



KILL SCALE
MILL SCALE REMOVER
SAFETY DATA SHEET (SDS)

SECTION 1: Identification

1.1 GHS Product identifier

Product name	KoatGuard Kill Scale
Product number	KGKS

1.3 Recommended use of the chemical and restrictions on use

Removes mill scale and rust from ferrous metal objects

1.4 Supplier's details

Name	KoatGuard Chemicals
Address	12683 McIlwain Rd Holladay, TN 38341 United States
Telephone	931-388-7730

1.5 Emergency phone number (Poison Control)

1-800-222-1222

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

GHS classification in accordance with: OSHA (29 CFR 1910.1200, 2012)

- Acute toxicity, inhalation, Cat. 4
- Eye damage/irritation, Cat. 1
- Skin corrosion/irritation, Cat. 1B
- Specific target organ toxicity (single exposure), Cat. 3

2.2 GHS label elements, including precautionary statements

Pictograms



Signal word

Danger

Hazard statement(s)

H314	Causes severe skin burns and eye damage
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H318	Causes serious eye damage

Precautionary statement(s)

P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P264	Wash ... thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P271	Use only outdoors or in a well-ventilated area.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	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/doctor/...
P321	Specific treatment (see ... on this label).
P312	Call a POISON CENTER/doctor/.../ if you feel unwell.
P321	Specific treatment (see ... on this label).
P363	Wash contaminated clothing before reuse.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container to ...

SECTION 3: Composition/information on ingredients**3.2 Mixtures****Hazardous components****1. HYDROCHLORIC ACID (<37%)**

Concentration	> 1 % (volume)
EC no.	231-595-7
CAS no.	7647-01-0
Index no.	017-002-01-X

- Specific target organ toxicity (single exposure), Cat. 3
- Skin corrosion/irritation, Cat. 1B

H314 Causes severe skin burns and eye damage
H335 May cause respiratory irritation
SCLs/M-factors/ATEs Skin Corr. 1B; H314: C ≥ 25%
Skin Irrit. 2; H315: 10% ≤ C <25%
Eye Irrit. 2; H319: 10% ≤ C <25%
STOT SE 3; H335: C ≥ 10%

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

If inhaled	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
In case of skin contact	Rinse with plenty of water. Get medical attention if irritation develops and persists.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	<p>Call a poison center or doctor if you feel unwell. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.</p> <p>Acute and delayed symptoms and effects: May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.</p>

4.2 Most important symptoms/effects, acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of immediate medical attention and special treatment needed, if necessary

No data available

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Use extinguishing media appropriate for surrounding fire.

5.2 Specific hazards arising from the chemical

Hydrogen chloride gas

5.3 Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. For personal protection see section 8.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

1. HYDROCHLORIC ACID (<37%) (CAS: 7647-01-0)

TWA [Hydrogen chloride] (Inhalation): 5 Peak limitation ppm; 7.5
Peak limitation mg/m³; AU (AU/SWA)

IOELV-LTEL [Hydrogen chloride] (Inhalation): 8 mg/m³; EU
(EU/OSHA) List no. 1 under Council Directive 98/24/EC as
amended. List last updated on 8/29/2023.

IOELV-LTEL [Hydrogen chloride] (Inhalation): 5 ppm; EU
(EU/OSHA) List no. 1 under Council Directive 98/24/EC as
amended. List last updated on 8/29/2023.

IOELV-STEL [Hydrogen chloride] (Inhalation): 15 mg/m³; EU
(EU/OSHA) List no. 1 under Council Directive 98/24/EC as
amended. List last updated on 8/29/2023.

IOELV-STEL [Hydrogen chloride] (Inhalation): 10 ppm; EU
(EU/OSHA) List no. 1 under Council Directive 98/24/EC as
amended. List last updated on 8/29/2023.

PEL [Hydrogen chloride] (Inhalation): (C) 5 ppm; US
(US/OSHA)

OSHA Annotated Table Z-1, www.osha.gov

PEL [Hydrogen chloride] (Inhalation): (C) 7 mg/m³; US (US/OSHA)

OSHA Annotated Table Z-1, www.osha.gov

PEL [Hydrogen chloride] (Inhalation): 0.3 ppm, (C) 2 ppm; US (Cal/OSHA)

REL [Hydrogen chloride] (Inhalation): (C) 5 ppm; US (NIOSH)
OSHA Annotated Table Z-1, www.osha.gov

OSHA Annotated Table Z-1, www.osha.gov REL [Sodium hydroxide] (Inhalation): (C) 2 mg/m³; US (NIOSH) OSHA Annotated Table Z-1, www.osha.gov

8.2 Appropriate engineering controls

General industrial hygiene practice.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

SECTION 9: Physical and chemical properties

Appearance (physical state, color, etc.)	No data available.
Odor	No data available.
Odor threshold	No data available.
pH	No data available.
Melting point/freezing point	No data available.
Initial boiling point and boiling range	No data available.
Flash point	No data available.
Evaporation rate	No data available.
Flammability (solid, gas)	No data available.
Upper/lower flammability or explosive limits	No data available.
Vapor pressure	No data available.
Vapor density	No data available.
Relative density	No data available.
Solubility(ies)	No data available.
Partition coefficient: n-octanol/water	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Viscosity	No data available.

