



## MATERIAL SAFETY DATA SHEET

### Yellow Wheel Acid

#### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

##### 1.1. Product identifier

**Product Name** Yellow Wheel Acid  
**Proper Shipping Name** CORROSIVE LIQUID, TOXIC, N.O.S. (SULPHURIC ACID, HYDROFLUORIC ACID)

##### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Application:** Car maintenance product. - Wheel Cleaner  
**Uses Advised Against** For professional use only. This product is not recommended for any industrial, professional or consumer use other than the Identified uses above.

##### 1.3. Details of the supplier of the safety data sheet

**Supplier** Autosmart Australia  
 11 Darrambal Close  
 Rathmines  
 NSW 2283  
 Australia  
 www.autosmartinternational.com  
 Tel: 02 49 75 14 88 (Mon to Fri, 08:00 - 16:00 AEST) (General Information. Transport Information. Mild Medical Information)  
 autosmart@autosmartaustralia.com.au

**Contact Person** Mr. Russell Butler

##### 1.4. Emergency telephone number

Emergency No: +44 7808 971321 (24hrs) (Autosmart International, UK)  
 General Information. Transport Information. Mild medical Information:-  
 Tel: 02 49 75 14 88 (Mon to Fri, 08:00 - 16:00 AEST)

#### SECTION 2: HAZARDS IDENTIFICATION

##### Risk Phrases

R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.  
 R34 Causes burns.  
 R37 Irritating to respiratory system.

##### Safety Phrases

S24/25 Avoid contact with skin and eyes.  
 S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
 S27 Take off immediately all contaminated clothing.  
 S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.  
 S38 In case of insufficient ventilation, wear suitable respiratory equipment.  
 S45 In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).

##### 2.1. Classification of the substance or mixture

##### 2.2. Label elements

**Contains** HYDROFLUORIC ACID 3.5000%

##### Labelling



Toxic



Corrosive

## Yellow Wheel Acid

### Risk Phrases

R23/24/25	Toxic by inhalation, in contact with skin and if swallowed.
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### Safety Phrases

S24/25	Avoid contact with skin and eyes.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
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S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.
S38	In case of insufficient ventilation, wear suitable respiratory equipment.
S45	In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).

### 2.3. Other hazards

This product does not contain any PBT or vPvB Substances.

#### Statement Of Hazardous Nature

HAZARDOUS SUBSTANCE (According to criteria of NOHSC). DANGEROUS GOODS (According to ADG Code).

**ADR Class** Class 8: Corrosive substances.

**ADR/RID/ADN Subsidiary Risk** 6.1

**ADR Pack Group** II

**UN No. Road** 2922

**Emergency Action Code** 2X

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2. Mixtures

<b>SULPHURIC ACID ...%</b>	<b>2-5%</b>
<b>CAS-No.: 7664-93-9</b>	<b>EC No.: 231-639-5</b>
Classification (EC 1272/2008) Skin Corr. 1A - H314	Classification (67/548) C;R35
<b>HYDROFLUORIC ACID ...%</b>	<b>2-5%</b>
<b>CAS-No.: 7664-39-3</b>	<b>EC No.: 231-634-8</b>
	<b>Registration Number: 01-2119458860-33-xxxx</b>
Classification (EC 1272/2008) Acute Tox. 2 - H300 Acute Tox. 1 - H310 Acute Tox. 2 - H330 Skin Corr. 1A - H314	Classification (67/548) T+;R26/27/28 C;R35

The Full Text for all R-Phrases and Hazard Statements is Displayed in Section 16.

## SECTION 4: FIRST AID MEASURES

#### Susdp First Aid Instructions

For advice, contact a Poisons Information Centre (Phone 13 1126) or a doctor.

If swallowed, do NOT induce vomiting.

If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.

If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water.

If skin contact occurs, immediately remove contaminated clothing. Flush skin under running water for 15 minutes. Then apply calcium gluconate gel. Contact the Poisons Information Centre.

### 4.1. Description of first aid measures

## Yellow Wheel Acid

### General information

CAUTION! First aid personnel must be aware of own risk during rescue! In case of accidents: Call an ambulance immediately! Seek medical attention for all burns, regardless how minor they may seem. NOTE! Effects may be delayed. Keep affected person under observation.

#### Inhalation

Move the exposed person to fresh air at once. Keep the affected person warm and at rest. Get prompt medical attention. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Be aware that symptoms of lung oedema (shortness of breath) may develop up to 24 hours after exposure. Immediately call an ambulance.

