc. to OSHA HCS

Date of issue: 08/27/2026 Reviewed on 08/27/2026

Trade name: Road Rage

(Contd. of page 3)

Information about protection against explosions and fires: Keep respiratory protective device available.

Conditions for safe storage, including any incompatibilities
Storage:
Requirements to be met by storerooms and receptacles: No special requirements.
Information about storage in one common storage facility: Not required
Further information about storage conditions: Keep receptacle tightly sealed.
Specific end use(s) No further relevant information available.

*
8 Exposure controls/personal protection

Control parameters
Components with limit values that require monitoring at the workplace:
The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
At this time, the other constituents have no known exposure limits.

1341-49-7 Ammonium fluoride	
PEL	Long-term value: 2.5 mg/m³ as F
REL	Long-term value: 2.5 mg/m³ as F
TLV	Long-term value: 2.5 mg/m³ as F, A4; BEI
111-76-2 2-butoxyethanol	
PEL	Long-term value: 240 mg/m³, 50 ppm Skin
REL	Long-term value: 24 mg/m³, 5 ppm Skin
TLV	Long-term value: 97 mg/m³, 20 ppm BEI, A3
7664-93-9 Sulfuric acid	
PEL	Long-term value: 1 mg/m³
REL	Long-term value: 1 mg/m³
TLV	Long-term value: 0.2* mg/m³ *as thoracic fraction, A2

Ingredients with biological limit values:	
1341-49-7 Ammonium fluoride	
BEI	2 mg/L Medium: urine Time: prior to shift Parameter: Fluoride (background, nonspecific) 3 mg/L Medium: urine Time: end of shift Parameter: Fluoride (background, nonspecific)

(Contd. on page 5)

Safety Data Sheet
acc. to OSHA HCS

Date of issue: 08/27/2026 Reviewed on 08/27/2026

Trade name: Road Rage

(Contd. of page 4)

111-76-2 2-butoxyethanol	
BEI	200 mg/g creatinine Medium: urine Time: end of shift Parameter: Butoxyacetic acid (BAA) (with hydrolysis)

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls
Appropriate engineering controls No further data; see section 7.
Personal protective equipment:
General protective and hygienic measures:
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.
Breathing equipment:
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
Material of gloves
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
Penetration time of glove material
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Eye protection:



Tightly sealed goggles

*
9 Physical and chemical properties

Information on basic physical and chemical properties
General Information

Physical state	Liquid
Color:	Orange
Odor:	Acrid
Odor threshold:	Not determined
Melting point/Melting range:	Undetermined
Boiling point/Boiling range:	100 °C (212 °F)

(Contd. on page 6)

Safety Data Sheet
acc. to OSHA HCS

Date of issue: 08/27/2026 Reviewed on 08/27/2026

Trade name: Road Rage

(Contd. of page 5)

Flammability:	Not applicable
Explosion limits:	
Lower:	Not determined
Upper:	Not determined
Flash point:	>93 °C (>199.4 °F)
Decomposition temperature:	Not determined
pH-value at 20 °C (68 °F):	0–1
Viscosity:	
Kinematic:	Not determined
Dynamic:	Not determined
Solubility in / Miscibility with	
Water:	Fully miscible.
Partition coefficient (n-octanol/water):	Not determined
Vapor pressure:	Not determined
Vapor pressure:	
Density at 20 °C (68 °F):	1.05–1.1 g/cm³ (8.76225–9.1795 lbs/gal)
Relative density	Not determined
Vapor density	Not determined
Particle characteristics	Not applicable

Other information
Appearance:
Form: Liquid
Important information on protection of health and environment, and on safety.
Ignition temperature: Product is not selfigniting.
Danger of explosion: Product does not present an explosion hazard.
Change in condition
Evaporation rate Not determined

10 Stability and reactivity

Reactivity No further relevant information available.
Chemical stability
Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
Possibility of hazardous reactions No dangerous reactions known.
Conditions to avoid No further relevant information available.
Incompatible materials: No further relevant information available.
Hazardous decomposition products: No dangerous decomposition products known.

*
11 Toxicological information

Information on toxicological effects
Acute toxicity:

LD/LC50 values that are relevant for classification:		
ATE (Acute Toxicity Estimate)		
Oral	LD50	1,713–1,719 mg/kg
Dermal	LD50	14,815 mg/kg (rab)
Inhalative	LC50/4 h	111 mg/l (ATE)

(Contd. on page 7)

Safety Data Sheet
acc. to OSHA HCS

Trade name: Road Rage

(Contd. of page 6)

77-92-9 citric acid		
Oral	LD50	5,040 mg/kg (mouse)
Proprietary Surfactant		
Oral	LD50	5,000 mg/kg (rat)
1341-49-7 Ammonium fluoride		
Oral	LD50	130 mg/kg (rat)
111-76-2 2-butoxyethanol		
Oral	LD50	1,200 mg/kg (ATE)
		1,480 mg/kg (rat)
Dermal	LD50	400 mg/kg (rab)
Inhalative	LC50/4 h	3 mg/l (ATE)
Alcohol Ethoxylated		
Oral	LD50	1,400 mg/kg (rat)
7664-93-9 Sulfuric acid		
Oral	LD50	2,140 mg/kg (rat)

Primary irritant effect:
on the skin: Strong caustic effect on skin and mucous membranes.
on the eye:
Strong caustic effect.
Strong irritant with the danger of severe eye injury.
Sensitization: No sensitizing effects known.
Additional toxicological information:
The product shows the following dangers according to internally approved calculation methods for preparations:
Harmful
Corrosive
Irritant
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.
Interactive effects No interactive effects between components are known.

