

## SAFETY DATA SHEET

# 0214

### 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

#### 1.1 Product identifier

**Product name** BOC SMOOTHARC STAINLESS STEEL PICKLING GEL (NZ)  
**Synonym(s)** 0214 - SDS NUMBER • 1107 - MATERIAL CODE • BOC WELD-GUARD STAINLESS STEEL PICKLING GEL (FORMERLY)

#### 1.2 Uses and uses advised against

**Use(s)** SCALE REMOVER • STAINLESS STEEL CLEANER

#### 1.3 Details of the supplier of the product

**Supplier name** BOC LIMITED (NEW ZEALAND)  
**Address** 988 Great South Road, Penrose, Auckland, NEW ZEALAND  
**Telephone** +64 9 525 5600  
**Fax** +64 9 525 7889  
**Email** [customer.servicenz@boc.com](mailto:customer.servicenz@boc.com)  
**Website** <http://www.boc.co.nz>

#### 1.4 Emergency telephone number(s)

**Emergency** 0800 111 333 (NZ only)

### 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

CLASSIFIED AS HAZARDOUS ACCORDING TO HAZARDOUS SUBSTANCES [CLASSIFICATION] REGULATIONS 2001

#### HSNO classification(s)

6.1C (dermal) Substances that are acutely toxic - Toxic.  
6.1C (inhalation) Substances that are acutely toxic - Toxic.  
6.1C (oral) Substances that are acutely toxic - Toxic.  
6.9A (Single) Substances that are toxic to human target organs or systems.  
8.1A Substances that are corrosive to metals.  
8.2B Substances that are corrosive to dermal tissue.  
8.3A Substances that are corrosive to ocular tissue.  
9.3B Substances that are ecotoxic to terrestrial vertebrates.

#### 2.2 Label elements

**Signal word** DANGER

#### Pictogram(s)



**PRODUCT NAME BOC SMOOTHARC STAINLESS STEEL PICKLING GEL (NZ)****Hazard**

H290	May be corrosive to metals.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H331	Toxic if inhaled.
H370	Causes damage to organs.
H432	Toxic to terrestrial vertebrates.

**Prevention**

P102	Keep out of reach of children.
P103	Read label before use.
P234	Keep only in original container.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

**Response**

P101	If medical advice is needed, have product container or label at hand.
P310	Immediately call a POISON CENTER or doctor/physician.
P321	Specific treatment is advised - see first aid instructions.
P363	Wash contaminated clothing before reuse.
P390	Absorb spillage to prevent material damage.
P391	Collect spillage.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove to fresh air and keep at rest in a position 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.
P307 + P311	IF exposed: Call a POISON CENTER or doctor/physician.

**Storage**

P405	Store locked up.
P406	Store in corrosive resistant container with a resistant inner liner.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.

**Disposal**

P501	In the case of a substance that is in compliance with a HSNO approval other than a Part 6A (Group Standards) approval, a label must provide a description of one or more appropriate and achievable methods for the disposal of a substance in accordance with the Hazardous Substances (Disposal) Regulations 2001. This may also include any method of disposal that must be avoided.
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**2.3 Other hazards**

No information provided.

**3. COMPOSITION/ INFORMATION ON INGREDIENTS****3.1 Substances / Mixtures**

Ingredient	CAS Number	EC Number	Content
WATER	7732-18-5	231-791-2	30 to 60%
ADDITIVE(S)	-	-	10 to 30%
NITRIC ACID	7697-37-2	231-714-2	10 to 30%
HYDROFLUORIC ACID	7664-39-3	231-634-8	1 to 5%

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

<b>Eye</b>	If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.
<b>Inhalation</b>	If inhaled, remove from contaminated area. To protect rescuer, use a Full-face Type B (Inorganic and acid

## PRODUCT NAME **BOC SMOOTHARC STAINLESS STEEL PICKLING GEL (NZ)**

	gas) respirator or an Air-line respirator (in poorly ventilated areas). Apply artificial respiration if not breathing.
<b>Skin</b>	If skin contact occurs, immediately remove contaminated clothing. Flush skin under running water for 15 minutes. Then apply calcium gluconate gel. Contact the National Poisons Centre at 0800 764 766 (0800 POISON) or +643 479 7248.
<b>Ingestion</b>	For advice, contact the National Poisons Centre at 0800 764 766 (0800 POISON) or +643 479 7248 or a doctor (at once). If swallowed, do not induce vomiting.
<b>First aid facilities</b>	Eye wash facilities and safety shower should be available. Calcium gluconate gel should be readily available wherever the product is used or stored.

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

See Section 11 for more detailed information on health effects and symptoms.