#### Ingestion

DO NOT INDUCE VOMITING! Rinse mouth thoroughly. Promptly get affected person to drink large volumes of water to dilute the swallowed chemical. Give milk instead of water if readily available. Get medical attention immediately!

#### Skin contact

Remove contaminated clothing. Rinse immediately with plenty of water. Apply Calcium Gluconate Gel over the affected areas. Get medical attention immediately.

#### Eye contact

Get medical attention immediately. Continue to rinse. Promptly wash eyes with plenty of water while lifting the eye lids. Make sure to remove any contact lenses from the eyes before rinsing. Medical aid should instil several drops of sterile calcium gluconate solution.

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

#### General information

NOTE! Effects may be delayed. Keep affected person under observation. The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

#### Inhalation

Delayed, often serious breathing problems.

#### Ingestion

Ingestion may result in unconsciousness, blindness and death.

#### Skin contact

Chemical burns. Reddened skin if chemical is not removed by washing. Later, white and wrinkled skin without pain, often with delayed skin burns.

#### Eye contact

May cause blurred vision and serious eye damage.

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

SPECIFIC NOTES FOR FLUORIDE DERIVATIVES: If calcium gluconate gel is available, rub it into affected skin. Massage continuously until pain disappears. DO NOT use this method for treatment of eyes. If ingested give milk or calcium gluconate by mouth.

## SECTION 5: FIREFIGHTING MEASURES

### 5.1. Extinguishing media

#### Extinguishing media

This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials.

### 5.2. Special hazards arising from the substance or mixture

#### Hazardous Combustion Products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Fire creates: Vapours/gases/fumes of: Hydrogen fluoride (HF).

#### Unusual Fire & Explosion Hazards

No unusual fire or explosion hazards noted.

#### Specific hazards

Asphyxiating gases/vapours/fumes of: Toxic gases/vapours/fumes of Hydrogen fluoride (HF).

### 5.3. Advice for firefighters

#### Special Fire Fighting Procedures

Keep up-wind to avoid fumes. Use supplied air respirator if product is involved in a fire. Use special protective clothing. Regular protection may not be safe. Keep run-off water out of sewers and water sources. Dike for water control.

#### Protective equipment for fire-fighters

Wear full protective clothing. Severe corrosive hazard. Wear chemical protection suits. Self contained breathing apparatus and full protective clothing must be worn in case of fire.

Emergency Action Code 2X

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

For personal protection, see section 8.

## Yellow Wheel Acid

### 6.2. Environmental precautions

Do not discharge onto the ground or into water courses. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

### 6.3. Methods and material for containment and cleaning up

DO NOT TOUCH SPILLED MATERIAL! Clean-up personnel should use respiratory and/or liquid contact protection. Neutralize small amounts with sodium bicarbonate or lime and flush to sewer with large amounts of water. Large spills, dilute, then neutralize with caustic solution. Absorb in vermiculite, dry sand or earth and place into containers. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Flush area with plenty of water. Flush to sewer if local regulations permit.

### 6.4. Reference to other sections

See section 11 for additional information on health hazards.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling

Read and follow manufacturer's recommendations. Avoid spilling, skin and eye contact. Eye wash facilities and emergency shower must be available when handling this product. Provide good ventilation. Antidote must be found in place of work.

### 7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container. Keep above the chemical's freezing point to avoid rupturing the container. Store in closed original container at temperatures between 5°C and 25°C.

#### Storage Class

Corrosive storage.

### 7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
HYDROFLUORIC ACID ...%	NOHSC			3 ppm	2,6 mg/m <sup>3</sup>	Peak limitation, As F
SULPHURIC ACID ...%	NOHSC		1 mg/m <sup>3</sup>		3 mg/m <sup>3</sup>	

NOHSC = The National Occupational Health and Safety Commission.

### 8.2. Exposure controls

#### Protective equipment



#### Process Conditions

Provide eyewash, quick drench.

#### Engineering measures

Must not be handled in confined space without sufficient ventilation.

#### Respiratory equipment

If ventilation is insufficient, suitable respiratory protection must be provided. Wear mask supplied with: Gas cartridge (acid gases).

#### Hand protection

Protection against this substance requires special consideration. Use protective gloves made of: Rubber, neoprene or PVC. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material. Be aware that the liquid may penetrate the gloves. Frequent change is advisable. Use thin cotton gloves inside the rubber gloves if allergy risk.

