

SAFETY DATA SHEET

623 HS Black 13 1-A

Version Number 1.1
Revision Date 04/26/2015

Page 1 of 11
Print Date 04/28/2015

SAFETY DATA SHEET

623 HS Black 13 1-A

Section 1. Identification

GHS product identifier : 623 HS Black 13 1-A
Chemical name : Mixture
CAS number : Mixture
Other means of identification : EM10029162
Product type : solid

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

Product use : Industrial applications. Plastics.

Supplier's details : **POLYONE CORPORATION**
 33587 Walker Road, Avon Lake, OH 44012
 1 (440) 930-1000 or 1 (866) POLYONE

Emergency telephone number (with hours of operation) : **CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).**CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).

Section 2. Hazards identification

This mixture has not been evaluated as a whole. Information provided on the health effects of this product is based on individual components. All ingredients are bound and potential for hazardous exposure as shipped is minimal. However, some vapors 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. After handling, always wash hands thoroughly with soap and water.

OSHA/HCS status :

Classification of the substance or mixture :

GHS label elements

Signal word : No signal word.
Hazard statements : No known significant effects or critical hazards.

SAFETY DATA SHEET

623 HS Black 13 1-A

Version Number 1.1
Revision Date 04/26/2015

Page 2 of 11
Print Date 04/28/2015

Precautionary statements

General :
 Prevention :
 Response :
 Storage :
 Disposal :
 Supplemental label elements :
 Hazards not otherwise classified : Not available.

Section 3. Composition/information on ingredients

Substance/mixture :
 Chemical name : Mixture
 Other means of identification : EM10029162

CAS number/other identifiers

| Ingredient name | % | CAS number |
|-----------------|-------|------------|
| Caprolactam | 0.965 | 105-60-2 |

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 :
 Inhalation :
 Skin contact :
 Ingestion :

Most important symptoms/effects, acute and delayed

Potential acute health effects

SAFETY DATA SHEET

623 HS Black 13 1-A

Version Number 1.1
Revision Date 04/26/2015

Page 3 of 11
Print Date 04/28/2015

Eye contact :
Inhalation :
Skin contact :
Ingestion :

Over-exposure signs/symptoms

Eye contact :
Inhalation :
Skin contact :
Ingestion :

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

Notes to physician :
Specific treatments :

Protection of first-aiders :

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media :
Unsuitable extinguishing media :

Specific hazards arising from the chemical :

Hazardous thermal decomposition products :

Special protective actions for fire-fighters :

Special protective equipment for fire-fighters :

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

SAFETY DATA SHEET

623 HS Black 13 1-A

Version Number 1.1
Revision Date 04/26/2015

Page 4 of 11
Print Date 04/28/2015

For non-emergency personnel :
For emergency responders :

Environmental precautions :

Methods and materials for containment and cleaning up

Small spill :
Large spill :

Section 7. Handling and storage

Precautions for safe handling

Protective measures :
Advice on general occupational hygiene :

Conditions for safe storage, including any incompatibilities :

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

| Ingredient name | Exposure limits |
|-----------------|--|
| Caprolactam | <p>OSHA PEL 1989 (1989-03-01) PEL: Permissible Exposure Level 1 mg/m³ Form: Dust Pollutant concentration that should not be exceeded during working hours and which workers are believed to be exposed during a period of 15 minutes maximum, without experiencing: a) irritation. b) chronic or irreversible tissue damage. c) dependent toxic effects of exposure rate. d) Narcosis of sufficient magnitude to increase susceptibility to accidents. e) The reduction of ability to get to safety by their own means. 3 mg/m³ Form: Dust PEL: Permissible Exposure Level 20 mg/m³ 5 ppm Form: Vapor Pollutant concentration that should not be exceeded during working hours and which workers are believed to be exposed during a period of 15 minutes maximum, without experiencing: a) irritation. b) chronic or irreversible tissue damage. c) dependent toxic effects of exposure rate. d) Narcosis of sufficient magnitude</p> |

