

SAFETY DATA SHEET



FlexaTrac™-NTA-200

Section 1. Identification

GHS product identifier : FlexaTrac™-NTA-200
Chemical name : Solution of Trisodium Nitrilotriacetate
Other means of identification : Not available.
Product type : Liquid.

Not available.

Supplier's details : Ascend Performance Materials Inc.
1010 Travis Street, Suite 900
Houston, TX 77002 USA
1-713-315-5700

Emergency telephone number (with hours of operation) : Emergency phone: CHEMTREC Toll Free Within USA: 800-424-9300 or +1-703-527-3887 (USA) or +(44)-870-8200418 (UK) or 800-101-2201/ +(65)-31581349 (Singapore) or +(61)-290372994 (Australia)

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 : EYE IRRITATION - Category 2A
CARCINOGENICITY - Category 2

GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : Causes serious eye irritation.
Suspected of causing cancer.

Precautionary statements

General : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves: > 8 hours (breakthrough time): butyl rubber
neoprene
nitrile rubber. Wear eye or face protection: Recommended: chemical splash goggles and/or face shield.. Wear protective clothing. Wash hands thoroughly after handling.

Response : IF exposed or concerned: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

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 : Mixture
Chemical name : Solution of Trisodium Nitrilotriacetate
Other means of identification : Not available.

CAS number/other identifiers

CAS number : Not applicable.

Ingredient name	%	CAS number
trisodium nitrilotriacetate	38 - 42	5064-31-3
water	58 - 62	7732-18-5

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. Check for and remove any contact lenses. Continue to rinse for at least 10 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 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. 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. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention if irritation develops. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : 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. Get medical attention. 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 irritation.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Adverse symptoms may include the following:
 redness
 pain or irritation
- Ingestion** : Harmful if swallowed.
 Irritating to mouth, throat and stomach.

Over-exposure signs/symptoms

Section 4. First aid measures

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
- Ingestion** : No specific data.

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 an extinguishing agent suitable for the surrounding fire.
This material will not burn or burns with difficulty.
- 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
nitrogen oxides
metal oxide/oxides
hydrogen cyanide
Ammonia.

- 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. 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).

Section 6. Accidental release measures

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. 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). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. 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 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. 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
trisodium nitrilotriacetate	Ascend Recommended Exposure Limit 1 mg/m ³ TWA (8 hours) 2 mg/m ³ Ceiling

- Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapor or mist, 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.

Individual protection measures

Section 8. Exposure controls/personal protection

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.
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. 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. > 8 hours (breakthrough time): butyl rubber neoprene nitrile rubber
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	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
Personal protective equipment (Pictograms)	: 

Section 9. Physical and chemical properties

Appearance

Physical state	: Liquid.
Color	: Clear. to Yellow.
Odor	: Not available.
Odor threshold	: Not available.
pH	: 10.5 to 11.5
Melting point	: -30°C (-22°F)
Boiling point	: 106°C (222.8°F)
Flash point	: Not applicable.
Evaporation rate	: <1 (butyl acetate = 1)
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: Not available.
Vapor density	:

Section 9. Physical and chemical properties

	Not available.
Relative density	: 1.29 to 1.31
Density	: 1.29 to 1.31 g/cm ³ [20°C]
Solubility in water	: Miscible in water.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: Not applicable.
Decomposition temperature	: Not applicable.
Viscosity	: Kinematic (room temperature): 0.1 to 0.15 cm ² /s (10 to 15 cSt)

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	Dose	Exposure
NTA Solution	LD50 Oral NOAEL Dermal	Rat Rabbit - Male, Female	4200 mg/kg >10000 mg/kg 24 hours per day 25% (aqueous)	- - -
trisodium nitrilotriacetate	LC50 Inhalation Dusts and mists LD50 Oral	Rat - Male Rat - Female	>5 mg/l 1300 mg/kg Single dose	4 hours - -
	LD50 Oral	Rat - Male	1600 mg/kg Single dose	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
trisodium nitrilotriacetate	Skin - Erythema/Eschar Skin - Erythema/Eschar	Rabbit Rabbit	1.5 0	24 hours 25% Pure Product (As Is)	5 days -
	Eyes - Irritant Eyes - Moderate irritant	Rabbit Rabbit	- -	24 hours 38% 24 hours Pure Product (As Is)	8 days 8 days

Conclusion/Summary

Skin	: Mild irritant
Eyes	: Causes severe eye irritation.

Sensitization

Section 11. Toxicological information

Product/ingredient name	Route of exposure	Species	Result
trisodium nitrilotriacetate	skin skin	Guinea pig Man	Not sensitizing Not sensitizing

Mutagenicity

Product/ingredient name	Test	Experiment	Result
trisodium nitrilotriacetate	471 Bacterial Reverse Mutation Test	Experiment: In vitro Subject: Bacteria	Negative
	476 <i>In vitro</i> Mammalian Cell Gene Mutation Test	Experiment: In vitro Subject: Mammalian-Animal	Negative
	474 Mammalian Erythrocyte Micronucleus Test	Experiment: In vivo Subject: Mammalian-Animal	Negative

Carcinogenicity

Product/ingredient name	Result	Species	Dose	Exposure
trisodium nitrilotriacetate	Positive - Oral - TD	Mouse - Male, Female	752 mg/kg LOAEL	18 weeks; 24 hours per day ad libitum
	Positive - Oral - TD	Rat - Male	100 mg/kg 0.1% (aqueous)	2 years; 24 hours per day ad libitum
	Positive - Oral - TD	Rat - Male, Female	92 mg/kg NOAEL	2 years; 24 hours per day ad libitum

Classification

Product/ingredient name	OSHA	IARC	NTP
trisodium nitrilotriacetate	-	2B	Reasonably anticipated to be a human carcinogen.

