

Double Duty

Safety Data Sheet

SECTION 1: Product and company identification

Product name : Double Duty
Use of the substance/mixture : Acid
Product code : 0772
Company : Total Solutions
P.O. Box 240014
Milwaukee, WI 53224 - USA
T (414) 354-6417
Emergency number : Chemtrec: (800) 424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Skin Irrit. 2 H315
Eye Irrit. 2 H319

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS07

Signal word (GHS-US) : Warning
Hazard statements (GHS-US) : Causes skin irritation
Causes serious eye irritation
Precautionary statements (GHS-US) : Wash thoroughly after handling
Wear eye protection, protective clothing, protective gloves.
If on skin: Wash with plenty of water.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Specific treatment (see First aid measures on this label)
If skin irritation occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable
Full text of H-phrases: see section 16

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
citric acid	(CAS-No.) 77-92-9	10-20	Eye Irrit. 2A, H319
Benzenesulfonic acid, C10-16-alkyl derivatives	(CAS-No.) 68584-22-5	1-5	Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314

A specific chemical identity and/or percentage of composition has been withheld as a trade secret. Any concentration shown as a range is to protect confidentiality or is due to batch variation.

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation : Remove the victim into fresh air.
First-aid measures after skin contact : Wash skin with plenty of water. If skin irritation occurs: Get medical advice/attention.

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- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : Rinse mouth with water. Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/effects : Causes skin irritation. Causes serious eye irritation.
- Symptoms/effects after inhalation : None under normal use.
- Symptoms/effects after skin contact : Causes skin irritation.
- Symptoms/effects after eye contact : Causes serious eye irritation.
- Symptoms/effects after ingestion : Gastrointestinal complaints. Cramps. Diarrhea. Nausea. Vomiting.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Adapt extinguishing media to the environment.

5.2. Special hazards arising from the substance or mixture

- Reactivity : Upon combustion: CO and CO₂ are formed.

5.3. Advice for firefighters

- Firefighting instructions : Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers. Take account of environmentally hazardous firefighting water.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Isolate from fire, if possible, without unnecessary risk.

6.1.1. For non-emergency personnel

- Protective equipment : Protective goggles. Gloves. Protective clothing.
- Emergency procedures : Evacuate unnecessary personnel. Avoid contact with skin, eyes and clothing. Ventilate spillage area.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Stop leak if safe to do so. Stop release. Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

- For containment : Contain released product, pump into suitable containers.
- Methods for cleaning up : This material and its container must be disposed of in a safe way, and as per local legislation.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Comply with the legal requirements. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Do not eat, drink or smoke when using this product. Do not get in eyes, on skin, or on clothing.
- Hygiene measures : Wash thoroughly after handling. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Comply with applicable regulations.
- Storage conditions : Keep container closed when not in use.
- Incompatible products : Strong alkalis.
- Information on mixed storage : KEEP SUBSTANCE AWAY FROM: alkaline substances.
- Storage area : Meet the legal requirements. Store in a cool area. Store in a dry area.
- Special rules on packaging : meet the legal requirements.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

citric acid (77-92-9)

Not applicable

Benzenesulfonic acid, C10-16-alkyl derivatives (68584-22-5)

Not applicable

8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Personal protective equipment : Use appropriate personal protective equipment when risk assessment indicates this is necessary. Safety glasses. Gloves. Protective clothing.



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: clear. Green. brown. Liquid.
Odor	: Mild odor
Odor threshold	: No data available
pH	: ≤ 2
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 200 °F Closed Cup
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Vapor pressure	: No data available
Relative density	: No data available
Relative vapor density at 20 °C	: No data available
Specific gravity / density	: 1.07 g/ml
Solubility	: Soluble in water.
Log Pow	: No data available
Log Kow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
VOC content	: < 0.5 %

SECTION 10: Stability and reactivity

10.1. Reactivity

Upon combustion: CO and CO₂ are formed.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Refer to section 10.1 on Reactivity.

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10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

alkalis.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

citric acid (77-92-9)

LD50 dermal rat	> 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male/female, Experimental value)
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Benzenesulfonic acid, C10-16-alkyl derivatives (68584-22-5)

LD50 oral rat	530 mg/kg
ATE CLP (oral)	530 mg/kg body weight

Skin corrosion/irritation : Causes skin irritation.

pH: ≤ 2

Serious eye damage/irritation : Causes serious eye irritation.

pH: ≤ 2

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity – single exposure : Not classified

Specific target organ toxicity – repeated exposure : Not classified

Aspiration hazard : Not classified

Symptoms/effects after inhalation : None under normal use.

Symptoms/effects after skin contact : Causes skin irritation.

Symptoms/effects after eye contact : Causes serious eye irritation.

Symptoms/effects after ingestion : Gastrointestinal complaints. Cramps. Diarrhea. Nausea. Vomiting.

Likely routes of exposure : Skin and eye contact

SECTION 12: Ecological information

12.1. Toxicity

citric acid (77-92-9)

LC50 fish 1	440 - 760 mg/l (Equivalent or similar to OECD 203, 48 h, Leuciscus idus, Static system, Fresh water, Experimental value)
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12.2. Persistence and degradability

citric acid (77-92-9)

Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
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Biochemical oxygen demand (BOD)	0.42 g O ₂ /g substance
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Chemical oxygen demand (COD)	0.728 g O ₂ /g substance
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ThOD	0.686 g O ₂ /g substance
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BOD (% of ThOD)	0.89 (20 day(s), Literature study)
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12.3. Bioaccumulative potential

citric acid (77-92-9)

BCF other aquatic organisms 1	3.2 (Other, Calculated value)
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Log Pow	-1.8 - -1.55 (Experimental value)
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Bioaccumulative potential	Not bioaccumulative.
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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT : Not regulated for transport

Additional information

Other information : No supplementary information available.

ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.



WARNING

This product can expose you to strong inorganic acid mists containing sulphuric acid which is known to the State of California to cause cancer, and sulphur dioxide, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

SECTION 16: Other information

Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging.

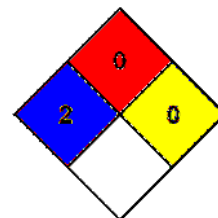
Full text of H-phrases:

H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H319	Causes serious eye irritation

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



Prepared by: Technical Department

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. No warranty is expressed or implied regarding the accuracy of this data or the results obtained from the use thereof. Our company assumes no responsibility for personal injury or property damage to the vendee, users or third parties caused by the material. Such vendees or users assume all risks associated with the use of this material.