Carcinogenic categories

IARC (International Agency for Research on Cancer)		
1341-49-7	Ammonium fluoride	3
111-76-2	2-butoxyethanol	3
7664-93-9	Sulfuric acid	1

NTP (National Toxicology Program)		
7664-93-9	Sulfuric acid	K

OSHA-Ca (Occupational Safety & Health Administration)
None of the ingredients is listed.

Alternative sources for toxicological information
No non-standard sources for toxicological information where used.

12 Ecological information

Toxicity
Aquatic toxicity: No further relevant information available.
Persistence and degradability No further relevant information available.

(Contd. on page 8)

Safety Data Sheet
acc. to OSHA HCS

Date of issue: 08/27/2026 Reviewed on 08/27/2026

Trade name: Road Rage

(Contd. of page 7)

Bioaccumulative potential No further relevant information available.
Mobility in soil No further relevant information available.
Results of PBT and vPvB assessment
PBT: Not applicable
vPvB: Not applicable
Other adverse effects
Additional ecological information:
General notes:
Must not reach bodies of water or drainage ditch undiluted or unneutralized.
Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

13 Disposal considerations

Waste treatment methods
Recommendation:
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings:
Recommendation: Disposal must be made according to official regulations.
Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

UN-Number	
DOT, IMDG, IATA	UN3264
UN proper shipping name	
DOT	Corrosive liquid, acidic, inorganic, n.o.s. (Sulfuric acid, Ammonium hydrogendifluoride)
IMDG	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (SULPHURIC ACID, AMMONIUM HYDROGENDIFLUORIDE)
IATA	Corrosive liquid, acidic, inorganic, n.o.s. (SULPHURIC ACID, AMMONIUM HYDROGENDIFLUORIDE)
Transport hazard class(es)	
DOT	



Class	8 Corrosive substances
Label	8
IMDG, IATA	



Class	8 Corrosive substances

(Contd. on page 9)

Safety Data Sheet
acc. to OSHA HCS

Date of issue: 08/27/2026 Reviewed on 08/27/2026

Trade name: Road Rage

(Contd. of page 8)

Label	8
Packing group **DOT, IMDG, IATA**	II
Environmental hazards:	Product contains environmentally hazardous substances: dodecyldimethylamine oxide
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable
Transport/Additional information:	
DOT **Quantity limitations**	On passenger aircraft/rail: 1 L On cargo aircraft only: 30 L
IMDG **Limited quantities (LQ)** **Excepted quantities (EQ)**	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
Special precautions for user **Hazard identification number (Kemler code):** **EMS Number:** **Segregation groups** **Stowage Category** **Stowage Code** **Segregation Code**	Warning: Corrosive substances 80 F-A,S-B (SGG1) Acids B SW2 Clear of living quarters. SG36 Stow "separated from" SGG18-alkalis. SG49 Stow "separated from" SGG6-cyanides
UN "Model Regulation":	UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (SULPHURIC ACID, AMMONIUM HYDROGENDIFLUORIDE), 8, II

*
15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture
Sara

Section 355 (extremely hazardous substances):	
7664-93-9	Sulfuric acid

Section 313 (Specific toxic chemical listings):	
111-76-2	2-butoxyethanol
7664-93-9	Sulfuric acid

TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

Hazardous Air Pollutants

None of the ingredients is listed.

Proposition 65

Chemicals known to cause cancer:

None of the ingredients is listed.

(Contd. on page 10)

Safety Data Sheet
acc. to OSHA HCS

Date of issue: 08/27/2026 Reviewed on 08/27/2026

Trade name: Road Rage

(Contd. of page 9)

Chemicals known to cause reproductive toxicity for females:
None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males:
None of the ingredients is listed.

Chemicals known to cause developmental toxicity:
None of the ingredients is listed.

Carcinogenic categories

EPA (Environmental Protection Agency)		
111-76-2	2-butoxyethanol	NL

TLV (Threshold Limit Value)		
1341-49-7	Ammonium fluoride	A4
111-76-2	2-butoxyethanol	A3
7664-93-9	Sulfuric acid	A2

NIOSH-Ca (National Institute for Occupational Safety and Health)
None of the ingredients is listed.

GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
Hazard pictograms



GHS05 GHS07

Signal word Danger

Hazard-determining components of labeling:
Ammonium fluoride
Proprietary Surfactant
2-butoxyethanol
Alcohol Ethoxylated
Hazard statements
Harmful if swallowed.
Causes severe skin burns and eye damage.
Precautionary statements
Do not breathe dusts or mists.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear eye protection / face protection.
Wear protective gloves/protective clothing/eye protection/face protection.
If swallowed: Call a poison center/doctor 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 [or shower].
If inhaled: Remove person to fresh air and keep comfortable for breathing.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a poison center/doctor.
Specific treatment (see on this label).
Wash contaminated clothing before reuse.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 11)

Safety Data Sheet
acc. to OSHA HCS

Date of issue: 08/27/2026 Reviewed on 08/27/2026

Trade name: Road Rage

(Contd. of page 10)

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Date of previous version 03/19/2026
Date of preparation 08/27/2026
Abbreviations and acronyms:
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
BEI: Biological Exposure Limit
Acute toxicity - oral 4: Acute toxicity – Category 4
Skin corrosion 1A: Skin corrosion/irritation – Category 1A
Eye damage 1: Serious eye damage/eye irritation – Category 1
*** Data compared to the previous version altered.**