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# SAFETY DATA SHEET

### MARIGOLD YELLOW

Section 1. Identification		
GHS product identifier	:	MARIGOLD YELLOW
Chemical name	:	Mixture
CAS number	:	Mixture
Other means of identification	:	CC10220277
Product type	:	liquid
Relevant identified uses of the subst	tance	or mixture and uses advised against
Product use	:	Industrial applications. Plastics.
Supplier's details	:	POLYONE CORPORATION
		ColorMatrix Group Inc.
		680 North Rocky River Drive, Berea, Ohio, 44017-1628, USA
		+1 216 622 0100
Emergency telephone number	:	CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure
(with hours of operation)		or accident).

# Section 2. Hazards identification

This mixture has not been evaluated as a whole for health effects. Information provided on health effects of this product is based on the individual components. However, some vapors or contaminants may be released upon heating and the end-user (fabricator) must take the necessary precautions (mechanical ventilation, respiratory protection, etc.) to protect employees from exposure. See sections 8 and 11 for special precautions. After handling, always wash hands thoroughly with soap and water.

OSHA/HCS status	:	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	:	SKIN CORROSION/IRRITATION - Category 2 SKIN SENSITIZATION - Category 1

#### **GHS label elements**



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Hazard pictograms	:	
Signal word Hazard statements	:	Warning Causes skin irritation. May cause an allergic skin reaction.
Precautionary statements		
General	:	Not applicable.
Prevention	:	Wear protective gloves. Avoid breathing vapor. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.
Response	:	IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention.
Storage	:	Not applicable.
Disposal	:	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	:	None known.
Hazards not otherwise classified	:	None known.

# Section 3. Composition/information on ingredients

Substance/mixture	:	Mixture
Chemical name	:	Mixture
Other means of identification	:	CC10220277

#### CAS number/other identifiers

Ingredient name	%	CAS number
Miscellaneous Compounds Distillates, petroleum, hydrotreated middle	10 - 30	Not available.
Titanium dioxide	10 - 30	13463-67-7
Bis (1,2,2,6,6-pentamethyl-4-piperidinyl) sebacate	1 - 5	41556-26-7



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Decanedioic acid, methyl 1,2,2,6,6-pentamethyl-4-piperidinyl	0.1 - 1	82919-37-7
ester		

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 adverse health effects persist or are severe. 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	:	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. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. 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 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.

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**Potential acute health effects** 

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Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

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

Eye contact Inhalation Skin contact Ingestion	::	Causes serious eye irritation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure. Causes skin irritation. May cause an allergic skin reaction. 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 specific data.
Skin contact	:	Adverse symptoms may include the following: irritation redness
Ingestion	:	No specific data.
Indication of immediate medical att	entio	n 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. 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 : In case of fire, use water spray (fog), foam, dry chemical or CO<sub>2</sub>.



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Unsuitable extinguishing media	:	None known.
Specific hazards arising from the chemical Hazardous thermal decomposition products	:	In a fire or if heated, a pressure increase will occur and the container may burst. Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides phosphorus oxides metal oxide/oxides
Special protective actions for fire- fighters Special protective equipment 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. 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
For emergency responders	:	inadequate. Put on appropriate personal protective equipment. 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 containm	nent a	nd 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
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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). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. 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 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



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Titanium dioxide	OSHA PEL 1989 (1989-03-01) PEL: Permissible Exposure Level 10 mg/m3 Form: Total dust OSHA PEL (1993-06-30) PEL: Permissible Exposure Level 15 mg/m3 Form: Total dust ACGIH TLV (1996-05-18) TLV-TWA: Threshold Limit Value - Time weighted average PEL: Permissible Exposure Level 10 mg/m3
	<ul> <li>Good general ventilation should be sufficient to control worker exposure to airborne contaminants.</li> <li>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.</li> </ul>
Individual protection measures	
	<ul> <li>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. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.</li> <li>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.</li> </ul>
Skin protection	
	<ul> <li>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.</li> <li>Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be</li> </ul>



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	approved by a specialist before handling this product.

	approved by a specialist before nanoling tins 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**

:	liquid [liquid]
:	YELLOW
:	Faint odor.
:	Not available.
:	Lower: Not available.
	Upper: Not available.
:	Not available.
:	Not available.
:	Not available.
:	Not available.
:	insoluble in water.
:	Not available.
:	Not available.
:	Not available.
:	Not available.
:	Dynamic: Not available.
	Kinematic: Not available.