SAFETY DATA SHEET

623 HS Black 13 1-A

Version Number 1.1
Revision Date 04/26/2015

Page 5 of 11
Print Date 04/28/2015

| | |
|--|--|
| | <p>to increase susceptibility to accidents. e) The reduction of ability to get to safety by their own means. 40 mg/m³ 10 ppmForm: Vapor NIOSH REL (1994-06-01) Time Weighted Average (TWA) 1 mg/m³ Form: Dust Pollutant concentration that should not be exceeded during working hours and which workers are believed to be exposed during a period of 15 minutes maximum, without experiencing: a) irritation. b) chronic or irreversible tissue damage. c) dependent toxic effects of exposure rate. d) Narcosis of sufficient magnitude to increase susceptibility to accidents. e) The reduction of ability to get to safety by their own means. 3 mg/m³ Form: Dust Time Weighted Average (TWA) 1 mg/m³ 0.22 ppmForm: Vapor Pollutant concentration that should not be exceeded during working hours and which workers are believed to be exposed during a period of 15 minutes maximum, without experiencing: a) irritation. b) chronic or irreversible tissue damage. c) dependent toxic effects of exposure rate. d) Narcosis of sufficient magnitude to increase susceptibility to accidents. e) The reduction of ability to get to safety by their own means. 3 mg/m³ 0.66 ppmForm: Vapor ACGIH TLV (2003-01-01) TLV-TWA: Threshold Limit Value - Time weighted average PEL: Permissible Exposure Level 5 mg/m³ Form: Inhalable fraction and vapor</p> |
|--|--|

Appropriate engineering controls :
Environmental exposure controls :

Individual protection measures

Hygiene measures :
Eye/face protection :

Skin protection

Hand protection :
Body protection :
Other skin protection :
Respiratory protection :

Section 9. Physical and chemical properties
Appearance

Physical state : solid [Pellets.]

SAFETY DATA SHEET

623 HS Black 13 1-A

Version Number 1.1
Revision Date 04/26/2015

Page 6 of 11
Print Date 04/28/2015

| | | |
|---|---|--|
| Color | : | BLACK |
| Odor | : | Faint odor. |
| Odor threshold | : | Not available. |
| pH | : | Not available. |
| Melting point | : | Not available. |
| Boiling point | : | Not available. |
| Flash point | : | Not available. |
| Burning time | : | Not available. |
| Burning rate | : | Not available. |
| Evaporation rate | : | Not available. |
| Flammability (solid, gas) | : | Not available. |
| Lower and upper explosive (flammable) limits | : | Lower: Not available. Upper: Not available. |
| Vapor pressure | : | Not available. |
| Vapor density | : | Not available. |
| Relative density | : | Not available. |
| Solubility | : | Not available. |
| Solubility in water | : | insoluble in water. |
| Partition coefficient: n-octanol/water | : | Not available. |
| Auto-ignition temperature | : | Not available. |
| Decomposition temperature | : | Not available. |
| SADT | : | Not available. |
| Viscosity | : | Dynamic: Not available. Kinematic: Not available. |

Section 10. Stability and reactivity

| | | |
|---|---|--|
| Reactivity | : | |
| Chemical stability | : | |
| Possibility of hazardous reactions | : | |
| Conditions to avoid | : | |
| Incompatible materials | : | |
| Hazardous decomposition products | : | |

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

SAFETY DATA SHEET

623 HS Black 13 1-A

Version Number 1.1
Revision Date 04/26/2015

Page 7 of 11
Print Date 04/28/2015

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|-------------------------|-----------------|---------|-------------|----------|
| Caprolactam | | | | |
| | LD50 Oral | Rat | 1,210 mg/kg | - |
| | LC50 Inhalation | Rat | 0.3 mg/l | 2 h |

Conclusion/Summary : Mixture.Not fully tested.

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|-------------------------|--------------------------|---------|-------|----------|-------------|
| Caprolactam | Eyes - Moderate irritant | Rabbit | | 24 hrs | - |
| | Skin - Mild irritant | Rabbit | | 24 hrs | - |

Conclusion/Summary

Skin : Mixture.Not fully tested.

