



Celltechgen

For Research Only

SAFETY DATA SHEET

Coomassie Protein Assay Reagent

CTG-PA0017-A	The Celltechgen™ Coomassie (Bradford) Assay Kit,500ml	ISSUE DATE 9July 2019
CTG-PA0017-B	The Celltechgen™ Coomassie (Bradford) Assay Kit,1000ml	ISSUE DATE 9July 2019

Section1: Identification

A GHS product identifier : Coomassie Protein Assay Reagent

Other means of identification : Not available.

Product type : Liquid.

Product Number:

Chemical formula : Not applicable.

CAS # : Not applicable.

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

Not applicable

Supplier's details

Celltechgen LLC

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Emergency telephone: 1-877-994-4100

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 4
ACUTE TOXICITY: SKIN - Category 4
ACUTE TOXICITY: INHALATION - Category 4
SKIN CORROSION/IRRITATION - Category 1B
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [central nervous system (CNS), eyes, gastrointestinal tract, heart, kidneys, liver, respiratory tract and skin] - Category 2

GHS label elements

Hazard pictogram



Signal word : Danger

Hazard statements : Harmful if swallowed, in contact with skin or if inhaled.

. Causes severe skin burns and eye damage.

May cause damage to organs. (central nervous system (CNS), eyes, gastrointestinal tract, heart, kidneys, liver, respiratory tract, skin)

Precautionary statements

Prevention : Wear protective gloves. Wear eye or face protection. Wash hands thoroughly after handling. Use only outdoors or in a well-ventilated area. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

Response : IF exposed or if you feel unwell: Call a POISON CENTER or physician. 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: Wash with plenty of soap and water. Call a

POISON CENTER or physician if you feel unwell. 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.

Supplemental label : Do not taste or swallow. Wash thoroughly after handling.

elements

Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Other means of identification : Not available

CAS number/other identifiers

CAS number : Not applicable

Ingredient name	%	CAS number
phosphoric acid	7 - 10	7664-38-2
methanol	3 - 5	67-56-1

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 10 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. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact :	Get medical attention immediately. Call a poison center or physician. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 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 dentures if any. 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. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband

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. Harmful in contact with skin.

Ingestion : Harmful if swallowed. Corrosive to the digestive tract. Causes burns. May cause burns to mouth, throat and stomach.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:

pain
watering
redness

Inhalation : No specific data.

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 : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical In a fire or if heated, a pressure increase will occur and the container may burst

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
sulfur oxides
phosphorus oxides

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

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. Put on appropriate personal protective equipment.

For emergency responders : If specialised 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. 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. 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. 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. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. 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. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Store between the following temperatures: 2 to 8°C (35.6 to 46.4°F). 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. 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
phosphoric acid

Exposure limits
ACGIH (United States).

TWA: 1 mg/m³

STEL: 3 mg/m³

NIOSH (United States, 0/1994).

TWA: 1 mg/m³

STEL: 3 mg/m³

OSHA (United States, 0/1989).

TWA: 1 mg/m³

STEL: 3 mg/m³

ACGIH TLV (United States, 3/2012).

STEL: 3 mg/m³ 15 minutes.

TWA: 1 mg/m³ 8 hours.

NIOSH REL (United States, 1/2013).

STEL: 3 mg/m³ 15 minutes.

TWA: 1 mg/m³ 10 hours.

OSHA PEL (United States, 6/2010).

TWA: 1 mg/m³ 8 hours.

OSHA PEL 1989 (United States, 3/1989).

STEL: 3 mg/m³ 15 minutes.

TWA: 1 mg/m³ 8 hours.

methanol

ACGIH (United States, 0/2003). Absorbed through skin.

CEIL: 200 ppm

ACGIH (United States). Absorbed through skin.

STEL: 250 ppm

TWA: 200 ppm

MSHA (United States). Absorbed through skin.

TWA: 260 mg/m³

NIOSH (United States). Absorbed through skin.

STEL: 250 ppm

TWA: 20

OSHA (United States, 0/2003). Absorbed through skin.

STEL: 250 ppm

TWA: 200 ppm

ACGIH TLV (United States, 3/2012).

Absorbed through skin.

STEL: 328 mg/m³ 15 minutes.

STEL: 250 ppm 15 minutes.

TWA: 262 mg/m³ 8 hours. TWA:

NIOSH REL (United States, 1/2013).

Absorbed through skin.

STEL: 325 mg/m³ 15 minutes.

STEL: 250 ppm 15 minutes.

TWA: 260 mg/m³ 10 hours.

TWA: 200 ppm 10 hours.

OSHA PEL (United States, 6/2010).

TWA: 260 mg/m³ 8 hours.

TWA: 200 ppm 8 hours.

OSHA PEL 1989 (United States, 3/1989).

Absorbed through skin.

STEL: 325 mg/m³ 15 minutes.

STEL: 250 ppm 15 minutes.

TWA: 260 mg/m³ 8 hours.

TWA: 200 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
Environmental exposure controls	:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
<u>Individual protection measures</u>		
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. If inhalation hazards exist, a full-face respirator may be required instead.
<u>Skin protection</u>		
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.

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 air-fed 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.

Color : Not available.

Odor : Not available.

