



# HARRIS FILTERS ACID BLEND

## MATERIAL SAFETY DATA SHEET

### 1. Identification of the substance/preparation and of the company

Product Name: Acid Blend

Composition: 45% Tartaric Acid, 35% Malic Acid, 20% Citric Acid

Company Identification: Harris Filters  
42 & 43 Zoar Street  
Lower Gornal  
Dudley  
West Midlands  
DY3 2PA, UK  
Tel: 01384 253073

### 2. Composition/Information on ingredients

Name	CAS No.	EC No.	Signal Word	Precaution Statements
Tartaric Acid	87-69-4	201-766-0		
Malic Acid	6915-15-74	230-022-8	H319:Warning	P264, P280, P305 P351
Citric Acid	77-92-9	201-069-1		

### 3. Hazard Identification

Warning symbols:



Signal Word: Irritant.

Hazard Statements: H319– Causes serious eye irritation  
P280 – Wear protective clothing/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

Precautionary Statements: P264 – Wash hands thoroughly after handling  
P337/P313 – If eye irritation persists get medical advice  
P304/P340– If inhaled move person to fresh air

### 4. First Aid Measures

Inhalation: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms/difficulty breathing, seek medical advice.

Ingestion: Wash mouth with water immediately. If person is conscious, give antacid or milk. Never give anything by mouth to an unconscious person. If swallowed, seek immediate medical attention.

Eye Contact: Rinse immediately and copiously with clean, fresh water for at least 15 minutes, keeping eyelids opened.

Skin Contact: Remove contaminated clothing and wash them before using them again. Wash with plenty of water and soap. In case of irritation attributable to the product seek medical attention.

Most important symptoms and effects, both acute and delayed:

Hazardous in case of eye or lung contact (irritant). Slightly hazardous in case of skin contact (irritant) or ingestion. Delayed effects are slightly hazardous in case of skin contact.

Prolonged repeated exposure to product dust can cause eye irritation and dermatitis.

Repeated inhalation of product dust can produce varying degrees of respiratory irritation and lung damage.

Indication of any immediate medical attention and special treatment needed:

May cause allergic respiratory reaction

## 5. Fire Fighting Measures

Fire extinguishing media: CO<sub>2</sub>, foam, chemical powder, water.

Special hazards from the mixture In case of fire, gas and hazardous vapours may be formed.

Advice for firefighters: Wear the self-contained breathing apparatus and full protection equipment in case of fire, all the time.

## 6. Accidental Release Measures

Personal Precautions: Avoid generation of dust, do not inhale dust. Ensure a supply of fresh air in closed rooms.

Environmental Precautions: Collect the product in suitable container for disposal. Prevent further leakage or spillage. Do not allow to enter into drains.

Methods for Cleaning: Sweep with a broom or vacuum and avoid generation of dust.. Provide for sufficient ventilation. Wash with plenty of water. Place contaminated material into suitable containers and send them for waste disposal.

## 7. Handling & Storage

Handling: Keep container closed. Avoid formation and breathing of dust. Use appropriate protection. Handle according to the good industrial hygiene and safety procedures. Supply good air circulation in working area. Wash contaminated clothing before reuse.

Storage: Keep container tightly closed in a well-ventilated cool dry place. Do not store with oxidants and alkali metals.

## 8. Exposure Controls/Personal Protection

Exposure Controls:	Prevent dust build up by providing adequate ventilation. Do not breathe dust.
Hand protection:	Chemical resistant gloves are recommended for prolonged use
Eye protection	safety glasses (goggles) with side-shields
Skin and body protection	wear suitable protective clothing
Respiratory protection	maintain adequate ventilation. Certified respirators, with a particle filter P2 recommended.

Environmental exposure controls: Do not pour waste waters into the environment.

## 9. Physical & Chemical Properties

Physical and chemical properties	Value
Appearance	White crystalline powder
Odour	odourless
pH	1.95 – 2.2
Melting point/freezing point	130C
Initial boiling point and boiling range	153C
Flash point	> 100°C
Evaporation rate	not available
Flammability (solid, gas)	non flammable
Upper/lower flammability or explosive limits	not available / 0.091 g/l
Vapour pressure	<5 Pa at 20C
Vapour density	4.6
Solubility	1.390 h/L at 20C
Partition coefficient: n-octanol/water	1.91 at 20C
Auto-ignition temperature	339C
Viscosity	not available
Explosive properties	not determined
Oxidising properties	not oxidising

## 10. Stability & Reactivity

Reactivity	Stable under normal conditions/temperatures
Chemical stability	Stable at normal conditions/temperatures
Possibility of hazardous reactions	Fluorine, metals, silver
Conditions to avoid	Temperatures over 80C and moisture
Incompatible materials	Strong oxidants, strong bases, alkali metals, nitrates
Hazardous decomposition products	carbon monoxide, carbon dioxide

## 11. Toxicological Information

### Product information

Acute toxicity – Eye and skin irritation LD50 rat – 11740 mg/Kg.

Dermal - Malic Acid can cause skin irritation

Inhalation- Citric Acid may be harmful through inhalation. This product occurs naturally in the juice of citrus fruits.

Irritation - may cause skin and eye irritation. May cause slight respiratory irritation  
 Other effects – systemic toxicity (no data); sensitisation (may cause sensitisation by inhalation of enzyme mist/dust which may cause allergic respiratory reactions including asthma in susceptible individuals). Skin irritation (rabbit) moderate; eye irritation (rabbit) severe.

Mutagenic effects – no data available

Carcinogenicity – contains no ingredients listed as carcinogenic

Reproductive effects – contains no known reproductive hazards

Developmental toxicity – not expected to produce developmental or reproductive toxicity

## 12. Ecological Information

Toxicity to fish	LC50	96 hrs	>100	Mg/l	
Toxicity to daphnia	EC50	48 hrs	93.3	Mg/l	Daphnia magna
Toxicity to algae	ErC50	72 hours	51.4	Mg/l	Selenastrum capricornutum

Persistence and degradability: A 1% solution of malic acid (15000 mg/l) creates biochemical oxygen demand.

Bioaccumulative potential: Bioaccumulation is unlikely.

Mobility in soil: No information available

Results of PBT and vPvB assessment: This does not fill the criteria for PBT or vPvB properties

Other adverse effects: None known

## 13. Disposal Consideration

Dispose of hazardous waste in compliance with local and national regulations.

Dispose of in accordance with the European Directives on waste and hazardous waste.

Empty containers should be taken to an approved waste handling site for recycling or disposal.

Dispose of in accordance with local regulations.

## 14. Transport Information

The product is not classified as dangerous (nor regulated) for transport.

Annex II of MARPOL 73/78 and the IBC code dangerous goods – not dangerous goods in the meaning of ADR/RID, IMDG, ICAO and IATA

## 15. Regulatory Information

Only applies to Citric Acid (found naturally in citrus fruits). Malic Acid and Tartaric Acid are of no concern and have no restrictions.

Health: Irritant

Risk Phrases: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
Irritating to skin  
Risk of serious damage to eyes

S Phrases: Wear suitable protective clothing.

Harris Filters has compiled the information contained in this data sheet to the best of its own knowledge and of available reliable data.

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