

## SAFETY DATA SHEET

in accordance with 1907/2006/EC (REACH, as amended by 2015/830/EU) 29 CFR 1910.1200 and WHMIS 2015

**Revision date:** 24 September 2020

**Initial date of issue:** 5 July 2007

**SDS No.** 115-21b

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

**1.1. Product identifier**

346 Descaler & Chemical Cleaner

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

This product is a nonflammable acid-based cleaner.

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

**Company:**

A.W. CHESTERTON COMPANY  
860 Salem Street  
Groveland, MA 01834-1507, USA  
Tel. +1 978-469-6446 Fax: +1 978-469-6785  
(Mon. - Fri. 8:30 - 5:00 PM EST)  
SDS requests: www.chesterton.com  
E-mail (SDS questions): ProductMSDSs@chesterton.com  
E-mail: customer.service@chesterton.com

**Supplier:**

Canada: A.W. Chesterton Company Ltd., 889 Fraser Drive,  
Unit 105, Burlington, Ontario L7L 4X8 - Tel. 905-335-5055  
EU: Chesterton International GmbH, Am Lenzenfleck 23,  
D85737 Ismaning, Germany – Tel. +49-89-996-5460

**1.4. Emergency telephone number**

24 hours per day, 7 days per week  
Call Infotrac: 1-800-535-5053  
Outside N. America: +1 352-323-3500 (collect)  
NSW Poisons Information Centre (Australia): 13 11 26

### SECTION 2: HAZARDS IDENTIFICATION

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

**2.1.1. Classification according to Regulation (EC) No 1272/2008 [CLP]**

Skin Corr. 1A, H314  
Eye Dam. 1, H318  
STOT SE 3, H335  
Met. Corr. 1, H290

**2.1.2. Classification according to 29 CFR 1910.1200 / WHMIS 2015**

Same as section 2.1.1.

**2.1.3. Australian statement of hazardous nature**

Hazardous according to criteria of Safe Work Australia.

**2.1.4. Additional information**

For full text of H-statements: see SECTIONS 2.2 and 16.

**2.2. Label elements**

**2.2.1. Labelling according to Regulation (EC) No 1272/2008 [CLP]**

**Hazard pictograms:**



**Signal word:**

Danger

<b>Hazard statements:</b>	H314	Causes severe skin burns and eye damage.
	H335	May cause respiratory irritation.
	H290	May be corrosive to metals.
<b>Precautionary statements:</b>	P260	Do not breathe mist/vapours/spray.
	P280	Wear protective gloves, protective clothing and eye/face protection.
	P303/361/353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P305/351/338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P301/330/331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
	P310	Immediately call a POISON CENTER or doctor/physician.
	P390	Absorb spillage to prevent material damage.
	P403/233	Store in a well-ventilated place. Keep container tightly closed.

**Supplemental information:** None

### 2.2.2. Labelling according to 29 CFR 1910.1200 / WHMIS 2015

**Hazard pictograms:** Same as section 2.2.1.

**Signal word:** Same as section 2.2.1.

**Hazard statements:** Same as section 2.2.1.

<b>Precautionary statements:</b>	P260	Do not breathe mist/vapours/spray.
	P271	Use only outdoors or in a well-ventilated area.
	P280	Wear protective gloves, protective clothing and eye/face protection.
	P301/330/331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
	P303/361/353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P304/340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	P305/351/338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P310	Immediately call a POISON CENTER or doctor/physician.
	P390	Absorb spillage to prevent material damage.
	P403/233	Store in a well-ventilated place. Keep container tightly closed.
	P405	Store locked up.
	P406	Store in a non-metallic container.
	P501	Dispose of contents/container to an approved waste disposal plant.

**Supplemental information:** None

### 2.3. Other hazards

If ingested, this product could cause internal damage to the body. This hazard is reduced as dilution is increased.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2. Mixtures

Hazardous Ingredients <sup>1</sup>	% Wt.	CAS No./ EC No.	REACH Reg. No.	CLP/GHS Classification
Hydrochloric Acid	20-30	7647-01-0 231-595-7	NA	Skin Corr. 1A, H314 STOT SE 3, H335 Met. Corr. 1, H290

For full text of H-statements: see SECTION 16.

