SAFETY DATA SHEET

in accordance with 1907/2006/EC (REACH, as amended by 453/2010/EC) and 29 CFR 1910.1200

Revision date: 15 April 2015 **Initial date of issue:** 6 July 2007 **SDS No.** 281-13

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

1.1. Product identifier

803 Industrial & Marine Solvent II

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

A high performance water based alkaline 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:

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)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

2.1.1. Classification according to Regulation (EC) No 1272/2008 [CLP] / 29 CFR 1910.1200 / WHMIS 2015 / GHS

Skin Corr. 1B, H314

2.1.2. Classification according to Directives 1999/45/EC and 1975/324/EEC

Corrosive; C; R34

2.1.3. Classification according to WHMIS 1988

E: Corrosive materials

2.1.4. Australian statement of hazardous nature

Hazardous according to criteria of Safe Work Australia.

2.1.5. Additional information

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

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP] / 29 CFR 1910.1200 / WHMIS 2015 / GHS

Hazard pictograms:

Signal word: Danger

Hazard statements: H314 Causes severe skin burns and eye damage.

Precautionary statements:	P260	Do not breathe mist/spray.
	P280	Wear protective gloves/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.

Supplemental information: None

2.3. Other hazards

The principal safety hazard associated with this product is its high alkaline content (pH 13.1-13.7). If ingested in large quantities, this product could cause internal damage to the body. Wash immediately after any contact.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Hazardous Ingredients[1]	% Wt.	CAS No./ EC No.	REACH Reg. No.	Classification (CLP/GHS)	Classification (67/548/EEC)
Sodium carbonate	1-5	497-19-8 207-838-8	NA	Eye Irrit. 2, H319	Xi; R36
Potassium hydroxide	1-2	1310-58-3 215-181-3	NA	Acute Tox. 4, H302 Skin Corr. 1A, H314	C; R22-35 Xn; R22
N-Methyl-2-pyrrolidone	0.1-1	872-50-4 212-828-1	NA	Repr. 1B, H360D Eye Irrit. 2, H319 STOT SE 3, H335 Skin Irrit. 2, H315	T; R61 Xi; R36/37/38

Indications of danger acc. to 67/548/EEC: C: Corrosive; T: Toxic; Xn: Harmful; Xi: Irritant
For full text of H-statements and R-phrases: see SECTION 16.

[1] 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, 67/548/EEC, 99/45/EC, REACH
* WHMIS 2015
* Safe Work Australia [NOHSC: 1008 (2004)]

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation: not applicable

Skin contact: Flood area with water while removing contaminated clothing. Wash clothing before reuse. Wash skin with soap and water. Contact physician immediately.

Eye contact: Flush eyes for at least 15 minutes with large amounts of water. Contact physician immediately.

Ingestion: Do not induce vomiting. If conscious, drink large quantities of water. Contact physician immediately.

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

Direct contact causes eye, skin and mucous membrane burns.

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

Treat symptoms.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Nonflammable, Use extinguisher appropriate to the surrounding fire.

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: –

HAZCHEM Emergency Action Code: 2 Z

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Utilize exposure controls and personal protection as specified in Section 8.

6.2. Environmental Precautions

No special requirements.

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.

6.4. Reference to other sections

Refer to section 13 for disposal advice.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Keep container closed when not in use. Take off immediately all contaminated clothing. Alkaline materials sometimes exhibit delayed effects. Wash immediately after any contact.

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool, dry area.

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[1]		ACGIH TLV[2]		UK WEL[3]		AUSTRALIA ES[4]	
	ppm	mg/m^3	ppm	mg/m^3	ppm	mg/m^3	ppm	mg/m^3
Potassium hydroxide	–	–	–	(Ceiling) 2	STEL	2	–	(Ceiling) 2
Sodium carbonate	–	–	–	–	–	–	–	–
N-Methyl-2-pyrrolidone*	–	–	–	–	10 STEL: 20	40 STEL: 80	25 STEL: 75	103 STEL: 309

*Chesterton recommended limit: 100 ppm.
[1] United States Occupational Health & Safety Administration permissible exposure limits.
[2] American Conference of Governmental Industrial Hygienists threshold limit values.
[3] EH40 Workplace exposure limits, Health & Safety Executive
[4] Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003].

8.2. Exposure controls

8.2.1. Engineering measures

Use only in well-ventilated areas. If exposure limits are exceeded, supplement with local mechanical exhaust.

8.2.2. Individual protection measures

Respiratory protection: Not normally needed. If exposure limits are exceeded, use an approved organic/acid/base vapor respirator (e.g., EN filter type A-P2).

Protective gloves: Waterproof gloves (e.g., rubber, latex, plastic)

Eye and face protection: Safety goggles.

