

## SAFETY DATA SHEET

#### **AF-CLEAN**

### **Section 1. Identification**

GHS product identifier : AF-CLEAN

**Product code** : 57-G 105 (10 L), 57-G 108 (208 L)

SDS no. : L-146E
Product type : Liquid.

#### **Identified uses**

High-performance, VOC reduced cleaner and degreaser.

**Manufacturer**: Walter Surface Technologies Inc.

Bio-Circle - A Division of Walter Surface Technologies Inc.

810 Day Hill Road Windsor, CT 06095 United States

General Information: 18665925837

info.us@walter.com www.walter.com

Emergency telephone number (with hours of operation) : INFOTRAC® 1-800-535-5053, Outside U.S.A. call collect: 1-352-323-3500

24 hours/day, 7 days/week.

### Section 2. Hazards identification

**OSHA/HCS** status

: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture

: FLAMMABLE LIQUIDS - Category 3 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A

**GHS label elements** 

Hazard pictograms





Signal word

: Warning

**Hazard statements** 

: H226 - Flammable liquid and vapor. H319 - Causes serious eye irritation.

**Precautionary statements** 

**Prevention** 

: P280 - Wear protective gloves. Wear eye or face protection.

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking.

P241 - Use explosion-proof electrical, ventilating, lighting and all material-handling equipment.

P242 - Use only non-sparking tools.

P243 - Take precautionary measures against static discharge.

P233 - Keep container tightly closed.

P264 - Wash hands thoroughly after handling.



### Section 2. Hazards identification

Response : P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated

clothing. Rinse skin with water or shower.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 - If eye irritation persists: Get medical attention.

Storage : P403 - Store in a well-ventilated place.

P235 - Keep cool.

Disposal : P501 - Dispose of contents and container in accordance with all local, regional, national

and international regulations.

Hazards not otherwise

classified

: None known.

### Section 3. Composition/information on ingredients

Substance/mixture : Mixture

**Product code** : 57-G 105 (10 L), 57-G 108 (208 L)

#### **CAS** number/other identifiers

**CAS number** : Not applicable.

Ingredient name	%	CAS number
(2-Methoxymethylethoxy)propanol	10 - 30	34590-94-8
Isopropyl alcohol	5 - 10	67-63-0
2-(2-Butoxyethoxy)ethanol	1 - 5	112-34-5
Sodium N-(2-carboxyethyl)-N-dodecyl-β-alaninate	0.1 - 1	14960-06-6

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

### Section 4. First aid measures

#### **Description of necessary first aid measures**

Eye contact

: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Continue to rinse for at least 20 minutes. Get medical attention.

Inhalation

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact

: Flush contaminated skin with plenty of water. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately.



### Section 4. First aid measures

#### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

**Eye contact** : Causes serious eye irritation.

Inhalation : Exposure to decomposition products may cause a health hazard. Serious effects may

be delayed following exposure.

**Skin contact**: No known significant effects or critical hazards.

**Ingestion**: Irritating to mouth, throat and stomach.

#### Over-exposure signs/symptoms

**Eye contact**: Adverse symptoms may include the following:

pain or irritation watering redness

Inhalation: No known significant effects or critical hazards.Skin contact: No known significant effects or critical hazards.Ingestion: No known significant effects or critical hazards.

#### Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed.

The exposed person may need to be kept under medical surveillance for 48 hours.

**Specific treatments**: No specific treatment.

**Protection of first-aiders**: No action shall be taken involving any personal risk or without suitable training. It may

be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

### Section 5. Fire-fighting measures

#### **Extinguishing media**

Suitable extinguishing media

: Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

Unsuitable extinguishing media

: Do not use water jet or water-based fire extinguishers.

Specific hazards arising from the chemical

: Flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.

Hazardous thermal decomposition products

 Decomposition products may include the following materials: carbon dioxide

carbon monoxide nitrogen oxides metal oxide/oxides

Special protective actions for fire-fighters

: Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.