Additional properties

Physical state	Liquid
Color	No data available.
Explosive properties	No data available.
Oxidizing properties	No data available.

Particle characteristics

No data available.

Supplemental information regarding physical hazard classes

No data available.

Further safety characteristics (supplemental)

No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

No data available.

10.3 Possibility of hazardous reactions

None under normal use conditions.

10.4 Conditions to avoid

Avoid storing in direct sunlight and avoid extremes of temperature.

10.5 Incompatible materials

Metals; Strong Oxidizers; Hydroxides; Amines; Sulfides; Carbonates; Hypochlorites; Formaldehyde; Alkalies Hazardous..

10.6 Hazardous decomposition products

Other decomposition products - No data available In the event of fire: see section 5

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

No data available.

Skin corrosion/irritation

No data available.

Serious eye damage/irritation

No data available.

Respiratory or skin sensitization

No data available.

Germ cell mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product Data:

No data available.

Substance Data: No data available.

Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

Product Data: No data available.

Reproductive toxicity

Reproductive Toxicity

Assessment: Based on available data, the classification criteria are not met.

Product Data:

No data available.

Substance Data: No data available.

Specific target organ toxicity (STOT) - single exposure

May cause respiratory irritation.
May cause drowsiness or dizziness

Specific target organ toxicity (STOT) - repeated exposure

No data available.

Aspiration hazard

May be harmful if swallowed and enters airways

Additional information

HYDROCHLORIC ACID (<37%): *TOXICITY:

typ. dose mode specie amount units other

LCLo ihl hmh 1300 ppm/30M

LCLo ihl hmh 3000 ppm/5M

LDLo unr man 81 mg/kg

LC50 ihl rat 3124 ppm/1H

LC50 ihl mus 1108 ppm/1H

LD50 ipr mus 1449 mg/kg

LD50 orl rbt 900 mg/kg

LCLo ihl rbt 4416 ppm/30M

LCLo ihl gpg 4416 ppm/30M

LCLo ihl mam 1000 mg/m3/2H

*AQTX/TLM96: Not available

*SAX TOXICITY EVALUATION:

THR: A highly corrosive irritant to the eyes, skin and mucous membranes.

Mildly toxic by inhalation.

*CARCINOGENICITY: Not available

*MUTATION DATA:

See RTECS printout for most current data

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Not available |

*TERATOGENICITY:

See RTECS printout for most current data

Reproductive Effects Data:

TCLo: ihl-rat 450 mg/m3/1H (1D pre)

*STANDARDS, REGULATIONS & RECOMMENDATIONS:

OSHA: Federal Register (1/19/89) and 29 CFR 1910.1000 Subpart Z

Transitional and Final Limits: PEL-Ceiling Limit 5 ppm [015,327,545,610]

ACGIH: TLV-Ceiling Limit 5 ppm [015,415,421,610]

NIOSH Criteria Document: None

NFPA Hazard Rating: Health (H): 3

Flammability (F): 0

Reactivity (R): 0

H3: Materials extremely hazardous to health but areas may be entered with extreme care (see NFPA for details).

F0: Materials that will not burn (see NFPA for details).

R0: Materials which are normally stable even under fire exposure conditions and which are not reactive with water (see NFPA for details).

SECTION 12: Ecological information

No data available on product

SECTION 13: Disposal considerations

Disposal methods

No data available.

SECTION 14: Transport information

DOT (US)

UN Number: UN1789

Class: 8

Packing Group: II

Proper Shipping Name: Hydrochloric acid

Reportable quantity (RQ):

Marine pollutant:

Poison inhalation hazard:

IMDG

UN Number: UN1789

Class: 8

Packing Group: II

EMS Number:

Proper Shipping Name: Hydrochloric acid

IATA

UN Number: UN1789

Class: 8

Packing Group: II

Proper Shipping Name: Hydrochloric acid

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

Massachusetts Toxic Use Reduction Act (TURA) list

Chemical name: Hydrochloric acid

CAS number: 7647-01-0

New Jersey Right To Know Components

Common name: HYDROGEN CHLORIDE

CAS number: 7647-01-0

Pennsylvania Right To Know Components

Chemical name: HYDROCHLORIC ACID

CAS number: 7647-01-0

Canadian Domestic Substances List (DSL)

Chemical name: Hydrochloric acid

CAS number: 7647-01-0

EU Table of Harmonised Entries (Annex VI to CLP)

Chemical name: HYDROCHLORIC ACID

(<37%)

CAS number: 7647-01-0

US EPA TSCA public inventory

Chemical name: HYDROCHLORIC ACID

(<37%)

CAS number: 7647-01-0

**Massachusetts Right To Know Components
(105 CMR 670)**

Chemical name: HYDROC

CAS number: 7647-01-0

SECTION 16: Other information