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

Physical state	clear liquid	**Odour**	mild odor
Colour	red	**Odour threshold**	not determined
Initial boiling point	100°C (212°F)	**Vapour pressure @ 20°C**	not determined
Melting point	0°C (32°F)	**% Aromatics by weight**	0%
% Volatile (by volume)	89%	**pH**	13.1 – 13.7
Flash point	none	**Relative density**	1.06 kg/l
Method	PM Closed Cup	**Weight per volume**	8.9 lbs/gal
Viscosity	< 5 cps @ 25°C	**Coefficient (water/oil)**	> 1
Autoignition temperature	not applicable	**Vapour density (air=1)**	> 1
Decomposition temperature	not determined	**Rate of evaporation (ether=1)**	< 1
Upper/lower flammability or explosive limits	not determined	**Solubility in water**	complete
Flammability (solid, gas)	not applicable	**Oxidising properties**	not applicable
Explosive properties	not applicable		

9.2. Other information

None

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Refer to sections 10.3 and 10.5.

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

Aluminum, Zinc and Tin; alloys of Aluminum, Zinc and Tin and strong oxidizers like liquid Chlorine and concentrated Oxygen.

10.6. Hazardous decomposition products

Carbon Monoxide, Carbon Dioxide 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 effects: Direct contact causes eye, skin and mucous membrane burns. ATE-mix oral = 18055 mg/kg.

Substance	Test	Result
Potassium hydroxide	LD50 oral, rat	365 mg/kg
Sodium carbonate	LC50 inhalation, rat	2.3 mg/l/2 hours
Sodium carbonate	LD50 oral, rat	4090 mg/kg
N-Methyl-2-pyrrolidone	LC50 inhalation, rat	> 5.1 mg/1/4 h
N-Methyl-2-pyrrolidone	LD50 dermal, rabbit	8000 mg/kg
N-Methyl-2-pyrrolidone	LD50 oral, rat	3598 mg/kg

Chronic effects: N-Methyl-2-Pyrrolidone has produced liver, kidney and reproductive/teratogenic effects in animal studies.

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. WARNING: This product contains chemical(s) known to the State of California to cause reproductive toxicity.

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 in excess of 10.

12.2. Persistence and degradability

N-Methyl-2-pyrrolidone: readily biodegradable. 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

N-Methyl-2-pyrrolidone: not expected to bioaccumulate (log Kow < 1).

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 or landfill absorbed material with a properly licensed facility. Liquids may be amenable for water treatment with absorption of organics after neutralization. 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.

European List of Wastes code: 20 01 29

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

ADR/RID/ADN/IMDG/ICAO:	UN1814
TDG:	UN1814
US DOT:	UN1814

14.2. UN proper shipping name

ADR/RID/ADN/IMDG/ICAO:	POTASSIUM HYDROXIDE SOLUTION
TDG:	POTASSIUM HYDROXIDE SOLUTION
US DOT:	POTASSIUM HYDROXIDE SOLUTION

14.3. Transport hazard class(es)

ADR/RID/ADN/IMDG/ICAO:	8
TDG:	8
US DOT:	8

14.4. Packing group

ADR/RID/ADN/IMDG/ICAO:	II
TDG:	II
US DOT:	II

14.5. Environmental hazards

NO ENVIRONMENTAL HAZARDS

14.6. Special precautions for user

NO SPECIAL PRECAUTIONS FOR USER

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. 154
May be shipped as Limited Quantities in packaging having a rated capacity gross weight of 66 lb. or less and in inner packages not over 1 Liter (49 CFR 173.154 (b,1)

IMDG: EmS. F-A, S-B "Separated from Acids"

ADR: Classification code C5, 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
Delayed

313 Chemicals:
N-Methyl-2-pyrrolidone. 0.1-1%

Hazardous Materials Identification System (HMIS)

4 = Severe Hazard
3 = Serious Hazard
2 = Moderate Hazard
1 = Slight Hazard
0 = Minimal Hazard
* = See Section 8

HEALTH	**3**
FLAMMABILITY	**0**
PHYSICAL HAZARD	**1**
Personal Protection	*****

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
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
NOAEL: No Observed Adverse Effect Level
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)
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS: Safety Data Sheet
STEL: Short Term Exposure Limit
STOT: Specific Target Organ Toxicity
TDG: Transportation of Dangerous Goods (Canada)
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.

Key literature references and sources for data:
Commission de la santé et de la sécurité du travail (CSST)
Chemical Classification and Information Database (CCID)
European Chemicals Agency (ECHA) - Information on Chemicals
Hazardous Substances Information System (HSIS)
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:

Classification	Classification procedure
Skin Corr. 1B, H314	Calculation method

Relevant H-statements: H302: Harmful if swallowed.
H314: Causes severe skin burns and eye damage.
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H335: May cause respiratory irritation.
H360D: May damage the unborn child.

Relevant R-phrases: R22: Harmful if swallowed.
R35: Causes severe burns.
R36/37/38: Irritating to eyes, respiratory system and skin:
R61: May cause harm to the unborn child.

Hazard pictogram names: Corrosion

Changes to the SDS in this revision: Sections 2.1, 2.2, 3, 8.1, 8.2.2, 9.1, 11, 16.

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.