Odor threshold : Not available.

pH : Not available.

Melting point : Not available.

Boiling point : Not available.

Flash point : [Product does not sustain combustion.]

Burning time : Not applicable.

Burning rate : Not applicable.

Evaporation rate : Not available.

Flammability (solid, gas) (flammable) limit : Not available

Vapor pressure : Not available.

Vapor density : Not available.

Relative density : Not available.

Solubility : Not available.

Solubility in water : Not available.

Partition coefficient:nocyanol/water: Not available.

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

SADT : 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 : No specific data.

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 Species	Dose	Exposure
phosphoric acid	LD50 Dermal	Rabbit	2730 mg/kg	-
	LD50 Oral	Rat	1.25 g/kg	-
methanol	LC50 Inhalation Gas.	Rat	145000 ppm	1 hours
	LC50 Inhalation Gas.	Rat	64000 ppm	4 hours
	LC50 Inhalation Vapor	Rat	83.2 mg/l	4 hours
	LD50 Dermal	Rabbit	15800 mg/kg	-
	LD50 Oral	Rat	5600 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
methanol	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	40milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
methanol	None.	-	-

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
methanol	Category 1	Not determined	central nervous system (CNS), eyes, gastrointestinal tract, heart, kidneys, liver, respiratory tract and skin

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Eye contact	: Causes serious eye irritation..
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. Harmful in contact with skin..
Ingestion	: Harmful if swallowed. Corrosive to the digestive tract. Causes burns. 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 specific data.

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 effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

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.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Non-ionic Detergent	Acute LC50 138 ppm Fresh water	Fish - Gambusia affinis - Adult	48 hours
	Acute EC50 16.912 mg/l Marine water	Algae - Ulva pertusa	48 hours
	Acute EC50 10000000 µg/l Fresh water	Daphnia - Daphnia magna	96 hours

	Acute LC50 2500000 µg/l Marine water	Crustaceans - Crangon crangon -Adult	48 hours
	Acute LC50 100 mg/l Fresh water	Fish - Pimephales promelas – Juvenile (Fledgling, Hatchling Weanling)	96 hours
	Chronic NOEC 9.96 mg/l Marine water	Algae - Ulva pertusa	96 hours

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
methanol	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
methanol	-0.77	<10	low

Mobility in soil

Soil/water partition : Not available.

coefficient (K_{OC})

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 at all times 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 emptied 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

Ingredient	CAS #	Status	Reference number
Methanol (I); Methyl alcohol (I)	67-56-1	Listed	U154

Section 14. Transport information

	DOT Classification	IATA
UN number	Not regulated.	Not regulated.
UN proper shipping name	Corrosive liquid, acidic, inorganic, n.o.s. (Phosphoric acid)	Corrosive liquid, acidic, inorganic, n.o.s. (Phosphoric acid)
Transport hazard class(es)	- 	- 
Packing group	II	II
Environmental hazards	No	No
Additional information		-

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

Section 15. Regulatory information

U.S. Federal regulations : TSCA 8(a) CDR Exempt/Partial exemption: Not determined

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

Clean Water Act (CWA) 311: Phosphoric acid..

Clean Air Act Section 112 : listed

(b) Hazardous Air Pollutants (HAPs)

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Immediate (acute) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
phosphoric acid	7 – 10	No	No	No	No	No
methanol	3 - 5	Yes	No	No	Yes	No

SARA313

	Product name	CAS number	%
Form R - Reporting requirements	Phosphoric acid	7664-38-2	7 - 10
	methanol	67-56-1	3 - 5
Supplier notification	methanol	67-56-1	3 - 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: PHOSPHORIC ACID; METHANOL

New York : The following components are listed: Phosphoric acid; Methanol

New Jersey : The following components are listed: PHOSPHORIC ACID; dimethyl sulfoxide; METHYL ALCOHOL; METHANOL

Pennsylvania : The following components are listed: PHOSPHORIC ACID; dimethylsulfoxide;METHANOL

California Prop. 65

WARNING:

This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Ingredient name	Cancer	Reproductive	No significant risk	Maximum acceptable dosage level
methanol	No.	Yes	No.	No.

Canada inventory : All components are listed or exempted.

International regulations

International lists :
Australia inventory (AICS): All components are listed or exempted.
China inventory (IECSC): All components are listed or exempted..
Japan inventory: All components are listed or exempted.
Korea inventory: All components are listed or exempted..
Malaysia Inventory (EHS Register): Not determined.
New Zealand Inventory of Chemicals (NZIoC):
All components are listed or exempted.
Philippines inventory (PICCS): All components are listed or exempted..

Taiwan inventory (CSNN): Not determined

Chemical Weapons : Not listed

**Convention List Schedule I
Chemicals**

Chemical Weapons : Not listed

**Convention List Schedule
II Chemicals**

Chemical Weapons : Not listed

**Convention List Schedule
III Chemicals**

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health 3

Chronic Health Hazard

Flammability 0

Physical hazards 0

National Fire Protection Association (U.S.A.)

Health 1

Flammability 0

Instability/Reactivity 0

Special

The customer is responsible for determining the PPE code for this materia

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

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represented only by the standard in its entirety.

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

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.

End of the safety data sheets

