

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Mixture  
 Product name : Custom 8270 Appendix IX Mix  
 Product code : AL0-130094  
 Product group : Trade product

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

##### 1.2.1. Relevant identified uses

Main use category : Laboratory Use  
 Industrial/Professional use spec : Industrial  
 For professional use only

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

Phenova  
 6390 Joyce Dr. Suite 100  
 80403 Golden, CO - United States  
 T 1-866-942-2978 - F 1-866-283-0269  
[info@phenova.com](mailto:info@phenova.com) - [www.phenova.com](http://www.phenova.com)

#### 1.4. Emergency telephone number

Emergency number : ChemTel Assistance (US/Canada) 1-800-255-3924  
 ChemTel Assistance (International) +1 813-248-0585

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Carc. 2 H351  
 Aquatic Chronic 2 H411

##### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Carc. Cat. 3; R40  
 N; R51/53  
 Full text of R-phrases: see section 16

##### Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

##### Labeling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS08

GHS09

Signal word (CLP) : Warning  
 Hazardous ingredients : Methylene Chloride  
 Hazard statements (CLP) : H351 - Suspected of causing cancer  
 H411 - Toxic to aquatic life with long lasting effects  
 Precautionary statements (CLP) : P273 - Avoid release to the environment  
 P280 - Wear protective gloves/protective clothing/eye protection/face protection  
 P308+P313 - IF exposed or concerned: Get medical advice/attention  
 P391 - Collect spillage  
 P403+P235 - Store in a well-ventilated place. Keep cool  
 P501 - Dispose of contents/container to hazardous or special waste collection point, in

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accordance with local, regional, national and/or international regulation

EUH phrases : EUH208 - Contains atrazine(1912-24-9). May produce an allergic reaction  
 No labeling applicable

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Methylene Chloride (Component)	(CAS No) 75-09-2 (EC no) 200-838-9 (EC index no) 602-004-00-3	99.3	Carc. 2, H351
atrazine (Component)	(CAS No) 1912-24-9 (EC no) 217-617-8 (EC index no) 613-068-00-7	0.1	Acute Tox. 4 (Oral), H302 Skin Sens. 1, H317 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
1,2,4,5-tetrachlorobenzene (Component)	(CAS No) 95-94-3 (EC no) 202-466-2	0.1	Aquatic Chronic 2, H411
caprolactam (Component) substance with a Community workplace exposure limit	(CAS No) 105-60-2 (EC no) 203-313-2 (EC index no) 613-069-00-2	0.1	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
2,3,4,6-tetrachlorophenol (Component)	(CAS No) 58-90-2 (EC no) 200-402-8 (EC index no) 604-013-00-8	0.1	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410
Name	Product identifier	Specific concentration limits	
2,3,4,6-tetrachlorophenol (Component)	(CAS No) 58-90-2 (EC no) 200-402-8 (EC index no) 604-013-00-8	(C >= 5) Skin Irrit. 2, H315 (C >= 5) Eye Irrit. 2, H319	

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation : Allow victim to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

### 4.2. Most important symptoms and effects, both acute and delayed

No additional information available

### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : Do not use a heavy water stream.

### 5.2. Special hazards arising from the substance or mixture

No additional information available

### 5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

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### SECTION 6: Accidental release measures

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

##### 6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

##### 6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up in absorbent material. Collect spillage.

#### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Hygiene measures : Gently wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container closed when not in use. Keep container tightly closed and in a well-ventilated place. Keep away from any flames or sparking source.

Incompatible materials : Direct sunlight.

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

No additional information available

#### 8.2. Exposure controls

Appropriate engineering controls : Either local exhaust or general room ventilation is usually required.

Personal protective equipment : Avoid all unnecessary exposure. Gloves. Protective clothing. Protective goggles. Safety glasses.



Hand protection : Wear chemically resistant protective gloves. Wear suitable gloves resistant to chemical penetration.

Eye protection : Chemical goggles or safety glasses. Safety glasses.

Skin and body protection : Wear chemically protective gloves, lab coat or apron to prevent prolonged or repeated skin contact.

Respiratory protection : Wear appropriate mask.

Other information : Do not eat, drink or smoke during use.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state : Liquid

Color : Colorless.

Odor : characteristic.

pH : No data available

Melting point : No data available

Freezing point : No data available

Boiling point : No data available

Flash point : No data available

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Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable
Relative density	: No data available
Solubility	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosion limits	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Not established.

### 10.3. Possibility of hazardous reactions

Not established.

### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

No additional information available

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

<b>atrazine (1912-24-9)</b>	
LD50 oral rat	672 mg/kg (Rat)
LD50 dermal rat	7500 mg/kg (Rat)
LC50 inhalation rat (mg/l)	5.2 mg/l/4h (Rat)
ATE CLP (oral)	672.000 mg/kg body weight
ATE CLP (dermal)	7500.000 mg/kg body weight
ATE CLP (vapors)	5.200 mg/l/4h
ATE CLP (dust, mist)	5.200 mg/l/4h
<b>caprolactam (105-60-2)</b>	
LD50 oral rat	1210 mg/kg (Rat; Equivalent or similar to OECD 401; Experimental value; 1475 mg/kg bodyweight; Rat; Equivalent or similar to OECD 401; Experimental value; 1876 mg/kg bodyweight; Rat)
LD50 dermal rat	> 2000 mg/kg (Rat; Experimental value; Other)
LD50 dermal rabbit	1438 mg/kg (Rabbit)
ATE CLP (oral)	1210.000 mg/kg body weight
ATE CLP (dermal)	1438.000 mg/kg body weight
ATE CLP (gases)	4500.000 ppmV/4h
ATE CLP (vapors)	11.000 mg/l/4h
ATE CLP (dust, mist)	1.500 mg/l/4h
<b>1,2,4,5-tetrachlorobenzene (95-94-3)</b>	
LD50 oral rat	3105 mg/kg (Rat)
ATE CLP (oral)	3105.000 mg/kg body weight
<b>2,3,4,6-tetrachlorophenol (58-90-2)</b>	
LD50 oral rat	140 mg/kg (Rat)
LD50 dermal rat	485 mg/kg (Rat)
ATE CLP (oral)	140.000 mg/kg body weight
ATE CLP (dermal)	485.000 mg/kg body weight
<b>Methylene Chloride (75-09-2)</b>	
LD50 oral rat	> 2000 mg/kg (Rat; Literature study)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit; Literature study)

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Skin corrosion/irritation	:	Not classified Based on available data, the classification criteria are not met
Serious eye damage/irritation	:	Not classified Based on available data, the classification criteria are not met
Respiratory or skin sensitization	:	Not classified Based on available data, the classification criteria are not met
Germ cell mutagenicity	:	Not classified Based on available data, the classification criteria are not met
Carcinogenicity	:	Suspected of causing cancer. May cause cancer
Reproductive toxicity	:	Not classified Based on available data, the classification criteria are not met
Specific target organ toxicity (single exposure)	:	Not classified Based on available data, the classification criteria are not met
Specific target organ toxicity (repeated exposure)	:	Not classified Based on available data, the classification criteria are not met
Aspiration hazard	:	Not classified Based on available data, the classification criteria are not met
Potential Adverse human health effects and symptoms	:	Based on available data, the classification criteria are not met.

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - water : Toxic to aquatic life with long lasting effects.

<b>atrazine (1912-24-9)</b>	
EC50 Daphnia 1	36.5 mg/l (EC50; 48 h)
LC50 fish 2	4.5 - 8.8 mg/l (LC50; 96 h)
<b>caprolactam (105-60-2)</b>	
EC50 Daphnia 1	> 1000 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)
Threshold limit algae 2	> 1000 mg/l (ErC50; OECD 201: Alga, Growth Inhibition Test; 72 h; Pseudokirchneriella subcapitata; Static system; Fresh water; Experimental value)
<b>2,3,4,6-tetrachlorophenol (58-90-2)</b>	
LC50 fish 1	0.14 mg/l (LC50; 96 h; Lepomis macrochirus)
EC50 Daphnia 1	0.01 mg/l (EC50; 48 h)
Threshold limit algae 2	1.3 mg/l (EC50; 96 h)
<b>Methylene Chloride (75-09-2)</b>	
LC50 fish 1	193 mg/l (LC50; 96 h; Pimephales promelas)
EC50 Daphnia 1	168.2 mg/l (EC50; 48 h)

#### 12.2. Persistence and degradability

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Persistence and degradability	May cause long-term adverse effects in the environment.
<b>atrazine (1912-24-9)</b>	
Persistence and degradability	Not readily biodegradable in water. Biodegradability in soil: no data available.
<b>caprolactam (105-60-2)</b>	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Highly mobile in soil.
Biochemical oxygen demand (BOD)	0.6 g O <sub>2</sub> /g substance (20 D)
Chemical oxygen demand (COD)	0.03 g O <sub>2</sub> /g substance (KMnO <sub>4</sub> )
<b>1,2,4,5-tetrachlorobenzene (95-94-3)</b>	
Persistence and degradability	Not readily biodegradable in water. Forming sediments in water. Adsorbs into the soil.
<b>2,3,4,6-tetrachlorophenol (58-90-2)</b>	
Persistence and degradability	Not readily biodegradable in water. Non degradable in the soil.
<b>Methylene Chloride (75-09-2)</b>	
Persistence and degradability	Not readily biodegradable in water. Biodegradable in the soil.

#### 12.3. Bioaccumulative potential

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Bioaccumulative potential	Not established.

