**Descaler Xtreme Type ll**

WORLD’S ONLY NON-REGULATED and OEM APPROVED SCALE REMOVER

* Removes scale
* Non-Corrosive
* 100% Synthetic Acid
* Non-Fuming
* Non-D.O.T. Regulated
* 100% Biodegradable
* Safe on Glass & Chrome
* One-Step Process
* Exceeds OSHA and EPA Safety Requirements
* Removes Mineral Stains
* Safe on Skin
* Made in USA

Descaler Xtreme Type ll is a thicker descaler for stubborn scale and can be left on overnight, and still the most potent descaler remover in the world, it’s also the safest. Independent tests conﬁrm that Descaler Xtreme Type ll, formed with patented ingredients, the world’s only synthetic acid, dissolves nearly 15% more scale than hydrochloric acid. Still, that potency comes with a triple zero HMIS score. Which makes our descaler remover safe on skin, safe for your equipment and safe to store anywhere you wish.

Descaler Xtreme Type ll is so safe it is recommended by leaders in the industry including EPD USA filters, HIRA chemicals and others. It is safe on paint, tile, fiber glass, gel coat, plastic, aluminum and even glass.

Descaler Xtreme type ll contains no acid and is non-corrosive, meaning it can be applied to any surface. It is so safe it can be left on overnight to loosen the heaviest buildup. Ideal for cleaning scale from water features, rock pools, waterpark assets, pool tile, decking, glass and more. Any cleaning that once required the use of dangerous, toxic acids can now be safely done with Descaler Xtreme. It is entirely synthetic, so no neutralizing step is required. Simply rinse with water.

Descaler Xtreme type ll is non-regulated and is readily biodegradable per OECD 301D. Descaler Xtreme is non- fuming and 100% OSHA safety compliant.

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For technical Support call (951)-963-5647-(760)828-6169 [www.chemsafeusa.com](http://www.chemsafeusa.com/)

# Technical Data Guarantee

NITRATE LEVEL: **0% - None** SHIPPER REGULATIONS: **None**

FORM: **Liquid** FLASH POINT: **None**

ODOR: **Mild Soapy Odor** BOILING POINT: **210° F** COLD STABILITY: **-26° F** SOLUBILITY IN WATER: **100%** DETERGENCY: **Moderate** BIODEGRADABLE: **Yes/100%** TOXICITY: **Non-Toxic** VOLATILE BY VOLUME: **N/A** WETTING ABILITY: **Excellent** CARCINOGENS: **None** STORAGE STABILITY: **1 Year+** VISCOSITY: **Thin**

# Dissolving Properties

Calcium Oxide Dissolving Properties of Acids with 3 Minute Exposure

|  |  |
| --- | --- |
| **Descaler Xtreme Type ll** | **13.9** |
| HCl (Muriatic) | 8.9 |
| Urea HCL | 7.2 |
| Urea Sulfuric | 6.1 |
| Phosphoric | 0.9 |

Citric 0.0

CHEM SAFE USA, LLC guarantees this product to be defects and true to its contents. When used per label directions and dilutions, Chem Safe Usa guarantees the use of this products will not void your manufacturers vehicle warranty for rust, corrosion and paint.

# Toxicity Studies

**Toxicity Limits: Test Procedure OECD 202, 48 hr.**

LC 50 and LD 50 (rat oral) scores found Descaler Xtreme Type ll to be NON-TOXIC.

# Mutagenicity Limits: OECD Guidelines Sec. 471 Chemicals

Descaler Xtreme type ll was found NOT TO BE MUTAGENIC

# Dermal Irritation & Corrosion Test

A modified Draize method was used as described in OECD Guidelines for the Testing of Chemicals Sec. 404 and complies with

Lactic 0.2 the requirements of OECD Principles of GLP, Annex revised as of

Acetic 0.1

Glycolic 0.2

July 1992.

Descaler Xtreme Type ll received a Primary Irritation Score of .09

Oxalic 0.0

+-0.2 and is classified as a “very mild skin irritant”.

Malic 0.4

# Test Conditions

200 grams of 5% active solution 1 Calcium Oxide Cube

3 Minutes @ 70° F

Clearly, Descaler XtremeType ll outperforms acids and organic salts when it comes to dissolving calcium oxide, including HCI (Muriatic), urea HCL which are highly corrosive.

# Biodegradation & Aquatic Safety

Test Procedure: Hach Reactor Digestion method for Waste Water and Sea Water. Hach Reactor Digestion Method is a semi-micro adaptation of the Standard Methods.

Test Results Conclude Descaler Xtreme type ll was found to be 100% Biodegradable

COD = **Low Detectable Limits**

BOD = **No Detectable Limits**

# Metal Studies

Dept. of Transportation (D.O.T.) Test Protocols as per Section 173.154 Exceptions for Class 8 (corrosive materials): The material being tested must be proven to be non-destructive or not to cause irreversible alterations in human skin tissue.

Testing was conducted on an albino rabbit.

**Conclusion:** Descaler XtremeType ll was proven to be NON-DESTRUCTIVE on human skin tissue.

**Metal Test Limits:** D.O.T. classifies a material to be corrosive if it has a corrosion rate that exceeds 6.25 mmpy on SAE C1020 carbon steel.

Results of Descaler Xrteme Type ll SAE 1020 carbon steel =0.2203 mmpy

**Conclusion:** Descaler Xtreme Type ll is NON-CORROSIVE



# D.O.T., TDG, IMO, IATA, IMDG, SARA 313 311/312, California Prop 65

Non-Regulated

# FDA

Approved as Safe (GRAS)

# USDA Authorization

A1, A2, A3, A4, A7, A8, C2, G6

& G7

Additional Studies & Results: When tested, Descaler Xtreme Type ll showed no potential for the generation of Carbon Dioxide under NIOSH 7903 OSHA & ACGIH testing protocols governing workplace environments.