Eyes : Mixture.Not fully tested.

Respiratory : Mixture.Not fully tested.

Sensitization

Conclusion/Summary

Skin : Mixture.Not fully tested.

Respiratory : Mixture.Not fully tested.

Mutagenicity

Conclusion/Summary : Mixture.Not fully tested.

Carcinogenicity

Conclusion/Summary : Mixture.Not fully tested.

Classification

| Product/ingredient name | OSHA | IARC | NTP |
|-------------------------|------|------|-----|
| Caprolactam | | 4 | |

Reproductive toxicity

Conclusion/Summary : Mixture.Not fully tested.

Teratogenicity

SAFETY DATA SHEET**623 HS Black 13 1-A**

Version Number 1.1
Revision Date 04/26/2015

Page 8 of 11
Print Date 04/28/2015

Conclusion/Summary : Mixture.Not fully tested.

Specific target organ toxicity (single exposure)**Specific target organ toxicity (repeated exposure)****Aspiration hazard**

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact :
Inhalation :
Skin contact :
Ingestion :

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact :
Inhalation :
Skin contact :
Ingestion :

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

Conclusion/Summary : Mixture.Not fully tested.

General :
Carcinogenicity :
Mutagenicity :
Teratogenicity :

SAFETY DATA SHEET

623 HS Black 13 1-A

Version Number 1.1
Revision Date 04/26/2015

Page 9 of 11
Print Date 04/28/2015

Developmental effects :
Fertility effects :

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

| Product/ingredient name | Result | Species | Exposure |
|--|--|-----------------------------------|----------|
| Caprolactam | | | |
| | Acute EC50 2,430 mg/l Fresh water | Aquatic invertebrates. Water flea | 48 h |
| | Acute EC50 4,550 mg/l Fresh water | Aquatic plants - Green algae | 72 h |
| 623 HS Black 13 1-A | | | |
| Remarks - Acute - Aquatic invertebrates.: | Chemicals are not readily available as they are bound within the polymer matrix. | | |

Conclusion/Summary : Chemicals are not readily available as they are bound within the polymer matrix.

Persistence and degradability

Conclusion/Summary : Chemicals are not readily available as they are bound within the polymer matrix.

Conclusion/Summary : Chemicals are not readily available as they are bound within the polymer matrix.

Bioaccumulative potential

| Product/ingredient name | LogPow | BCF | Potential |
|-------------------------|--------|-----|-----------|
| Caprolactam | 0.12 | - | low |

Mobility in soil

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

SAFETY DATA SHEET

623 HS Black 13 1-A

Version Number 1.1
Revision Date 04/26/2015

Page 10 of 11
Print Date 04/28/2015

Other adverse effects :

Section 13. Disposal considerations

Section 14. Transport information

U.S. DOT Classification : Not regulated for transportation.
ICAO/IATA : Not classified as dangerous good under transport regulations.
IMO/IMDG (maritime) : Not classified as dangerous good under transport regulations.

Section 15. Regulatory information

U.S. Federal regulations :
DEA List I Chemicals (Precursor
Chemicals) :
DEA List II Chemicals (Essential
Chemicals) :

US. EPA CERCLA Hazardous Substances (40 CFR 302)

SARA 311/312

Classification : Acute Health Hazard

Composition/information on ingredients

| Name | % | Classification |
|-------------|-------|----------------|
| Caprolactam | 0.965 | AH |

SARA 313

Not applicable.

State regulations

International regulations

SAFETY DATA SHEET**623 HS Black 13 1-A**

Version Number 1.1
Revision Date 04/26/2015

Page 11 of 11
Print Date 04/28/2015

International lists :
Chemical Weapons Convention :
List Schedule I Chemicals
Chemical Weapons Convention :
List Schedule II Chemicals
Chemical Weapons Convention :
List Schedule III Chemicals

Section 16. Other information**History**

Date of printing : 04/28/2015
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Date of previous issue : 05/14/2013
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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

References : Not available.

Notice to reader

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