<sup>1</sup> Classified according to: \* 29 CFR 1910.1200, 1915, 1916, 1917, Mass. Right-to-Know Law (ch. 40, M.G.L..O. 111F), California Proposition 65  
\* 1272/2008/EC, GHS, REACH  
\* WHMIS 2015  
\* Safe Work Australia

**SECTION 4: FIRST AID MEASURES****4.1. Description of first aid measures**

- Inhalation:** Remove to fresh air. If not breathing, administer artificial respiration. Contact physician immediately.
- Skin contact:** Flood area with water while removing contaminated clothing. Wash clothing before reuse. Consult physician.
- Eye contact:** Flush eyes for at least 15 minutes with large amounts of water. Remove contact lenses, if present and easy to do. Continue rinsing. Contact physician immediately.
- Ingestion:** Do not induce vomiting. If person is conscious, rinse mouth with water and give water to drink. Contact physician immediately.

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

Corrosive to eyes, skin and mucous membranes, which can result in strong irritation, burning and tissue damage. Prolonged or repeated contact can cause ulceration of mucous membranes and skin.

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

Treat symptoms.

**SECTION 5: FIREFIGHTING MEASURES****5.1. Extinguishing media**

**Suitable extinguishing media:** Nonflammable. Use extinguisher appropriate to the surrounding fire.

**Unsuitable extinguishing media:** Not applicable

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

None

**5.3. Advice for firefighters**

Cool exposed containers with water. Recommend Firefighters wear self-contained breathing apparatus.

**Flammability Classification:** Not applicable

**HAZCHEM Emergency Action Code:** Not applicable

**SECTION 6: ACCIDENTAL RELEASE MEASURES****6.1. Personal precautions, protective equipment and emergency procedures**

Evacuate area. Provide adequate ventilation. Utilize exposure controls and personal protection as specified in Section 8.

**6.2. Environmental Precautions**

Keep out of sewers, streams and waterways.

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

Contain spill to a small area. Pick up with absorbent material (sand, sawdust, clay, etc.) and place in a suitable container for disposal. Carefully flush area with water. Lime or soda ash may be used to neutralize the final traces after flushing.

**6.4. Reference to other sections**

Refer to section 13 for disposal advice.

**SECTION 7: HANDLING AND STORAGE****7.1. Precautions for safe handling**

Store and mix in non-metallic containers, preferably plastic. Rubber gloves, apron and eye protection must be worn while transferring this product. Wash thoroughly after handling. Wash contaminated clothing before reuse.

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

Store in a cool, dry area in non-metallic containers.

**7.3. Specific end use(s)**

No special precautions.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1. Control parameters****Occupational exposure limit values**

Ingredients	OSHA PEL <sup>1</sup>		ACGIH TLV <sup>2</sup>		UK WEL <sup>3</sup>		AUSTRALIA ES <sup>4</sup>	
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Hydrochloric Acid	5 (Ceiling)	7	2 (Ceiling)	–	1 STEL: 5	2 STEL: 8	5 (Peak)	7.5

<sup>1</sup> United States Occupational Health & Safety Administration permissible exposure limits

<sup>2</sup> American Conference of Governmental Industrial Hygienists threshold limit values

<sup>3</sup> EH40 Workplace exposure limits, Health & Safety Executive

<sup>4</sup> Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003]

**Derived No Effect Level (DNEL) according to Regulation (EC) No 1907/2006:****Workers**

Not available

**Predicted No Effect Concentration (PNEC) according to Regulation (EC) No 1907/2006:**

Not available

**8.2. Exposure controls****8.2.1. Engineering measures**

Provide sufficient ventilation to keep the vapor concentrations below the exposure limit. If exposure limit is exceeded, supplement with local mechanical exhaust.

**8.2.2. Individual protection measures**

**Respiratory protection:** Not normally needed. If exposure limit is exceeded, use approved acid/base respirator (e.g., EN filter type E-P2).

**Protective gloves:** Chemical resistant gloves (e.g., natural rubber, neoprene or PVC)

**Eye and face protection:** Safety goggles.

**Other:** Rubber apron, rubber boots and other impervious clothing as necessary to prevent skin contact.

**8.2.3. Environmental exposure controls**

Refer to sections 6 and 12.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES****9.1. Information on basic physical and chemical properties**

