## SAFETY DATA SHEET

#### **MVP-WWC Wire Wheel Plus**

## **Section 1. Identification**

**GHS** product identifier

: MVP-WWC Wire Wheel Plus

Other means of identification

: MVP-WWC

Product type : Liquid.

#### **Identified uses**

Wheel Cleaner to remove brake dust.

**Supplier's details** 

: MVP Distributing Inc. PO. Box 190441 Tel: 208-859-6000 Fax: 208-888-5593

Email:tom@mvpdistributing.com www.mvpdistributing.com

Emergency telephone number (with hours of operation) : CHEMTREC, U.S.: 1-800-424-9300 International: +1-703-527-3887

(24/7)

## 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

: ACUTE TOXICITY (oral) - Category 3
ACUTE TOXICITY (dermal) - Category 2
ACUTE TOXICITY (inhalation) - Category 4
SKIN CORROSION/IRRITATION - Category 1
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1

GHS label elements

Hazard pictograms





Signal word

: Danger

**Hazard statements** 

: Fatal in contact with skin. Toxic if swallowed. Harmful if inhaled.

Causes severe skin burns and eye damage.

**Precautionary statements** 

**Prevention** 

: Wear protective gloves. Wear eye or face protection. Wear protective clothing. Use only outdoors or in a well-ventilated area. Do not get in eyes, on skin, or on clothing. Avoid breathing vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

### Section 2. Hazards identification

#### Response

: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or physician. IF ON SKIN: Gently wash with plenty of soap and water. Immediately call a POISON CENTER or physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.

**Storage** 

: Store locked up.

**Disposal** 

: 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

Other means of

identification

: Mixture

: HF Wheel Acid

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

CAS number : Not applicable.

Product code :MVP-WWC

Ingredient name	%	CAS number
Phosphoric acid	5 - 20	7664-38-2
Sulfuric acid	5 - 20	7664-93-9
Hydrogen Fluoride	1 - 15	7664-39-3
Nonylphenol, ethoxylated	0.1 - 10	9016-45-9

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** 

: Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician.

#### Inhalation

: Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. 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.

### Section 4. First aid measures

#### Skin contact

: Get medical attention immediately. Call a poison center or physician. Gently wash with plenty of soap and water. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

#### Ingestion

: Get medical attention immediately. Call a poison center or physician. 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. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person.

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

#### Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : Harmful if inhaled. May give off gas, vapor or dust that is very irritating or corrosive to

the respiratory system.

Skin contact : Causes severe burns. Fatal in contact with skin.

Ingestion : Toxic if swallowed. May cause burns to mouth, throat and stomach.

#### Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:

> watering redness

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

: Adverse symptoms may include the following:

pain or irritation

redness

blistering may occur

Ingestion : Adverse symptoms may include the following:

stomach pains

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

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Specific treatments** : No specific treatment.

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

> suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water

before removing it, or wear gloves.

See toxicological information (Section 11)



## Section 5. Fire-fighting measures

#### **Extinguishing media**

Suitable extinguishing

media

Unsuitable extinguishing

media

: Use an extinguishing agent suitable for the surrounding fire.

: None known.

Specific hazards arising from the chemical

Hazardous thermal decomposition products

: No specific fire or explosion hazard.

 Decomposition products may include the following materials: carbon dioxide carbon monoxide
 Sulfur oxides phosphorus oxides

phosphorus oxides halogenated compounds

Special protective actions for fire-fighters

Special protective equipment for fire-fighters

: No special measures are required.

: 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. Do not breathe 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

**Spill** 

: Stop leak if without risk. Move containers from spill area. 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). The spilled material may be neutralized with sodium carbonate, sodium bicarbonate or sodium hydroxide. 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 get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from alkalis. 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. Remove contaminated clothing and protective equipment before entering eating areas.

# Conditions for safe storage, including any incompatibilities

: Store in accordance with local regulations. 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. Store locked up. Separate from alkalis. 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
Phosphoric acid	ACGIH TLV (United States, 6/2013).  STEL: 3 mg/m³ 15 minutes.  TWA: 1 mg/m³ 8 hours.  NIOSH REL (United States, 4/2013).  STEL: 3 mg/m³ 15 minutes.  TWA: 1 mg/m³ 10 hours.  OSHA PEL (United States, 2/2013).  TWA: 1 mg/m³ 8 hours.
Sulfuric acid	NIOSH REL (United States, 4/2013).  TWA: 1 mg/m³ 10 hours.  OSHA PEL (United States, 2/2013).  TWA: 1 mg/m³ 8 hours.  ACGIH TLV (United States, 6/2013).  TWA: 0.2 mg/m³ 8 hours. Form: thoracic fraction
Hydrogen Fluoride	ACGIH TLV (United States, 6/2013). Absorbed through skin.  CEIL: 2 ppm, (as F) TWA: 0.5 ppm, (as F) 8 hours.  NIOSH REL (United States, 4/2013).  CEIL: 5 mg/m³, (as F) 15 minutes.  CEIL: 6 ppm, (as F) 15 minutes.  TWA: 2.5 mg/m³, (as F) 10 hours.  TWA: 3 ppm 10 hours.  OSHA PEL (United States, 2/2013).  TWA: 2.5 mg/m³, (as F) 8 hours.  OSHA PEL Z2 (United States, 2/2013).  TWA: 3 ppm 8 hours.

## Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.



## Section 8. Exposure controls/personal protection

**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. Ensure that eyewash stations and safety showers are close to the workstation location.

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 and/or face shield.

**Skin 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. Recommended: Nitrile gloves.

**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.

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 properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

## Section 9. Physical and chemical properties

**Appearance** 

Physical state : Liquid. [Clear.]
Color : Transparent.
Odor : Sulfur.
Odor threshold : Not available.

pH : 1.5

Melting point : Not available.

Boiling point : Not available.

Flash point : Closed cup: 100°C (212°F) [Pensky-Martens.]

Evaporation rate : Not available.
Flammability (solid, gas) : Not available.
Lower and upper explosive : Not available.

(flammable) limits

**Vapor pressure** : 0.13 kPa (1 mm Hg) [room temperature]

Vapor density : >1 [Air = 1] Relative density : 1.08

**Solubility** : Soluble in water.



## Section 9. Physical and chemical properties

Partition coefficient: n-

octanol/water

: Not available.

Auto ignition towns

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

## 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 : No specific data.

**Incompatible materials**: Reactive or incompatible with the following materials: oxidizing materials, reducing

materials, organic materials, metals, alkalis and moisture.

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
Phosphoric acid	LD50 Oral	Rat	1.25 g/kg	-
Sulfuric acid	LD50 Oral	Rat	2140 mg/kg	-
Hydrogen Fluoride	LC50 Inhalation Gas.	Rat	1276 ppm	1 hours
, ,	LC50 Inhalation Vapor	Rat	1278 ppm	1 hours
	LC50 Inhalation Vapor	Rat	1100 mg/m <sup>3</sup>	60 minutes
	LD50 Oral	Rat	1276 mg/kg	-

#### **Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
Sulfuric acid	Eyes - Severe irritant	Rabbit	-	250 µg	-
	Eves - Severe irritant	Rabbit	_	0.5 minutes 5 mg	-
Hydrogen Fluoride	Eves - Severe irritant	Human	-	50 mg	-
, ,	Skin - Severe irritant	Rat	-	3 minutes 50%	-
Nonylphenol, ethoxylated	Eyes - Severe irritant	Guinea pig	-	20 mg	-
	Eyes - Severe irritant	Mouse	-	20 mg	-
	Eves - Severe irritant	Rabbit	-	20 mg	-
	Skin - Mild irritant	Human	-	72 hours 15 mg	-
				Intermittent	
	Skin - Mild irritant	Rabbit	-	500 mg	-

#### **Sensitization**

There is no data available.

**Carcinogenicity** 

**Classification** 



## **Section 11. Toxicological information**

Product/ingredient name	OSHA	IARC	NTP	ACGIH	EPA	NIOSH
Sulfuric acid	-	1	Known to be a human carcinogen.	A2	-	-
Hydrogen Fluoride	-	3	-	A4	-	-

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

There is no data available.

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

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 damage.

Inhalation : Harmful if inhaled. May give off gas, vapor or dust that is very irritating or corrosive to

the respiratory system.

**Skin contact**: Causes severe burns. Fatal in contact with skin.

Ingestion : Toxic if swallowed. May cause burns to mouth, throat and stomach.

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

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

pain watering redness

Inhalation : No known significant effects or critical hazards.

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

pain or irritation

redness

blistering may occur

**Ingestion**: Adverse symptoms may include the following:

stomach pains

#### 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 : No known significant effects or critical hazards.
 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.



## **Section 11. Toxicological information**

Fertility effects : No known significant effects or critical hazards.