### **4.3 Immediate medical attention and special treatment needed**

Eye Treatment: Flush the eye with water for at least 15 minutes, continue irrigation with isotonic saline or water until the severe pain of the burn is relieved. Instil several drops of sterile calcium gluconate (10% solution).

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## **5. FIRE FIGHTING MEASURES**

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### **5.1 Extinguishing media**

Use an extinguishing agent suitable for the surrounding fire.

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

Non flammable. May evolve toxic gases (nitrogen oxides, fluorides and hydrogen fluoride) when heated to decomposition.

### **5.3 Advice for firefighters**

Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.

### **5.4 Hazchem code**

2X  
2 Fine Water Spray.  
X Wear liquid-tight chemical protective clothing and breathing apparatus. Contain spill and run-off.

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## **6. ACCIDENTAL RELEASE MEASURES**

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

Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS. Clear area of all unprotected personnel. Contact emergency services where appropriate.

### **6.2 Environmental precautions**

Prevent product from entering drains and waterways.

### **6.3 Methods of cleaning up**

Contain spillage, then cover / absorb spill with non-combustible absorbent material (vermiculite, sand, or similar), collect and place in suitable containers for disposal.

### **6.4 Reference to other sections**

See Sections 8 and 13 for exposure controls and disposal.

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## **7. HANDLING AND STORAGE**

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### **7.1 Precautions for safe handling**

Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

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

Store in a cool, dry, well ventilated area, removed from incompatible substances, heat or ignition sources and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Check regularly for leaks or spills. Large storage areas should be bunded and have appropriate ventilation systems.

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

No information provided.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Control parameters

#### Exposure standards

Ingredient	Reference	TWA		STEL	
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Hydrofluoric Acid	WES (NZ)	3	2.6 (Peak)	--	--
Nitric acid	WES (NZ)	2	5.2	4	10

#### Biological limits

No biological limit values have been entered for this product.

### 8.2 Exposure controls

**Engineering controls** Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended. Maintain vapour levels below the recommended exposure standard.

#### PPE

- Eye / Face** Wear splash-proof goggles.
- Hands** Wear PVC gloves.
- Body** Wear rubber or PVC boots and a PVC apron and impervious coveralls.
- Respiratory** Wear a Full-face Type B (Inorganic and Acid gas) respirator. With prolonged use, wear an Air-line respirator.



## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

<b>Appearance</b>	OPAQUE WHITE GEL
<b>Odour</b>	PUNGENT ACIDIC ODOUR
<b>Flammability</b>	NON FLAMMABLE
<b>Flash point</b>	NOT RELEVANT
<b>Boiling point</b>	NOT AVAILABLE
<b>Melting point</b>	NOT AVAILABLE
<b>Evaporation rate</b>	NOT AVAILABLE
<b>pH</b>	< 1
<b>Vapour density</b>	NOT AVAILABLE
<b>Specific gravity</b>	1.33 to 1.35
<b>Solubility (water)</b>	SOLUBLE
<b>Vapour pressure</b>	NOT AVAILABLE
<b>Upper explosion limit</b>	NOT RELEVANT
<b>Lower explosion limit</b>	NOT RELEVANT
<b>Partition coefficient</b>	NOT AVAILABLE
<b>Autoignition temperature</b>	NOT AVAILABLE
<b>Decomposition temperature</b>	NOT AVAILABLE
<b>Viscosity</b>	NOT AVAILABLE
<b>Explosive properties</b>	NOT AVAILABLE
<b>Oxidising properties</b>	NOT AVAILABLE
<b>Odour threshold</b>	NOT AVAILABLE

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

Carefully review all information provided in sections 10.2 to 10.6.

**10.2 Chemical stability**

Stable under recommended conditions of storage.

**10.3 Possibility of hazardous reactions**

Polymerization is not expected to occur.

**10.4 Conditions to avoid**

Avoid heat, sparks, open flames and other ignition sources.

**10.5 Incompatible materials**

Incompatible (violently) with combustible materials, metals, reducing agents (e.g. sulphites), alkalis (e.g. sodium hydroxide), ammonia, heat and ignition sources.

**10.6 Hazardous decomposition products**

May evolve toxic gases (nitrogen oxides, fluorides and hydrogen fluoride) when heated to decomposition.

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**11. TOXICOLOGICAL INFORMATION**

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**11.1 Information on toxicological effects**

<b>Health hazard summary</b>	Highly corrosive - toxic. This product has the potential to cause serious adverse health effects. Use safe work practices to avoid eye or skin contact and inhalation. Over exposure may result in severe and permanent eye, skin and respiratory damage.
<b>Eye</b>	Highly corrosive. Contact may result in irritation, lacrimation, pain, redness and corneal burns with possible permanent eye damage.
<b>Inhalation</b>	Corrosive - toxic. Over exposure may result in irritation of the nose and throat, coughing and bronchitis. High level exposure may result in ulceration of the respiratory tract, lung tissue damage, chemical pneumonitis and pulmonary oedema. Effects may be delayed.
<b>Skin</b>	Highly corrosive - toxic. Contact may result in burning sensation (delayed), severe and deep burns, discolouration, severe tissue damage and death which may be delayed.
<b>Ingestion</b>	Causes severe burns - toxic. Ingestion may result in severe burns to the mouth and throat, vomiting, abdominal pain, ulceration of the gastrointestinal tract, convulsions and death.
<b>Toxicity data</b>	HYDROFLUORIC ACID (7664-39-3) LC50 (inhalation) 342 ppm/1 hour (mouse)

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**12. ECOLOGICAL INFORMATION**

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**12.1 Toxicity**

No information provided.

**12.2 Persistence and degradability**

No information provided.

**12.3 Bioaccumulative potential**

No information provided.

**12.4 Mobility in soil**

No information provided.

**12.5 Other adverse effects**

SOIL: If released to soil, this product will dissolve the carbonate based soil materials due to its acidic nature. WATER: A significant amount will reach the water table where dilution and dispersion serve to reduce the acid concentration. Aquatic life may be threatened if the pH falls below 5.

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**13. DISPOSAL CONSIDERATIONS**

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**13.1 Waste treatment methods**

<b>Waste disposal</b>	Neutralise with lime, weak alkali or similar. For small amounts, absorb with sand or similar and dispose of to an approved landfill site. Contact the manufacturer/supplier for additional information (if required).
<b>Legislation</b>	Dispose of in accordance with relevant local legislation.

## 14. TRANSPORT INFORMATION

CLASSIFIED AS A DANGEROUS GOOD ACCORDING TO LAND TRANSPORT RULE:  
DANGEROUS GOODS 2005; NZS 5433:2012, UN, IMDG OR IATA



	LAND TRANSPORT (LTR:DG 2005)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
14.1 UN Number	2922	2922	2922
14.2 Proper Shipping Name	CORROSIVE LIQUID, TOXIC, N.O.S.	CORROSIVE LIQUID, TOXIC, N.O.S.	CORROSIVE LIQUID, TOXIC, N.O.S.
14.3 Transport Hazard Classes	8, 6.1	8, 6.1	8, 6.1
14.4 Packing Group	II	II	II

14.5 Environmental hazards No information provided

### 14.6 Special precautions for user

Hazchem code 2X  
EMS F-A, S-B

## 15. REGULATORY INFORMATION

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Approval code HSR002615  
Group standard Metal Industry Products (Toxic [6.1], Corrosive) Group Standard 2006  
Inventory listing(s) **NEW ZEALAND: NZIoC (New Zealand Inventory of Chemicals)**  
All components are listed on the NZIoC inventory, or are exempt.

## 16. OTHER INFORMATION

**Additional information** ACIDS: When mixing acids with water (diluting), caution must be taken as heat will be generated which causes violent spattering. Always add a small volume of acid to a large volume of water, NEVER the reverse.

HYDROFLUORIC ACID: Severe burns and tissue damage have been reported after direct contact with small quantities of low concentration (< 20 %) hydrofluoric acid. An immediate burning sensation and pain is not always apparent but is a delayed effect which may proceed to corrosive tissue damage and toxic systemic effects through absorption. Hydrofluoric acid has the potential to cause permanent tissue damage and to be fatal if contaminated areas are not treated immediately.

RESPIRATORS: In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:  
The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

**HEALTH EFFECTS FROM EXPOSURE:**

It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

**Abbreviations**

ACGIH	American Conference of Governmental Industrial Hygienists
CAS #	Chemical Abstract Service number - used to uniquely identify chemical compounds
CCID	Chemical Classification and Information Database (HSNO)
CNS	Central Nervous System
EC No.	EC No - European Community Number
EMS	Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods)
EPA	Environmental Protection Authority [New Zealand]
GHS	Globally Harmonized System
HSNO	Hazardous Substances and New Organisms
IARC	International Agency for Research on Cancer
LC50	Lethal Concentration, 50% / Median Lethal Concentration
LD50	Lethal Dose, 50% / Median Lethal Dose
mg/m <sup>3</sup>	Milligrams per Cubic Metre
OEL	Occupational Exposure Limit
pH	relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
ppm	Parts Per Million
STEL	Short-Term Exposure Limit
STOT-RE	Specific target organ toxicity (repeated exposure)
STOT-SE	Specific target organ toxicity (single exposure)
TLV	Threshold Limit Value
TWA	Time Weighted Average

**Report status**

This document has been compiled by RMT on behalf of the manufacturer, importer or supplier of the product and serves as their Safety Data Sheet ('SDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer, importer or supplier or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer, importer or supplier.

While RMT has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

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