<b>Physical state</b>	liquid	<b>Odour</b>	acidic
<b>Colour</b>	colorless	<b>Odour threshold</b>	not determined
<b>Initial boiling point</b>	> 100°C (>212°F)	<b>Vapour pressure @ 20°C</b>	not determined
<b>Melting point</b>	not determined	<b>% Aromatics by weight</b>	0%
<b>% Volatile (by volume)</b>	96.8%	<b>pH</b>	0.5
<b>Flash point</b>	not applicable	<b>Relative density</b>	1.15 kg/l
<b>Method</b>	not applicable	<b>Weight per volume</b>	9.58 lbs/gal.
<b>Viscosity</b>	not determined	<b>Coefficient (water/oil)</b>	> 1
<b>Autoignition temperature</b>	not determined	<b>Vapour density (air=1)</b>	> 1
<b>Decomposition temperature</b>	not determined	<b>Rate of evaporation (ether=1)</b>	< 1
<b>Upper/lower flammability or explosive limits</b>	not determined	<b>Solubility in water</b>	complete
<b>Flammability (solid, gas)</b>	not applicable	<b>Oxidising properties</b>	none
<b>Explosive properties</b>	not applicable		

**9.2. Other information**

None

**SECTION 10: STABILITY AND REACTIVITY****10.1. Reactivity**

Hydrochloric Acid reacts with metal to generate Hydrogen and heat.

**10.2. Chemical stability**

Stable

**10.3. Possibility of hazardous reactions**

No dangerous reactions known under conditions of normal use.

**10.4. Conditions to avoid**

None

**10.5. Incompatible materials**

Amines. Metals.

**10.6. Hazardous decomposition products**

Hydrogen Chloride and other toxic fumes

**SECTION 11: TOXICOLOGICAL INFORMATION****11.1. Information on toxicological effects****Primary route of exposure under normal use:** Skin and eye contact.**Acute toxicity -****Oral:**

Substance	Test	Result
Hydrochloric Acid	LD50, rabbit	900 mg/kg

**Dermal:**

Substance	Test	Result
Hydrochloric Acid	LD50, rabbit	> 5010 mg/kg

**Inhalation:**

Substance	Test	Result
Hydrochloric Acid	LC50, mouse, 1 h	1108 ppm
Hydrochloric Acid	LC50, rat, 1 h	3124 ppm
Hydrochloric Acid	LC50 (aerosol) rat, 30 min.	8.3 mg/l

**Skin corrosion/irritation:** Corrosive to eyes, skin and mucous membranes, which can result in strong irritation, burning and tissue damage. Prolonged or repeated contact can cause ulceration of mucous membranes and skin.**Serious eye damage/irritation:** Risk of serious damage to eyes.**Respiratory or skin sensitisation:**

Substance	Test	Result
Hydrochloric Acid	Skin sensitization, guinea pig	Not sensitizing
Hydrochloric Acid	Skin sensitization, human	Not sensitizing

**Germ cell mutagenicity:** Hydrochloric Acid, Ames test: negative.**Carcinogenicity:** As per 29 CFR 1910.1200 (Hazard Communication), this product contains no carcinogens as listed by the National Toxicology Program (NTP), the International Agency for Research on Cancer (IARC), the Occupational Safety and Health Administration (OSHA) or Regulation (EC) No 1272/2008.**Reproductive toxicity:** Not expected to be a reproductive toxicant.**STOT-single exposure:** May cause respiratory irritation.**STOT-repeated exposure:** Hydrochloric Acid: based on available data, the classification criteria are not met.**Aspiration hazard:** Based on available data, the classification criteria are not met.**Other information:** None known

**SECTION 12: ECOLOGICAL INFORMATION**

Ecotoxicological data have not been determined specifically for this product. The information given below is based on a knowledge of the components and the ecotoxicology of similar substances.

**12.1. Toxicity**

Many aquatic species are intolerant of pH levels below 4.

**12.2. Persistence and degradability**

Hydrochloric Acid: inorganic substance. The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) N° 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.

**12.3. Bioaccumulative potential**

Hydrochloric Acid: not expected to bioaccumulate.

**12.4. Mobility in soil**

Liquid. Soluble in water. In determining environmental mobility, consider the product's physical and chemical properties (see Section 9).

**12.5. Results of PBT and vPvB assessment**

Not available

**12.6. Other adverse effects**

None known

**SECTION 13: DISPOSAL CONSIDERATIONS****13.1. Waste treatment methods**

Incinerate absorbed material with a properly licensed facility. Material may be amenable to neutralization and discharge to a wastewater treatment system. This product is classified as a hazardous waste according to 2008/98/EC. Check local, state and national/federal regulations and comply with the most stringent requirement.