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

#### **Acute toxicity estimates**

Route	ATE value
Dermal	101.7 mg/kg 102 mg/kg 11.22 mg/L

## **Section 12. Ecological information**

#### **Toxicity**

Product/ingredient name	Result	Species	Exposure
Phosphoric acid Sulfuric acid	Acute LC50 138 ppm Fresh water Acute LC50 42500 µg/l Marine water Acute LC50 42 ppm Fresh water	Fish - Gambusia affinis - Adult Crustaceans - Pandalus montagui - Adult Fish - Gambusia affinis - Adult	96 hours 48 hours 96 hours
Nonylphenol, ethoxylated	Acute EC50 12 mg/L Fresh water Acute LC50 1.23 mg/L Marine water Acute LC50 0.148 mg/L Fresh water Acute LC50 4700 μg/l Fresh water Chronic NOEC 8 mg/L Fresh water Chronic NOEC 35 μg/l Fresh water	Algae - Pseudokirchneriella subcapitata Crustaceans - Americamysis bahia Daphnia - Daphnia magna - Neonate Fish - Oncorhynchus mykiss Algae - Pseudokirchneriella subcapitata Fish - Oryzias latipes - Fry	96 hours 48 hours 48 hours 96 hours 96 hours 100 days

#### Persistence and degradability

There is no data available.

#### **Bioaccumulative potential**

There is no data available.

#### **Mobility in soil**

Soil/water partition coefficient (Koc)

: There is no data 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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

United States - RCRA Toxic hazardous waste "U" List



#### **MVP-WWC Wire Wheel Plus**

## Section 13. Disposal considerations

Ingredient	CAS#		Reference number
Hydrogen Fluoride	7664-39-3	Listed	U134

## **Section 14. Transport information**

	DOT Classification	IMDG	IATA
UN number	UN3264	UN3264	UN3264
UN proper shipping name	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Sulfuric acid, Phosphoric acid)	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Sulfuric acid, Phosphoric acid)	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Sulfuric acid, Phosphoric acid)
Transport hazard class(es)	8	8	8
Packing group	III	III	III
Environmental hazards	No.	No.	No.
Additional information	Reportable quantity 2040.8 lbs / 926.53 kg [226.63 gal / 857. 9 L] Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.	Emergency schedules (EmS) F-A, S-B	-

**AERG** : 154

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.

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: Nonylphenol, ethoxylated

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

Commerce control list precursor: Hydrogen Fluoride

United States inventory (TSCA 8b): All components are listed or exempted. Clean Water Act (CWA) 311: Phosphoric acid; Sulfuric acid; Hydrogen Fluoride

Clean Air Act (CAA) 112 regulated toxic substances: Hydrogen Fluoride

Clean Air Act Section 112 (b) Hazardous Air **Pollutants (HAPs)** 

: Listed



## **Section 15. Regulatory information**

Clean Air Act Section 602

**Class I Substances** 

: Not listed

Clean Air Act Section 602

: Not listed

**Class II Substances** 

**DEA List I Chemicals** 

: Not listed

(Precursor Chemicals)

**DEA List II Chemicals** 

: Listed

(Essential Chemicals)

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

#### Composition/information on ingredients

			SARA 302 TPQ		<b>SARA 304 F</b>	RQ
Name	%	EHS	(lbs)	(gallons)	(lbs)	(gallons)
Sulfuric acid	5 - 20	Yes.	1000	66.3	1000	66.3
Hydrogen Fluoride	1 - 15	Yes.	-	-	-	-

**SARA 304 RQ** : 14285.7 lbs / 6485.7 kg [1586.4 gal / 6005.3 L]

**SARA 311/312** 

Classification : Immediate (acute) health hazard

#### Composition/information on ingredients

Name	%		Sudden release of pressure		Immediate (acute) health hazard	Delayed (chronic) health hazard
Phosphoric acid Sulfuric acid Hydrogen Fluoride Nonylphenol, ethoxylated	5 - 20 5 - 20 1 - 15 0.1 - 10	No. No. No. No.	No. No. No.	No. No. No.	Yes. Yes. Yes.	No. No. No.

#### **SARA 313**

	Product name	CAS number	%
Form R - Reporting requirements		7664-93-9 7664-39-3	5 - 20 1 - 15
Supplier notification		7664-93-9 7664-39-3	5 - 20 1 - 15

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: Phosphoric acid; Sulfuric acid; Hydrogen Fluoride **New York** : The following components are listed: Phosphoric acid; Sulfuric acid; Hydrogen Fluoride : The following components are listed: Phosphoric acid; Sulfuric acid; Hydrogen Fluoride **New Jersey** : The following components are listed: Phosphoric acid; Sulfuric acid; Hydrogen Fluoride Pennsylvania

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

Ingredient name	Cancer	•		Maximum acceptable dosage level
Occupational exposures to strong inorganic acid mists containing sulfuric acid.	Yes.	No.	No.	No.



### **Section 16. Other information**

#### **History**

Date of issue mm/dd/yyyy : 02/15/2014

Version : 1

Revised Section(s) : Not applicable.

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.