### Section 6. Accidental release measures

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

# For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

#### For emergency responders:

: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

#### **Environmental precautions**

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

#### Methods and materials for containment and cleaning up

#### **Small spill**

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

#### Large spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

### Section 7. Handling and storage

#### Precautions for safe handling

#### **Protective measures**

: Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

# Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.





### Section 7. Handling and storage

Conditions for safe storage, including any incompatibilities

: Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

### Section 8. Exposure controls/personal protection

#### **Control parameters**

Occupational exposure limits

Ingredient name	Exposure limits
(2-Methoxymethylethoxy)propanol	ACGIH TLV (United States, 3/2015). Absorbed through skin.
	STEL: 150 ppm 15 minutes.
	TWA: 606 mg/m³ 8 hours.
	TWA: 100 ppm 8 hours.
	STEL: 909 mg/m³ 15 minutes.
	NIOSH REL (United States, 10/2013). Absorbed through skin.
	STEL: 900 mg/m³ 15 minutes.
	STEL: 150 ppm 15 minutes.
	TWA: 600 mg/m³ 10 hours.
	TWA: 100 ppm 10 hours.
	OSHA PEL (United States, 2/2013). Absorbed through skin.
	TWA: 600 mg/m³ 8 hours.
Is a ground also had	TWA: 100 ppm 8 hours.
Isopropyl alcohol	ACGIH TLV (United States, 3/2015).
	STEL: 400 ppm 15 minutes.
	TWA: 200 ppm 8 hours.
	NIOSH REL (United States, 10/2013).
	STEL: 1225 mg/m³ 15 minutes. STEL: 500 ppm 15 minutes.
	TWA: 980 mg/m³ 10 hours.
	TWA: 400 ppm 10 hours.
	OSHA PEL (United States, 2/2013).
	TWA: 980 mg/m <sup>3</sup> 8 hours.
	TWA: 400 ppm 8 hours.
2-(2-Butoxyethoxy)ethanol	ACGIH TLV (United States, 3/2015).
2-(2-Datoxyctrioxy)ctriarior	TWA: 10 ppm 8 hours. Form: Inhalable fraction and vapor

# Appropriate engineering controls

: No personal respiratory protective equipment normally required. Avoid breathing dust/fume/gas/mist/vapors/spray. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

# **Environmental exposure** controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

#### **Individual protection measures**

**Hygiene measures** 

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.

#### **Eye/face protection**

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

#### **Skin protection**





### Section 8. Exposure controls/personal protection

**Hand protection** 

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Body protection** 

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear antistatic protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

: Use a NIOSH/MSHA approved respirator if there is a risk of exposure at levels exceeding the exposure limits. Advice should be sought from respiratory protection specialists.

### Section 9. Physical and chemical properties

**Appearance** 

Physical state : Liquid.

Color : Transparent. Odor Fragrant. **Odor threshold** : Not available.

pН : 9 to 11

: <0°C (<32°F) **Melting point** 

: 88.7 to 215.3°C (191.7 to 419.5°F) **Boiling point** 

Closed cup: 41°C (105.8°F) [Pensky-Martens.] Flash point

: >1 (Butyl acetate = 1) **Evaporation rate** 

Flammability (solid, gas) Lower and upper explosive

Vapor pressure

 Not available. : Not available.

(flammable) limits

Vapor density : Not available.

**Density** : 0.95 to 1.01 g/ml @ 20°C (68°F)

**Solubility** : Soluble in the following materials: cold water and hot water.

: >4.5 kPa (>33.753 mm Hg) [@ 20°C (68°F)]

Partition coefficient: n-

octanol/water

: Not available.

**Auto-ignition temperature** : Not available. **Decomposition temperature**: Not available.

**Viscosity** : Kinematic (@ 20°C (68°F)): 0.01 cm<sup>2</sup>/s (1 cSt)

VOC content (g/L) : 118



### Section 10. Stability and reactivity

Reactivity

: No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability** 

: The product is stable.