# Section 10. Stability and reactivity



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Reactivity	:	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	:	Stable under recommended storage and handling conditions (see Section 7).
Possibility of hazardous reactions	:	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	:	Keep away from extreme heat and oxidizing agents.
Incompatible materials	:	Keep away from strong acids. Oxidizer.
Hazardous decomposition products	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

# Section 11. Toxicological information

This mixture has not been evaluated as a whole for health effects. Exposure effects listed are based on existing health data for the individual components which comprise the mixture.

#### **Information on toxicological effects**

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Titanium dioxide				
	LC50 Inhalation	Rat - Male	6.82 Mg/l	4 h
	LD50 Dermal	Rabbit	> 5,000 mg/kg	-
Bis (1,2,2,6,6-pentamethyl-4-p	piperidinyl) sebacate			
Decanedioic acid, methyl 1,2,2	2,6,6-pentamethyl-4-	piperidinyl ester		
Conclusion/Summary	: Mixtu	re.Not fully tested.		
<u>Irritation/Corrosion</u> Conclusion/Summary Skin Eyes Respiratory <u>Sensitization</u>	: Mixtu	rre.Not fully tested. rre.Not fully tested. rre.Not fully tested.		
Conclusion/Summary Skin Respiratory <u>Mutagenicity</u>		rre.Not fully tested. rre.Not fully tested.		



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Conclusion/Summary	:	Mixture.Not	fully tested.	
<b>Carcinogenicity</b>				
Conclusion/Summary <u>Classification</u>	:	Mixture.Not	fully tested.	
Product/ingredient name	OSHA	IARC	NTP	
Titanium dioxide		2B		
<b>Reproductive toxicity</b>				
Conclusion/Summary	:	Mixture.Not	fully tested.	
<u>Teratogenicity</u>				
Conclusion/Summary	:	Mixture.Not	fully tested.	
Specific target organ toxicity Not available.	<u>(single exp</u>	osure)		
Specific target organ toxicity Not available.	<u>r (repeated e</u>	<u>xposure)</u>		
<u>Aspiration hazard</u> Product/ingredient name			Result	
Miscellaneous Compounds Distillates, petroleum,     ASPIRATION HAZARD - Category 1       hydrotreated middle     ASPIRATION HAZARD - Category 1				
Information on the likely rou exposure	tes of :	Not available	·.	
Potential acute health effects				
Eye contact	:	Causes serior	as eye irritation.	
Inhalation	: Exposure to decomposition products may cause a health hazard.			
Skin contact	<ul><li>Serious effects may be delayed following exposure.</li><li>Causes skin irritation. May cause an allergic skin reaction.</li></ul>			
Ingestion	:		nouth, throat and stomach.	
-		-		
Symptoms related to the phys	sical, chemic	al and toxico	logical characteristics	
Eye contact	:	Adverse sympain or irritat	ptoms may include the following: ion	
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		watering
		redness
Inhalation	:	No specific data.
Skin contact	:	Adverse symptoms may include the following:
		irritation
		redness
Ingestion	:	No specific data.
Delayed and immediate effects and	l also c	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		
Conclusion/Summary	:	Mixture.Not fully tested.
General	:	Once sensitized, a severe allergic reaction may occur when
		subsequently exposed to very low levels.
Carcinogenicity	:	No known significant effects or critical hazards.
Mutagenicity	:	No known significant effects or critical hazards.
Teratogenicity	:	No known significant effects or critical hazards.
<b>Developmental effects</b>	:	No known significant effects or critical hazards.
Fertility effects	:	No known significant effects or critical hazards.

#### Numerical measures of toxicity

#### Acute toxicity estimates

Route	ATE value
Oral	274,589.5 mg/kg
Route	ATE value
Inhalation (dusts and mists)	7.404 mg/l

# Section 12. Ecological information



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#### **Toxicity**

Product/ingredient name	Result	Species	Exposure
Titanium dioxide			
	Acute LC50 > 1,000,000 μg/l	Fish - Mummichog	96 h
	Marine water		
	Acute LC50 > 1,000 mg/l Fresh water	Fish - Fathead minnow	96 h
	Acute LC50 13 mg/l Fresh water	Aquatic invertebrates. Water flea	48 h
	Acute EC50 19.3 mg/l Fresh water	Aquatic invertebrates. Water flea	48 h
	Acute EC50 27.8 mg/l Fresh water	Aquatic invertebrates. Water flea	48 h
	Acute EC50 35.306 mg/l Fresh	Aquatic invertebrates.	48 h
	water	Water flea	
MARIGOLD YELLOW			
Remarks - Acute - Aquatic invertebrates.:	Dangerous for the environment: May cause long term adverse effects in the aquatic environment.		
Conclusion/Summary	: Dangerous for the envir in the aquatic environme	onment: May cause long te ent.	rm adverse effects
Persistence and degradabilit	<u>Y</u>		
Conclusion/Summary	: Not available.		
Conclusion/Summary	: Dangerous for the envir in the aquatic environme	onment: May cause long te	rm adverse effects

#### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
Titanium dioxide		352.00	low

#### **Mobility in soil**

Soil/water partition coefficient	:	Not available.
(KOC)		
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



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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 Acute hazardous waste "P" List: Not listed

United States - RCRA Toxic hazardous waste "U" List: Not listed

### Section 14. Transport information

U.S. DOT Classification	:	Not regulated for transportation.
ICAO/IATA	:	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate), 9, PGIII, Marine Pollutant
IMO/IMDG (maritime)	:	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate), 9, PGIII, Marine Pollutant

### Section 15. Regulatory information

<u>PolyOne</u>

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		United States - TSCA 6 - Final risk management: Not listed United States - TSCA 6 - Proposed risk management: Not listed United States - TSCA 8(a) - Chemical risk rules: Not listed United States - TSCA 8(a) - Dioxin/Furane precusor: Not listed United States - TSCA 8(a) - Chemical Data Reporting (CDR): Not determined United States - TSCA 8(a) - Preliminary assessment report (PAIR): Not listed United States - TSCA 8(a) - Preliminary assessment report (PAIR): Not listed United States - TSCA 8(c) - Significant adverse reaction (SAR): Not listed United States - TSCA 8(d) - Health and safety studies: Not listed United States - EPA Clean water act (CWA) section 307 - Priority pollutants: Listed Chromium (III) oxide United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Flammable substances: Not listed United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Flammable substances: Not listed United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Toxic substances: Not listed United States - Department of commerce - Precursor chemical: Not listed
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	:	Not listed
Chemicals) DEA List II Chemicals (Essential	:	Not listed

#### US. EPA CERCLA Hazardous Substances (40 CFR 302)

not applicable

SARA 311/312

Classification

**Chemicals**)

: Immediate (acute) health hazard

#### **Composition/information on ingredients**

Name	%	Classification
Miscellaneous Compounds	10 - 30	AH



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Distillates, petroleum, hydrotreated middle		
Titanium dioxide	10 - 30	СН
Bis (1,2,2,6,6-pentamethyl-4- piperidinyl) sebacate	1 - 5	АН
Decanedioic acid, methyl 1,2,2,6,6- pentamethyl-4-piperidinyl ester	0.1 - 1	АН

#### SARA 313

Not applicable.

State regulations		
Massachusetts	:	The following components are listed:
		Titanium dioxide
New York	:	None of the components are listed.
New Jersey	:	The following components are listed:
-		Titanium dioxide
Pennsylvania	:	The following components are listed: Titanium dioxide

<u>California Prop. 65</u> WARNING: This product contains a chemical known to the State of California to cause cancer.

United States inventory (TSCA 8b)	:	All components are listed or exempted.
Canada inventory	:	All components are listed or exempted.
International regulations		
International lists	:	<ul> <li>Australia inventory (AICS): All components are listed or exempted.</li> <li>Taiwan inventory (CSNN): Not determined.</li> <li>Malaysia Inventory (EHS Register): Not determined.</li> <li>EINECS: All components are listed or exempted.</li> <li>Japan inventory: Not determined.</li> <li>China inventory (IECSC): All components are listed or exempted.</li> <li>Korea inventory: All components are listed or exempted.</li> <li>New Zealand Inventory of Chemicals (NZIoC): Not determined.</li> <li>Philippines inventory (PICCS): All components are listed or exempted.</li> </ul>
Chemical Weapons Convention List Schedule I Chemicals Chemical Weapons Convention List Schedule II Chemicals	:	Not listed

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Chemical Weapons Convention List Schedule III Chemicals

: Not listed

# Section 16. Other information

<u>History</u>		
Date of printing	:	06/20/2015
Date of issue/Date of revision	:	06/19/2015
Date of previous issue	:	00/00/0000
Version	:	1.0
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 = Internediate 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 Not available.
NCICI CIICES	•	NOT available.

#### Notice to reader

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