

## SAFETY DATA SHEET

SDS # 181019-01

Ivey-sol® Surfactant Remediation Technology

Ivey-sol® Formulations: 103, 106 and 108

### 1. Identification

Product identifier: Ivey-sol® 103, 106, 108  
 Other means of identification: Not applicable  
 Recommended use: Remediation surfactant  
 Restriction on use: Not applicable  
 Manufacturer/Supplier Address: Ivey International Inc.  
 Unit 7, 19122-27 Avenue, Surrey, BC Canada V3Z 5T1  
 Emergency telephone number: Tel: +1 (604) 538-1168 (Not available 24 hours)  
 Toll Free: +1 800 246-2744

### 2. Hazard Identification

WHMIS 2015/OSHA Hazcom 2012/GHS Classification:

- Serious Eye Damage/Irritation Category 2
- Skin Corrosion/Irritation Category 3

Label elements:

Signal word: Warning Pictograms: Hazard statements:

H316 – May causes mild skin irritation.

H319 – may causes eye irritation.



Precautionary Statements:

P264 - Wash contacted areas thoroughly after handling.

P280 - Wear eye protection.

P305/P351/P338 - If In Eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.

P332/P313 - If skin irritation occurs: Get medical advice/attention.

P337/P313 - If eye irritation persists: Get medical advice/attention

### 3. Composition / Information on Ingredients

Chemical Name	CAS No.	Concentration (v/v)	Other Identifiers
Biodegradable Non-ionic Surfactant 1	Proprietary	1-10%	Not applicable
Biodegradable Non-ionic Surfactant 2	Proprietary	1-10%	Not applicable
Biodegradable Non-ionic Surfactant 3	Proprietary	1-10%	Not applicable
Biodegradable Non-ionic Surfactant 4	Proprietary	1-10%	Not applicable
Biodegradable Non-ionic Surfactant 5	Proprietary	1-10%	Not applicable
Biodegradable Non-ionic Surfactant 6	Proprietary	1-10%	Not applicable



Preservative	4080-31-3	<90%	Food Grade (Optional)
Scent	8016	<1%	Optional
Water	7732-18-5	<90%	Not applicable

*Regulatory Note: Chemical names, CAS numbers and actual concentrations have been withheld as part of a confidential business information claim with HMIRA Registry #11724 filed on 2017-07-17*

#### 4. First-aid Measures

- Inhalation:** No adverse effects anticipated by this route when handled according to section 7 of document. However, if necessary, move person to fresh air.
- Skin contact:** Generally will not irritate skin. Wash contact areas with soap and water. If irritation persist, seek medical attention.
- Eye contact:** May cause eye irritation. Flush eyes with plenty of water for at least 15 minutes, remove contact lenses if present and easy to do so. If irritation persists, seek medical attention.
- Ingestion:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. If necessary, seek medical attention.

Most Important Symptoms and Effects, Acute and Delayed

Acute Symptoms:

**Eye Contact:** May be irritating to the eyes. Occasional contact through splashing is not expected to affect the eyes. If irritation occurs, effect will be transient.

Chronic Symptoms: Not Applicable

Immediate Medical Attention and Special Treatment: Not Applicable

#### 5. Fire-Fighting Measures

Suitable extinguishing media: Not flammable. Use extinguishing media for surrounding fire.

Unsuitable extinguishing media: Not applicable

Specific hazards arising from the hazardous product: Not available

Special protective equipment for fire-fighters: Not available

#### 6. Accidental release measures

Personal Precautions, Protective Equipment:

Observe good industrial hygiene practices. Use personal protective equipment as recommended in Section 8. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Emergency Procedures: Eliminate and/or contain source with inert material (sand, earth, absorbent pads, etc.). Wear basic eye and skin protection. Floor may be slightly slippery; so use care to avoid falling. Avoid discharge to natural waters, and/or dilute with water. Transfer liquids to suitable containers for recovery, re-use or disposal. Contact Ivey for technical assistance if required.

#### 7. Handling and Storage

Precautions for Safe Handling:

Practice good housekeeping. Avoid breathing excessive vapours. Ensure adequate ventilation. Avoid contact with skin and eyes. Wear protective gloves. Wash thoroughly after handling.

Conditions for Safe Storage: Keep closed or sealed when not in use. Do not allow to freeze, keep >0°C.