Possibility of hazardous reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid** 

: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

**Incompatible materials** 

: Reactive or incompatible with the following materials: oxidizing materials, acids and alkalis.

Hazardous decomposition products

: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

### Section 11. Toxicological information

#### Information on toxicological effects

#### **Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
Isopropyl alcohol	LD50 Dermal LD50 Oral		12800 mg/kg 5000 mg/kg	-
2-(2-Butoxyethoxy)ethanol	LD50 Dermal LD50 Oral		2700 mg/kg 4500 mg/kg	-

#### **Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
(2-Methoxymethylethoxy)propanol	Eyes - Mild irritant	Human	-	8 mg	-
, , , , , , , , ,	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	500 mg	-
Isopropyl alcohol	Eyes - Severe irritant	Rabbit	-	100 mg	_
	Skin - Mild irritant	Rabbit	-	500 mg	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 100 mg	_
	Eyes - Moderate irritant	Rabbit	-	10 mg	_
2-(2-Butoxyethoxy)ethanol	Eyes - Moderate irritant	Rabbit	-	24 hours 20 mg	_
, , , , , , , , , , , , , , , , , , , ,	Eyes - Severe irritant	Rabbit	-	20 mg	-

#### **Sensitization**

There is no data available.

#### Carcinogenicity

#### **Classification**

Product/ingredient name	OSHA	IARC	NTP	ACGIH	EPA	NIOSH
Isopropyl alcohol	None.	3	-	A4	-	-

#### Specific target organ toxicity (single exposure)

Name		Route of exposure	Target organs
Isopropyl alcohol	Category 3	Not applicable.	Narcotic effects

#### Specific target organ toxicity (repeated exposure)





### Section 11. Toxicological information

There is no data available.

#### **Aspiration hazard**

There is no data available.

Information on the likely routes of exposure

: Dermal contact. Eye contact. Inhalation. Ingestion.

#### Potential acute health effects

**Eye contact** : Causes serious eye irritation.

Inhalation : Exposure to decomposition products may cause a health hazard. Serious effects may

be delayed following exposure.

**Skin contact**: No known significant effects or critical hazards.

**Ingestion**: Irritating to mouth, throat and stomach.

#### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : Adverse symptoms may include the following:

pain or irritation

watering redness

Inhalation : No known significant effects or critical hazards.
 Skin contact : No known significant effects or critical hazards.
 Ingestion : No known significant effects or critical hazards.

#### Delayed and immediate effects and also chronic effects from short and long term exposure

**Short term exposure** 

**Potential immediate** : No known significant effects or critical hazards.

effects

Potential delayed effects: No known significant effects or critical hazards.

**Long term exposure** 

**Potential immediate** : No known significant effects or critical hazards.

effects

Potential delayed effects : No known significant effects or critical hazards.

Potential chronic health effects

General
 Carcinogenicity
 No known significant effects or critical hazards.
 Mutagenicity
 No known significant effects or critical hazards.
 Teratogenicity
 No known significant effects or critical hazards.
 Developmental effects
 No known significant effects or critical hazards.
 Fertility effects
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.

#### **Numerical measures of toxicity**

#### **Acute toxicity estimates**

Route	ATE value
Oral	38570.3 mg/kg
Dermal	66176.5 mg/kg



## Section 12. Ecological information

#### **Toxicity**

Product/ingredient name	Result	Species	Exposure
Isopropyl alcohol	Acute LC50 1400000 to 1950000 µg/L Marine water	Crustaceans - Crangon crangon	48 hours
	Acute LC50 1400000 μg/L	Fish - Gambusia affinis	96 hours
2-(2-Butoxyethoxy)ethanol	Acute LC50 1300000 µg/L Fresh water	Fish - Lepomis macrochirus	96 hours

#### Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
AF-CLEAN	-	>95%; 28 to 100 day(s)	Readily

#### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
(2-Methoxymethylethoxy)propanol Isopropyl alcohol	0.004 0.05	-	low low
2-(2-Butoxyethoxy)ethanol	1	-	low

#### **Mobility in soil**

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

### Section 13. Disposal considerations

#### **Disposal methods**

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

### **Section 14. Transport information**

	DOT Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-



## **Section 14. Transport information**

Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.
Additional information	-	-	-

**AERG**: Not applicable.

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage. Protect from freezing. Freezing will damage product and render it unusable.