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
trisodium nitrilotriacetate	Positive	Negative	Negative	Rat - Male, Female	Oral: 450 mg/kg LOAEL	2 years; 24 hours per day ad libitum

Teratogenicity

Product/ingredient name	Result	Species	Dose	Exposure
trisodium nitrilotriacetate	Negative - Oral	Rabbit - Female	250 mg/kg NOAEL	9 days During Pregnancy

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : No known significant effects or critical hazards.

Section 11. Toxicological information

- Skin contact** : Adverse symptoms may include the following:
redness
pain or irritation
- Ingestion** : Harmful if swallowed.
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 specific data.
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
- Ingestion** : No specific data.

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

Product/ingredient name	Result	Species	Dose	Exposure
trisodium nitrilotriacetate	Chronic NOAEL Oral	Rat - Male, Female	92 mg/kg	2 years; 24 hours per day ad libitum 91 days
	Sub-chronic NOAEL Dermal	Rabbit - Male, Female	50 mg/kg	
	Sub-chronic NOAEL Inhalation Dusts and mists	Rat - Male, Female	0.21 mg/l	28 days; 6 hours per day 5 workdays/week.

- General** : No known significant effects or critical hazards.
- Carcinogenicity** : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
- 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
trisodium nitrilotriacetate	Acute LC50 80 mg/l Fresh water	Crustaceans - Gammarus pseudolimnaeus	96 hours
	Acute LC50 400 mg/l Fresh water	Crustaceans - Physa heterostropha	48 hours
	Acute LC50 560 mg/l Fresh water	Daphnia	48 hours
	Acute LC50 298 mg/l Fresh water	Fish - Lepomis macrochirus	96 hours
	Acute LC50 103 mg/l Fresh water	Fish - Pimephales promelas	96 hours
	Chronic EC10 22.8 mg/l (biomass) Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Chronic EC10 74.8 mg/l (growth rate) Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Chronic EC50 91.5 mg/l Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Chronic EC50 143 mg/l Fresh water	Algae - Navicula seminulum	5 days
	Chronic LC50 90.5 mg/l Fresh water	Fish - Oncorhynchus mykiss - Embryo	27 days
	Chronic NOEC 1.43 mg/l Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Chronic NOEC 9.3 mg/l Fresh water	Crustaceans - Gammarus psuedolimnaeus	21 weeks
	Chronic NOEC 18.7 mg/l Fresh water	Crustaceans - Gammarus psuedolimnaeus	21 weeks
	Chronic NOEC 12.5 mg/l Fresh water	Crustaceans - Helisoma trivolvis	120 days
	Chronic NOEC 100 mg/l Fresh water	Daphnia	21 days
	Chronic NOEC 54 mg/l Fresh water	Fish - Pimephales promelas	229 days

Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
trisodium nitrilotriacetate	-	100 % - Readily - 28 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
trisodium nitrilotriacetate	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
trisodium nitrilotriacetate	-2.62	-	low

Mobility in soil

Soil/water partition coefficient (K_{oc}) : 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 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

Section 13. Disposal considerations

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.

RCRA classification : Not regulated.

Section 14. Transport information

	Transport information
UN number	Not regulated.
UN proper shipping name	-
Transport hazard class(es)	-
Packing group	-
Environmental hazards	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 and the IBC Code : Not available.

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 8(a) CDR Exempt/Partial exemption:** Not determined
TSCA (Toxic Substance Control Act): This product is listed on the TSCA Inventory.

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

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

Section 15. Regulatory information

Classification : Immediate (acute) health hazard
Delayed (chronic) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
trisodium nitrilotriacetate	38 - 42	No.	No.	No.	Yes.	Yes.

State regulations

Massachusetts : The following components are listed: NITRILOTRIACETIC ACID (NTA) TRISODIUM
New York : None of the components are listed.
New Jersey : None of the components are listed.
Pennsylvania : None of the components are listed.

California Prop. 65

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

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Solution of Trisodium Nitrilotriacetate	Yes.	No.	175 µg/day (ingestion)	No.

Canadian lists

Canadian NPRI : The following components are listed: Nitrilotriacetic acid (and its salts)
CEPA Toxic substances : None of the components are listed.
Canada inventory : Listed in DSL

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

International lists

National inventory

Australia : All components are listed or exempted.
Canada : Listed in DSL
China : All components are listed or exempted.
Europe : All components are listed or exempted.
Japan : **Japan inventory (ENCS)**: All components are listed or exempted.
Japan inventory (ISHL): Not determined.
Malaysia : Not determined.
New Zealand : All components are listed or exempted.
Philippines : All components are listed or exempted.

Section 15. Regulatory information

Republic of Korea : All components are listed or exempted.

Taiwan : All components are listed or exempted.

Section 16. Other information

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

Health	*	2
Flammability		0
Physical hazards		0

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.

The customer is responsible for determining the PPE code for this material.

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



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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.

Procedure used to derive the classification

Classification	Justification
Eye Irrit. 2A, H319 Carc. 2, H351	Calculation method Calculation method

History

Date of printing : 8/30/2017

Date of issue/Date of revision : 8/30/2017

Date of previous issue : No previous validation

Version : 1

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 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

References : Not available.

Indicates information that has changed from previously issued version.

Notice to reader

Section 16. Other information

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.