**SECTION 14: TRANSPORT INFORMATION****14.1. UN number**

<b>ADR/RID/ADN/IMDG/ICAO:</b>	UN1789
<b>TDG:</b>	UN1789
<b>US DOT:</b>	UN1789

**14.2. UN proper shipping name**

<b>ADR/RID/ADN/IMDG/ICAO:</b>	HYDROCHLORIC ACID SOLUTION
<b>TDG:</b>	HYDROCHLORIC ACID SOLUTION
<b>US DOT:</b>	HYDROCHLORIC ACID SOLUTION

**14.3. Transport hazard class(es)**

<b>ADR/RID/ADN/IMDG/ICAO:</b>	8
<b>TDG:</b>	8
<b>US DOT:</b>	8

**14.4. Packing group**

<b>ADR/RID/ADN/IMDG/ICAO:</b>	II
<b>TDG:</b>	II
<b>US DOT:</b>	II

**14.5. Environmental hazards**

NO ENVIRONMENTAL HAZARDS

**14.6. Special precautions for user**

NOT APPLICABLE

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

NOT APPLICABLE

**14.8. Other information**

**US DOT:** ERG NO.157  
**IMDG:** EmS F-A, S-B  
**ADR:** Classification code C1, Tunnel restriction code (E)

**SECTION 15: REGULATORY INFORMATION****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****15.1.1. EU regulations**

**Authorisations under Title VII:** Not applicable

**Restrictions under Title VIII:** None

**Other EU regulations:** Regulation (EC) No 648/2004 on detergents. Directive 94/33/EC on the protection of young people at work.

### 15.1.2. National regulations

#### US EPA SARA TITLE III

**312 Hazards:** Immediate  
**313 Chemicals:** Hydrochloric Acid 20-30%

**Other national regulations:** National implementation of the EC Directive referred to in section 15.1.1.

### 15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

## SECTION 16: OTHER INFORMATION

**Abbreviations and acronyms:** ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road  
 ATE: Acute Toxicity Estimate  
 BCF: Bioconcentration Factor  
 cATpE: Converted Acute Toxicity point Estimate  
 CLP: Classification Labelling Packaging Regulation (1272/2008/EC)  
 ES: Exposure Standard  
 GHS: Globally Harmonized System  
 ICAO: International Civil Aviation Organization  
 IMDG: International Maritime Dangerous Goods  
 LC50: Lethal Concentration to 50 % of a test population  
 LD50: Lethal Dose to 50% of a test population  
 LOEL: Lowest Observed Effect Level  
 N/A: Not Applicable  
 NA: Not Available  
 NOEC: No Observed Effect Concentration  
 NOEL: No Observed Effect Level  
 OECD: Organization for Economic Co-operation and Development  
 PBT: Persistent, Bioaccumulative and Toxic substance  
 (Q)SAR: Quantitative Structure-Activity Relationship  
 REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (1907/2006/EC)  
 REL: Recommended Exposure Limit  
 RID: Regulations concerning the International Carriage of Dangerous Goods by Rail  
 SDS: Safety Data Sheet  
 STEL: Short Term Exposure Limit  
 STOT RE: Specific Target Organ Toxicity, Repeated Exposure  
 STOT SE: Specific Target Organ Toxicity, Single Exposure  
 TDG: Transportation of Dangerous Goods (Canada)  
 TWA: Time Weighted Average  
 US DOT: United States Department of Transportation  
 vPvB: very Persistent and very Bioaccumulative substance  
 WEL: Workplace Exposure Limit  
 WHMIS: Workplace Hazardous Materials Information System  
 Other abbreviations and acronyms can be looked up at [www.wikipedia.org](http://www.wikipedia.org).

**Key literature references and sources for data:** Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST)  
 Chemical Classification and Information Database (CCID)  
 European Chemicals Agency (ECHA) - Information on Chemicals  
 Hazardous Chemical Information System (HCIS)  
 National Institute of Technology and Evaluation (NITE)  
 Swedish Chemicals Agency (KEMI)  
 U.S. National Library of Medicine Toxicology Data Network (TOXNET)

**Procedure used to derive the classification for mixtures according to Regulation (EC) No 1272/2008 [CLP]:**

Classification	Classification procedure
Skin Corr. 1A, H314	Calculation method
STOT SE 3, H335	Bridging principle "Dilution"
Met. Corr. 1, H290	Bridging principle "Dilution"

**Relevant H-statements:** H314: Causes severe skin burns and eye damage.  
H290: May be corrosive to metals.  
H335: May cause respiratory irritation.

**Hazard pictogram names:** Corrosion, exclamation mark

**Changes to the SDS in this revision:** Section 2.1.

**Revision date:** 24 September 2020

**Further information:** None

This information is based solely on data provided by suppliers of the materials used, not on the mixture itself. No warranty is expressed or implied regarding the suitability of the product for the user's particular purpose. The user must make their own determination as to suitability.