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### Eye protection

Use safety goggles and face shield in case of splash risk.

### Other Protection

Wear appropriate clothing to prevent any possibility of skin contact. Wear rubber footwear. Provide eyewash station. Ensure calcium gluconate antidote gel is available.

### Hygiene measures

DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. Wash contaminated clothing before reuse. Contaminated clothing to be placed in closed container until disposal or decontamination. Warn cleaning personnel of chemical's hazardous properties. When using do not eat, drink or smoke.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

<b>Appearance</b>	Liquid
<b>Colour</b>	Yellow.
<b>Odour</b>	Acidic.
<b>Solubility</b>	Soluble in water. Miscible with water
<b>Boiling Point (°C)</b>	~ 100 760 mm Hg
<b>Melting point (°C)</b>	~ 0
<b>Relative density</b>	~ 1.047 (20°C)
<b>Vapour pressure</b>	Not available.
<b>Evaporation rate</b>	Not available.
<b>pH-Value, Conc. Solution</b>	~ 1.0
<b>Viscosity</b>	Not available.
<b>Decomposition temperature (°C)</b>	Not available.
<b>Odour Threshold, Lower</b>	Not available.
<b>Odour Threshold, Upper</b>	Not available.
<b>Flash point (°C)</b>	Not applicable.
<b>Auto Ignition Temperature (°C)</b>	Not applicable.
<b>Flammability Limit - Lower(%)</b>	Not applicable.
<b>Flammability Limit - Upper(%)</b>	Not applicable.
<b>Partition Coefficient (N-Octanol/Water)</b>	Not available.
<b>Oxidising properties</b>	Not applicable.
<b>Other Information</b>	Information declared as "Not available" or "Not applicable" is not considered to be justified for enabling proper control measures to be taken.

### 9.2. Other information

**Volatile Organic Compound (VOC)** 0 g/litre

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

Reacts with alkalis and generates heat. Reaction with: Strong reducing agents.

### 10.2. Chemical stability

Stable under normal temperature conditions. Avoid Contact with peroxides. Contact with alkalis.

### 10.3. Possibility of hazardous reactions

## Yellow Wheel Acid

Not applicable.

### **Hazardous Polymerisation**

Will not polymerise.

### **10.4. Conditions to avoid**

Avoid excessive heat for prolonged periods of time. Water, moisture.

### **10.5. Incompatible materials**

#### **Materials To Avoid**

Strong alkalis. Strong acids. Strong oxidising substances.

### **10.6. Hazardous decomposition products**

Fire or high temperatures create: Vapours/gases/fumes of: Hydrogen fluoride (HF).

## SECTION 11: TOXICOLOGICAL INFORMATION

### **11.1. Information on toxicological effects**

#### **Toxicological information**

This material is toxic.

#### **Other Health Effects**

This substance has no evidence of carcinogenic properties. NTP Not Listed. IARC Not Listed.

#### **Skin Corrosion/Irritation**

##### **Extreme pH**

pH ≤ 2

Classification based on Conventional Method, and In Vitro Approaches - Corrosive or Irritant by measuring pH and Acid/Alkali Reserve.  
Corrosive

#### **Inhalation**

Toxic by inhalation. Irritating to respiratory system. Prolonged inhalation of high concentrations may damage respiratory system.

#### **Ingestion**

Toxic if swallowed. Swallowing concentrated chemical may cause severe internal injury. May cause burns in mucous membranes, throat, oesophagus and stomach.

#### **Skin contact**

Toxic in contact with skin. May be absorbed through the skin. Effect may be delayed.

#### **Eye contact**

May cause chemical eye burns. Contact with concentrated chemical may very rapidly cause severe eye damage, possibly loss of sight.

#### **Health Warnings**

Repeated exposure to high concentrations of materials containing fluorine may increase bone density leading to Osteosclerosis.

#### **Route of entry**

Skin and/or eye contact. Inhalation. Ingestion.

#### **Medical Symptoms**

Severe skin irritation. Severe pulmonary irritation. Reddened skin if chemical is not removed by washing. Later, white and wrinkled skin without pain, often with delayed skin burns.

## SECTION 12: ECOLOGICAL INFORMATION

#### **Ecotoxicity**

Dangerous for the environment if discharged into watercourses. The product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms. The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

### **12.1. Toxicity**

#### **Acute Toxicity - Fish**

Not determined.

#### **Acute Toxicity Aquatic Invertebrates**

Not determined.