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<b>atrazine (1912-24-9)</b>	
BCF fish 1	3 - 4 (BCF)
BCF fish 2	3 - 10 (BCF)
BCF other aquatic organisms 1	52 (BCF; 24 h)
BCF other aquatic organisms 2	10 - 83 (BCF)
Log Pow	2.64
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
<b>caprolactam (105-60-2)</b>	
BCF other aquatic organisms 1	< 1 (BCF; Other)
Log Pow	0.12 (Experimental value; Equivalent or similar to OECD 107; 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
<b>1,2,4,5-tetrachlorobenzene (95-94-3)</b>	
BCF fish 1	13000 (BCF)
BCF fish 2	1650 - 4830 (BCF)
BCF other aquatic organisms 1	> 5012 (BCF)
Log Pow	4.5 - 4.98
Bioaccumulative potential	High potential for bioaccumulation (BCF > 5000).
<b>2,3,4,6-tetrachlorophenol (58-90-2)</b>	
BCF fish 1	200 (BCF; 24 h)
BCF fish 2	93 (BCF; 24 h)
Log Pow	4.1 - 4.8
Bioaccumulative potential	Potential for bioaccumulation ( $4 \geq \text{Log Kow} \leq 5$ ).
<b>Methylene Chloride (75-09-2)</b>	
BCF fish 1	2 - 40 (BCF)
Log Pow	1.25 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
<b>12.4. Mobility in soil</b>	
<b>atrazine (1912-24-9)</b>	
Ecology - soil	Toxic to flora. Not toxic to bees.
<b>caprolactam (105-60-2)</b>	
Log Koc	log Koc,Other; 1.76; Calculated value
<b>Methylene Chloride (75-09-2)</b>	
Surface tension	0.028 N/m (20 °C)
Ecology - soil	May be harmful to plant growth, blooming and fruit formation.
<b>12.5. Results of PBT and vPvB assessment</b>	
No additional information available	
<b>12.6. Other adverse effects</b>	
Additional information	: Avoid release to the environment
<b>SECTION 13: Disposal considerations</b>	
<b>13.1. Waste treatment methods</b>	
Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials	: Avoid release to the environment.
<b>SECTION 14: Transport information</b>	
In accordance with ADR / RID / IMDG / IATA / ADN	
<b>14.1. UN number</b>	
UN-No. (ADR)	: 3082
UN-No.(IATA)	: 3082
UN-No. (IMDG)	: 3082
UN-No.(ADN)	: 3082
<b>14.2. UN proper shipping name</b>	
Proper Shipping Name (ADR)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (IATA)	: Environmentally hazardous substance, liquid, n.o.s.
Proper Shipping Name (IMDG)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (ADN)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport document description (ADR)	: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III, (E)

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### 14.3. Packing group

Class (ADR) : 9  
 Classification code (ADR) : M6  
 Class (IATA) : 9  
 Class (IMDG) : 9  
 Class (ADN) : 9  
 Classification code (ADN) : M6  
 Hazard labels (ADR) : 9



Hazard labels (IATA) : 9



Hazard labels (IMDG) : 9



Hazard labels (ADN) : 9



### 14.4. Packing group

Packing group (ADR) : III  
 Packing group (IATA) : III  
 Packing group (IMDG) : III  
 Packing group (ADN) : III

### 14.5. Environmental hazards

Dangerous for the environment :



Other information : No supplementary information available.

### 14.6. Special precautions for user

#### 14.6.1. Overland transport

Hazard identification number (Kemler No.) : 90  
 Classification code (ADR) : M6  
 Orange plates :



Special provision (ADR) : 274, 335, 601, 375  
 Transport category (ADR) : 3  
 Tunnel restriction code (ADR) : E  
 Limited quantities (ADR) : 5l  
 Excepted quantities (ADR) : E1

#### 14.6.2. Transport by sea

Special provision (IMDG) : 274, 335, 969  
 Limited quantities (IMDG) : 5 L  
 Excepted quantities (IMDG) : E1

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Packing instructions (IMDG)	: P001, LP01
Packing provisions (IMDG)	: PP1
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP2, TP29
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-F
Stowage category (IMDG)	: A

### 14.6.3. Air transport

CAO packing instructions (IATA)	: 964
CAO max net quantity (IATA)	: 450L
PCA packing instructions (IATA)	: 964
PCA Limited quantities (IATA)	: Y964
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA max net quantity (IATA)	: 450L
PCA Excepted quantities (IATA)	: E1
Special provision (IATA)	: A97, A158, A197
ERG code (IATA)	: 9L

### 14.6.4. Inland waterway transport

Special provision (ADN)	: 274, 335, 375, 601
Limited quantities (ADN)	: 5 L
Excepted quantities (ADN)	: E1
Carriage permitted (ADN)	: T
Equipment required (ADN)	: PP
Number of blue cones/lights (ADN)	: 0
Carriage prohibited (ADN)	: No

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.1.1. EU-Regulations

Contains no substances with Annex XVII restrictions  
Contains no REACH candidate substance  
Contains no REACH Annex XIV substances.

#### 15.1.2. National regulations

No additional information available

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

Data sources	: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
Other information	: None.

PHV SDS EU

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