Transport in bulk according : Not available. to Annex II of MARPOL 73/78 and the IBC Code

### **Section 15. Regulatory information**

U.S. Federal regulations

: TSCA 8(a) PAIR: (2-Methoxymethylethoxy)propanol; Cinnamaldehyde

TSCA 8(a) CDR Exempt/Partial exemption: Not determined TSCA 12(b) one-time export: (2-Methoxymethylethoxy)propanol

United States inventory (TSCA 8b): All components are listed or exempted.

Clean Water Act (CWA) 307: Diethyl phthalate Clean Water Act (CWA) 311: Ammonia, anhydrous

Clean Air Act Section 112

(b) Hazardous Air **Pollutants (HAPs)**  Listed

Clean Air Act Section 602

: Not listed

**Class I Substances** Clean Air Act Section 602

: Not listed

Class II Substances

: Not listed

**DEA List I Chemicals** (Precursor Chemicals)

**DEA List II Chemicals** (Essential Chemicals) : Not listed

#### **SARA 302/304**

#### Composition/information on ingredients

			SARA 302 TPQ		SARA 304 RQ	
Name	%	EHS	(lbs)	(gallons)	(lbs)	(gallons)
Ammonia, anhydrous	0 - 0.1	Yes.	500	-	100	-



## Section 15. Regulatory information

SARA 304 RQ : 555555.6 lbs / 252222.2 kg [67989.9 gal / 257369.6 L]

**SARA 311/312** 

Classification : Fire hazard

Immediate (acute) health hazard

#### Composition/information on ingredients

Name	%		Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
(2-Methoxymethylethoxy)propanol	10 - 30	Yes.	No.	No.	Yes.	No.
Isopropyl alcohol	5 - 10	Yes.	No.	No.	Yes.	No.
2-(2-Butoxyethoxy)ethanol	1 - 5	Yes.	No.	No.	Yes.	No.
Sodium N-(2-carboxyethyl)-N-dodecyl-β-alaninate	0.1 - 1	No.	No.	No.	Yes.	No.

#### **SARA 313**

	Product name	CAS number	%
Form R - Reporting requirements	The strain of th	67-63-0 112-34-5	5 - 10 1 - 5
Supplier notification		67-63-0 112-34-5	5 - 10 1 - 5

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

#### **State regulations**

Massachusetts : The following components are listed: (2-Methoxymethylethoxy)propanol; Isopropyl

alcohol

New York : None of the components are listed.

New Jersey : The following components are listed: (2-Methoxymethylethoxy)propanol; Isopropyl

alcohol; 2-(2-Butoxyethoxy)ethanol

Pennsylvania : The following components are listed: (2-Methoxymethylethoxy)propanol; Isopropyl

alcohol; 2-(2-Butoxyethoxy)ethanol

#### California Prop. 65

No products were found.

#### **International lists**

#### **National inventory**

**Australia** : All components are listed or exempted. Canada : All components are listed or exempted. China : All components are listed or exempted. : All components are listed or exempted. **Europe Japan** : All components are listed or exempted. **New Zealand** : All components are listed or exempted. **Philippines** : All components are listed or exempted. Republic of Korea : All components are listed or exempted.





### Section 16. Other information

#### **History**

Date of issue mm/dd/yyyy : 12/30/2015 Date of previous issue : 08/01/2015

Version : 1.2

**Revised Section(s)** : 2, 3, 8, 11, 12, 15, 16.

Prepared by : KMK Regulatory Services Inc.

Key to abbreviations : ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

**UN = United Nations** 

#### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.