## Yellow Wheel Acid

### Acute Toxicity - Aquatic Plants

Not determined.

### Acute Toxicity - Microorganisms

Not determined.

### Acute Toxicity - Terrestrial

Not determined.

## 12.2. Persistence and degradability

### Degradability

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer. The product is biodegradable, but it must not be discharged into drains without permission from the authorities.

## 12.3. Bioaccumulative potential

### Bioaccumulative potential

The product does not contain any substances expected to be bioaccumulating.

### Partition coefficient

Not available.

## 12.4. Mobility in soil

### Mobility:

The product is soluble in water.

## 12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB Substances.

## 12.6. Other adverse effects

Not applicable.

## SECTION 13: DISPOSAL CONSIDERATIONS

### General information

When handling waste, consideration should be made to the safety precautions applying to handling of the product. The packaging must be empty (drop-free, when inverted).

### 13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements. Confirm disposal procedures with environmental engineer and local regulations. Small amounts may be flushed with water to sewer. Larger volumes must be sent to approved plant for destruction.

## SECTION 14: TRANSPORT INFORMATION

### 14.1. UN number

UN No. Road	2922
UN No. Sea	2922
UN No., Air	2922

### 14.2. UN proper shipping name

Proper Shipping Name	CORROSIVE LIQUID, TOXIC, N.O.S. (SULPHURIC ACID, HYDROFLUORIC ACID)
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### 14.3. Transport hazard class(es)

ADR Class No.	8
ADR Class	Class 8: Corrosive substances.
ADR/RID/ADN Subsidiary Risk	6.1
ADR Label No.	8 & 6.1
IMDG Class	8
IMDG Subsidiary Risk	6.1
ICAO Class	8
Air Sub Class	6.1

## Yellow Wheel Acid

## Transport Labels

**14.4. Packing group**

ADR Pack Group	II
IMDG Pack Gr.	II
Air Pack Gr.	II

**14.5. Environmental hazards****Environmentally Hazardous Substance/Marine Pollutant**

No.

**14.6. Special precautions for user**

Segregation Group	1. Acids.
EMS	F-A, S-B
Emergency Action Code	2X
Tunnel Restriction Code	(E)

**14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

**SECTION 15: REGULATORY INFORMATION****Poisons Schedule Number** 7.**National Regulations And References**

The Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP). National Code of Practice for the Preparation of Material Safety Data Sheets. Approved Criteria for Classifying Hazardous Substances. Exposure Standards for Atmospheric Contaminants in the Occupational Environment. Guidance Note on the Interpretation of Exposure Standards for Atmospheric Contaminants in the Occupational Environment. National Code of Practice for the Labelling of Workplace Substances. National Model Regulations for the Control of Workplace Hazardous Substances. National Code of Practice for the Control of Workplace Hazardous Substances. National Standard for the Storage and Handling of Workplace Dangerous Goods. National Code of Practice for the Storage and Handling of Workplace Dangerous Goods. Guidance Note for Placarding Stores for Dangerous Goods and Specified Hazardous Substances. Guidance Note for the Assessment of Health Risks Arising from Hazardous Substances in the Workplace. National Standard for the Control of Major Hazard Facilities. National Code of Practice for the Control of Major Hazard Facilities.

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU Legislation**

Dangerous Preparations Directive 1999/45/EC. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

**Health And Environmental Listings**

Regulation EC 689/2008 concerning the export and import of dangerous chemicals.

**Water hazard classification**

WGK 2

**15.2. Chemical Safety Assessment**

No chemical safety assessment has been carried out.

**SECTION 16: OTHER INFORMATION**



## Yellow Wheel Acid

### General information

Only trained personnel should use this material.

### Revision Comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

**Issued By** Prepared by Autosmart International Ltd, Lynn Lane, Shenstone, Lichfield, Staffordshire, WS14 0DH, Great Britain.

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23/06/2014

**Revision Date**

**Revision**

1

**Safety Data Sheet Status**

Approved.

### Risk Phrases In Full

R34 Causes burns.  
R35 Causes severe burns.  
R37 Irritating to respiratory system.  
R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.  
R26/27/28 Very toxic by inhalation, in contact with skin and if swallowed.

### Hazard Statements In Full

H300 Fatal if swallowed.  
H301 Toxic if swallowed.  
H310 Fatal in contact with skin.  
H311 Toxic in contact with skin.  
H314 Causes severe skin burns and eye damage.  
H330 Fatal if inhaled.  
H335 May cause respiratory irritation.