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## 8. Exposure Controls / Personal Protection

Control parameters: Not available  
Appropriate Engineering Controls: General mechanical room ventilation is expected to be satisfactory.  
Individual Protections Measures: Eye/face protection: Mono goggles or similar.  
Skin protection: Latex gloves, or similar, would be sufficient. Normal work clothes.  
Respiratory Protection: None expected to be needed. However, if an engineered / industrial application where vapours and/or misting may occur, wear MSHA/NIOSH approved half mask air purifying respirator

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## 9. Physical and Chemical Properties

Appearance: Liquid, cloudy  
Odour: Mild  
Odour threshold: Not available  
pH: 7 (+/- 0.5) (1% solution)  
Melting Point: ~0°C  
Freezing point: ~0°C  
Boiling Point: Not available  
Flash Point: Not applicable  
Evaporation Rate: <0.01  
Flammability: Not applicable  
Lower flammable/ explosive limit: Not applicable  
Upper flammable/Explosive Limit: Not applicable  
Vapour Pressure: <0.01 mm Hg  
Vapour Density: >1  
Relative Density: 0.99-1.04  
Solubility: 100% (Completely miscible in water)  
Partition Coefficient: Not available (n-octanol / water)  
Auto-Ignition Temperature: Not applicable  
Decomposition Temperature: Not available  
Viscosity: Not available

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## 10. Stability and Reactivity

Reactivity: Not reactive.  
Chemical Stability: Stable.  
Possibility of Hazardous Reactions: Not applicable  
Conditions to Avoid: Prolonged excessive heat may cause product decomposition. Freezing should also be avoided as it may cause product decomposition. In some cases freezing may cause irreversible changes.  
Incompatible Materials: Normally un-reactive; however avoid strong bases at high temperatures, strong acids, strong oxidizing agents, and materials with reactive hydroxyl compounds. These compounds would damage the mixture and reduce its effectiveness during application.  
Hazardous Decomposition products: Not applicable

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## 11. Toxicological Information

Likely Routes of Exposure  
Inhalation: No  
Skin contact: No  
Eye contact: Yes

Ingestion: No  
 Acute Toxicity:  
 LD50 - Oral (Rat): = >43.000mg/kg (rat) mg/kg  
 LD50 - Dermal (Rabbit): >58.000mg/kg (rabbit) mg/kg  
 Inhalation: Not available  
 Skin corrosion/irritation: Mild irritation  
 Serious eye damage/irritation: Eye irritation  
 Respiratory or skin sensitization: No  
 Germ cell mutagenicity: No  
 Carcinogenicity: None known or expected  
 Reproductive toxicity: No

## 12. Ecological Information

Toxicity: Low potential to affect aquatic organisms when used in accordance with Ivey International Inc. In-situ and Ex-situ Remediation Application Guidelines.

Acute toxicity	Time	Species	Method	Evaluation	Remarks
LC/50 = 0.07695%	96h	Rainbow trout	OECD 203	Not applicable	Not applicable
LC/50 = 0.11%	48h	Daphnia magna	OECD 202	Not applicable	Not applicable
EC/50 = Not applicable	72h	Algae	OECD 201	Not applicable	Not applicable

Persistence and degradability: >90% biodegradable in < 28 days.\*  
 Bio-accumulative potential: Not available  
 Mobility in soil: Completely miscible with water.  
 Other adverse effects: Not available

Based on actual testing or on data for similar material(s). Degradation Biodegradation reached in Modified OECD Screening Test (OECD Test No.301 E) after 28 days: 90 %. Biodegradation reached in CO2 Evolution Test (Modified Sturm Test, (OECD Test No. 301 B) after 28 days: 70 %.

## 13. Disposal Considerations

Product/Packaging:

For aqueous mixture solutions; aerobic biological wastewater treatment systems are effective in treating said mixtures. Ivey-sol does not have any known negative affect on coagulant or flocculent water treatment processes.

## 14. Transport Information

UN Number: Not applicable  
 Proper Shipping Name: Not applicable  
 Technical Name: Not applicable  
 Transport Hazard Class: Not applicable  
 Packing Group: Not applicable  
 Environmental Hazards: Not applicable



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## 15. Regulatory Information

UN GHS Classification: Classified in accordance with GHS 5th revised edition.

WHMIS Classification: Classified in accordance with HPR August 29, 2016 revised edition.

CPR Compliance: This product has been classified in accordance with the hazard criteria of the CPR, and the SDS contains all the information required by the CPR.

CEPA Compliance: All ingredients of this product are listed on the DSL.

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## 16. Other Information

Creation Date: July 5, 2017

Revision Date: Updated October 2, 2017, October 18, 2018

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