




SAFETY DATA SHEET

FIRST CHEMICAL LIMITED

SECTION 1: IDENTIFICATION	
Product Name	Flush II
Product UPC Recommended use of the chemical and restrictions on use	27909-07704
Product Code	07704
Manufacturer Address First Chemical Limited 83 Torbarrie Road Toronto, Ontario M3L 1G5	
Emergency Contact Number	416- 249- 8050 and 416- 678- 3179
Recommended Use	For Industrial and Institutional Use Only
Uses advised against	Do not mix with other chemicals or Bleach

SECTION 2: HAZARD IDENTIFICATION	
GHS Classification	
Acute Toxicity - Inhalation (Gases):	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin Irritation	Category 1
Eye Irritation	Category 1
Specific Target Organ Toxicity (Single Exposure):	Category 3
Corrosive to Metals:	Category 1

GHS Label Element	
Hazard pictogram	
	
Colour: White Physical State: Liquid Odour: Acid Signal word: Danger	
Hazard Statements:	Causes severe skin burns and serious eye damage. May cause respiratory irritation. May be corrosive to metals.
<u>Precautionary Statements:</u>	
Prevention:	Use only outdoors or in a well-ventilated area. Do not breathe mist, vapors or spray. Wash hands and any exposed skin thoroughly after handling. Wear protective gloves. Wear eye/face protection. Wear protective clothing. Keep in original or other corrosion resistant container
Response:	IMMEDIATELY CALL A POISON CENTER OR PHYSICIAN
Eyes	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Skin	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse.
Inhalation:	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Ingestion:	IF SWALLOWED: Rinse mouth. DO NOT induce vomiting.
Specific Treatment:	See Safety Data Sheet Section4: "FIRST AID MEASURES" for additional information.
Storage:	Store locked up. Store in a well-ventilated place. Keep container tightly closed. Store in corrosion resistant container.
Disposal:	Dispose of contents and container in accordance with local, state and federal regulations.
Hazards Not Otherwise Classified:	Not Applicable.

Other information:	<p>Corrosive. Harmful or fatal if swallowed. Do not mix with hypochlorite-type bleach or other household chemicals as hazardous vapors or gases may be produced. KEEP OUT OF REACH OF CHILDREN. Note to physician: Probable mucosal damage may contraindicate the use of gastric Lavage.</p>
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SECTION 3: INGREDIENTS

Chemical Name	Cas-No	Concentration: (%)
Water	7732-18-5	>60%
Hydrochloric acid	7647-01-0	> 10%

SECTION 4: FIRST AID MEASURES

In case of eye contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention.
In case of skin contact:	Wash off immediately with plenty of water for at least 15 minutes. Use mild soap if available. Get medical attention if irritation develops and persists
If swallowed:	Rinse mouth with water. Get medical attention if symptoms occur
If inhaled:	Remove to get fresh air. Get medical attention if symptoms occur.
Notes to physician:	Treat symptomatically

SECTION 5: FIREFIGHTING MEASURES

Suitable extinguishing media:	Product does not support combustion, Use extinguishing agent suitable for type of surrounding fire
Specific Hazards Arising from the chemical:	Combustion products are toxic. Contact with metals may evolve flammable hydrogen gas.
Hazardous Combustion Products:	May include Carbon monoxide Carbon dioxide and other toxic gases or vapors.

Special protective equipment for firefighters:	Wear MSHA/ NIOSH approved self-contained breathing apparatus (SCBA) and full protective gear. Cool fire – exposed containers with water spray.
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SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.
Environmental Precautions:	Do not rinse spill onto the ground, into storm sewers or bodies of water.
Methods for clean-Up:	Prevent further leakage or spillage if safe to do so. Contain and collect spillage with non-combustible absorbent material, (sand ,earth, diatomaceous earth,) and place in container for disposal according to local/ national regulations (see Section 13)

SECTION 7: HANDLING AND STORAGE

Advice on Safe Handling:	Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling.
Storage Conditions:	Keep containers tightly closed in a dry, cool and well – ventilated place. Keep out of the reach of children. Keep from freezing.
Incompatible Materials:	Acids. Strong oxidizing agents. Ammonia. Reactive metals such as aluminum, zing and tin.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Limits: None established.			
Chemical Name	ACGIH TLV	OSHA PEL	NIOSH
hydrochloric acid 7647-01-0	Ceiling: 2 ppm	(vacated) Ceiling: 5 ppm (vacated) Ceiling: 7 mg/m ³ Ceiling: 5 ppm Ceiling: 7 mg/m ³	IDLH: 50 ppm Ceiling: 5 ppm Ceiling: 7 mg/m ³

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Engineering Controls:	Provide good general ventilation If work practices generate dust, fumes, gas, vapors or mists which expose workers to chemicals above the occupational exposure limits, local exhaust ventilation or other engineering controls should be considered. Eyes wash stations and shower facilities areas available
Personal Protective Equipment	
Eyes /Face Protection:	Wear splash goggles. For severe use –conditions, wear a face shield over the goggles.
Skin and Body Protection:	Wear rubber or other chemical-resistant gloves. Use of impervious apron, boots and other protective equipment should be considered in order to prevent or minimize contact with this product.
Respiratory Protection:	Not required with expected use. If occupational exposure limits are exceeded or respiratory irritation occurs, use of a NIOSH/MSHA approved respirator suitable for the use-conditions and chemicals in Section 3 should be considered.
General Hygiene Considerations:	Wash hands and any exposed skin thoroughly after handling. See 29 CFR 1910.132-138 for further guidance.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES	
Appearance	Liquid
Colour	White
Odour	Unpleasant
pH	<1.0
Flash point	>104 oC/ > 219 F ASTM D56
Odour threshold	N/A
Melting/freezing point	N/A
Initial boiling point/boiling range	104 degree Celsius /219 F
Evaporation rate	<1
Flammability (solid and gas)	N/A
Upper explosion limit	N/A
Lower explosion limit	N/A
Vapour pressure	N/A
Relative vapour density	N/A
Specific gravity	1.1- 1.2
Water solubility	Soluble in water

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Solubility in other solvents	N/A
Partition coefficient: n- octanol/water	N/A
Auto-ignition temperature	N/A
Thermal decomposition	N/A
Viscosity kinematic	N/A
Explosive properties	N/A
Oxidizing properties	N/A
Molecular weight	N/A
VOC	N/A

SECTION 10: STABILITY AND REACTIVITY

Reactivity	This material is considered to be non-reactive under normal conditions of use.
Chemical Stability	Stable under recommended storage conditions
Possibility of Hazardous Reactions	Not expected to occur with normal handling and storage.
Conditions to avoid	Do not mix with other chemicals. High temperature accelerates decomposition of product.
Incompatible materials	Sodium hypochlorite (or other hypochlorites). Strong bases Reactive metals such as aluminum, zinc and tin.
Hazardous Decomposition Products	May include carbon monoxide, carbon dioxide (CO ₂) and other toxic gases or vapors

SECTION 11: TOXICOLOGICAL INFORMATION

<u>Information on likely routes of exposure</u>	Eyes, Skin, Ingestion, Inhalation.
Inhalation	Inhalation of vapors in high concentration may cause irritation of respiratory system
Eye contact	Avoid contact with eyes. Pain, redness, swelling of the conjunctiva and tissue damage. Eye contact may cause permanent damage.
Skin contact	Avoid contact with skin. Pain redness, blistering and possible chemical burn.
Ingestion	Damage or chemical burns to mouth, throat and stomach. Pain, nausea, vomiting and diarrhea.
Immediate, Delayed, Chronic Effects Product information:	Data not available or insufficient for classification.

Numerical Measures of Toxicity			
The following acute toxicity estimate		(ATE) are calculated based on the GHS document	
ATEmix (oral):		2917 mg/kg	
ATEmix (dermal):		20877 mg/kg	
ATEmix (inhalation-gas):		6509 mg/l	
ATEmix (inhalation-dust/mist):		2.1 mg/l	
Component Acute Toxicity inform.			
Chemical Name	Oral LD 50	Dermal LD 50	Inhalation LD 50
Water 7732-18-5	>90 ml/kg (Rat)	Not Available	Not Available
hydrochloric acid 7647-01-0	= 700 mg/kg (Rat)	> 5010 mg/kg (Rabbit)	= 3124 ppm (Rat) 1 h
Carcinogenicity : No components present at 0.1% or greater are listed as to being carcinogens by ACGIH,IARC, NTP or OSHA.			

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity				
Chemical Name	Algae/Aquatic Plants	Fish	Toxicity to Microorganisms	Crustacea
hydrochloric acid 7647-01-0	Not Available	282: 96 h Gambusia affinis mg/L LC50 static	Not Available	Not Available
<u>Persistence and degradability</u>	No information available			
<u>Bioaccumulation</u>	No information available			
<u>Other adverse effects</u>	No information available			

SECTION 13: DISPOSAL CONSIDERATIONS

<u>Waste treatment methods</u>	
Disposal of wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations
Contaminated packaging	Do not reuse container. Dispose of in accordance with federal, state and local regulations

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US EPA Waste Number :	D002
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SECTION 14: TRANSPORT INFORMATION

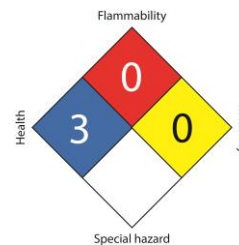
DOT UN / ID No.	UN 1760
IATA UN/ID no. Proper shipping name: Hazard Class Packing Group Descriptions	1760 Corrosive liquids n.o.s. ((contains hydrochloric (muriatic) acid) 8 III Shipping descriptions may vary based on mode of transport, quantities, package size, and/ or origin and destination.
IMDG UN/ ID NO. Proper shipping name Hazard class Packing Group	1760 Corrosive liquids n.o.s. ((contains hydrochloric (muriatic) acid) 8 III

SECTION 15: REGULATORY INFORMATION

<u>International Inventories</u> TSCA DSL/NDSL
<u>Legend:</u> TSCA- United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL- Canadian Domestic Substances List/ Non- Domestic Substances lists
<u>US Federal Regulations</u>
<u>SARA 313</u> This product contains the following listed substances: hydrochloric acid CAS No 7647-01-0 acid aerosols including mists, vapors, gas, fog, and other airborne forms of any particle size

<u>Sara 311/312 Hazard Categories</u>	
Acute health hazard	YES
Chronic Health Hazard	NO
Fire hazard	NO
Sudden release of pressure hazard	NO
Reactive hazard	NO
<u>California Proposition 65</u>	
This product does not contain any Proposition 65 chemicals	

SECTION 16: OTHER INFORMATION								
NFPA	Health Hazards :	3	Flammability :	0	Instability:	0	Special:	N/A
HMIS	Health Hazards :	3	Flammability :	0	Physical Hazards:	0		
Revision Date :				Dec 15 /2017				
Prepared by :				Regulatory Affairs				



Issuing Date: 12/15/2016
Prepared by: Regulatory Affairs

The information provided in this Safety Data Sheet is correct to best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet