1. Identification

Product Name: **ATC 100**
Manufacturer/Supplier: Applied Technologies
P.O. Box 18476
Fairfield, OH 45018
Telephone: 513-939-3767
Emergency Telephone: **Chemtrec 800-424-9300**

2. Hazard(s) 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:
CARCINOGENICITY- Category 1A

GHS Label Elements

Hazard Symbol:
Signal Word: Danger
See Section 8: Exposure controls/Personal Protection for personal protection.

Hazards Statements:
May cause cancer

Precautionary Statements:

Prevention:
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.
Wear protective gloves. Wear eye or face protection. Wear protective clothing.
Response: If exposed or concerned: 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.

3. Composition / Information on Ingredients

Description: Mixture

United States

Ingredient Name	% by Weight	CAS Number
Titanium dioxide	1-5%	13463-67-7
Reaction mass on N,N'-ethane-1,2-diylbis(hexanamide);12-hydroxyN-(2-((1-oxyhexyl)amino)ethyl)octadecanamide;N,N'-ethane-1,2-diylbis(12hydroxyoctadecanami de)	1-5%	TS0705
Crystalline silica, non-respirable	0.1-1%	14808-60-7

There are no 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.

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.

4. First Aid Measures

Description of First Aid Measures

After 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 collar, tie, belt or waistband.

After skin contact:

Flush contaminated skin with plenty of 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. Wash clothing before reuse. Clean shoes thoroughly before reuse.

After 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 or at least 10 minutes. Get medical attention.

After swallowing:

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 sic 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 so that vomit does not enter the lungs. Get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms and effects, both acute and delayed:

Potential Acute Health Effects

Inhalation:

No significant effects or critical hazards.

Skin Contact:

No significant effects or critical hazards.

Eye Contact:

No significant effects or critical hazards.

Ingestion:

No significant effects or critical hazards.

Over-Exposure signs/symptoms

Inhalation:

No specific data.

Skin Contact:

No specific data.

Eye Contact:

No specific data.

Ingestion:

No specific data.

Indication of any immediate medical attention and special treatment needed:

Notes to Physician:

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific Treatments:
No specific treatment.

5. Fire Fighting Measures

Extinguishing media
Suitable extinguishing agents: Use an extinguishing agent suitable for surrounding fire.
For safety reasons unsuitable extinguishing agents: None known.
Special hazards arising from the substance or mixture: No specific fire or explosion hazards
Hazardous thermal decomposition Products:
Carbon Monoxide, Carbon dioxide, metal oxide/oxides

National Fire Protection Association:
Flammability: 1
Health: 1
Instability/Reactivity: 1
Advice for the Firefighters
Protective equipment:
Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus with a full face-piece operated in positive pressure mode.
Protective Actions for the Fire Fighter:
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.
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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. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment**.**

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For Emergency Responders:
If specialized clothing is required to deal with the spillage, take note of any information in Section8 on suitable and unsuitable materials. See also the information in "For 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 material for containment and cleaning up:
Small Spill:
Move containers from spill area. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large Spill: Move containers from spill area.
Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

7. Handling and Storage

Conditions for safe storage, including and incompatibilities:

Do not store above the following temperature: 80 degrees F. Store in accordance with local regulations. Store in original container 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. See Section 10 for incompatible materials before handling or use. Shelf life 12 months.

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. 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 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 was hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment for entering eating areas. See Section 8 for additional information on hygiene measures**.**

8. Exposure Controls / Personal Protection

Control parameters

Occupational Exposure Limits

Ingredient Name	CAS #	Exposure Limits
Titanium Dioxide	**13463-67-7**	**ACGIH TLV (US 3/2018)** TWA: 10 mg/m^3 8 hours. Form Total dust **OSHA PEL 1989 (US 3/1989)** TWA:10 mg/m^3 8 hours Form : Total **dust** **OASHA PEL (US 5/2018)** TWA: 15ng/m^3 8 hours. Form: Total dust
Crystalline Silica, non-respirable	**14808-60-7**	**OSHA PEL (US 5/2018)** TWA:50 ugm/m3 8 hours. Form: Respirable dust **OSHA PEL Z3 (US 6/2016)** TWA: 30 mg/m3/ (%Si02+2) 8 hours. Form: Total dust

Appropriate Engineering Controls:

If user operations generate dust, fumes, gas 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 an acceptable level.

Individual Protection Measures

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.

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.

Skin Protection:

Hand Protection:

Chemical resistant, impervious gloves complying with n approved standard should be worn at all times when handling chemical products if a rash assessment indicates this is necessary. Considering the parameters specified by 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.

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: safety glasses with side shields.

9. Physical and Chemical Properties

General Information

Physical State:	Solid
Color:	Gray
Odor:	Mild
Odor threshold:	No data available
pH:	Not applicable
Melting point/range:	No data available
Boiling point/range:	No data available
Flash point:	Closed cup: >199.9 deg F
Evaporation rate:	Not applicable
Flammability (solid, gaseous):	Not applicable
Upper/lower flammability or explosive limit:	Not available
Vapor pressure:	Not available
Vapor density:	Not available
Relative Density	1.7
Solubility	Insoluble in the following materials, cold and hot water.
Solubility in Water	Not available
Auto/Self-ignition temperature:	Not available
Decomposition temperature:	>194 deg F
Viscosity	Not available
VOC	0.185 lbs/gal (22.1g/l)

10. Stability and Reactivity

Reactivity:

No specified test data related to reactivity available for this product or its ingredients.

Chemical stability

The product is stable.

Thermal decomposition / conditions to be avoided: No decomposition if used and stored according to specifications.

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.

11. Toxicological Information

Information on Toxicological Effects

Ingredient name	Result	Species	Dose	Exposure
Reaction mass on N,N'-ethane-1,2-diylbis(hexanamide);12-hydroxyN-(2-((1-oxyhexyl)amino)ethyl)octadecanamide;N,N'-ethane-1,2-diylbis(12hydroxyoctadecanamide)	LD50 Dermal LD50 Oral	Rabbit Rat	>2000mg/kg 2000 mg/kg	- -

Irritation/Corrosion

Ingredient Name	Result	Species	Score	Exposure	Observation
Titanium dioxide	Skin-Mild irritant	Human	-	72 Hours 300 micrograms intermittent	-

Sensitization: No specific data

Mutagenicity: No specific data

Carcinogenicity: No Specific Data

Conclusion Summary:

IARC classifies TiO2 as a 2B carcinogen based in large part on several studies of effects of the inhalation of TiO2 on animals in which the TiO2 particles were of various sizes. Particles defined as "ultrafine" have been shown to cause cancer in animals exposed to very high concentrations. A number of authorities have reviewed those effects result from overloading the respiratory system of the animals. The effects observed according to scientist, are not due to TiO2 but are general responses to high levels of dust in the lungs. In addition, a carcinogenic effect of TiO2 dust in the workers was not observed in several epidemiology studies on more than 20,000 TiO2 industry workers in Europe and the USA, nor were other chronic diseases, including other respiratory diseases, associated with exposure to TiO2 dust. Accordingly, we have concluded that our products should not be classified on the basis of the presence of TiO2 in the products.

Classification

Ingredient name	OSHA	IARC	NTP
Titanium dioxide crystalline silica, non-respirable	- -	2B 1	- Known carcinogen to humans

Reproductive Toxicity: No specific data

Tetragenicity: No specific data

Specific Target Organ Toxicity (single exposure): No specific data

Specific Target Organ Toxicity (repeated exposure): No specific data

Aspiration Hazard: No specific data

Information on the Likely Routes of Exposure: Not available

Potential Acute Health Effects:

Eye Contact: No known significant effects or critical hazards
Inhalation: No known significant effects or critical hazards
Skin Contact: No known significant effects or critical hazards
Ingestion: No known significant effects or critical hazards

Symptoms Related to the Physical, Chemical and toxicological Characteristics:

Eye Contact: No specific data
Inhalation: No specific data
Skin Contact: No specific data
Ingestion: No specific data

Delayed and Immediate effects and also Chronic Effects from Short and Long Term Exposure:

Short Term:

Potential immediate effects: Mot available
Potential Delayed Effects: Not available

Long Term Exposure:

Potential immediate effects: Mot available
Potential Delayed Effects: Not available

Potential Chronic Health Effects: No specific data

General: No known significant effects or critical hazards
Carcinogenicity: May cause cancer. Risk of cancer depends on duration and level of exposure
Mutagenicity: No significant effects or critical hazards.
Tetragenicity: No significant effects or critical hazards.
Developmental Effects: No significant effects or critical hazards.
Fertility Effects: No significant effects or critical hazards.

Numerical Measures of Toxicity:

Acute Toxicity Estimates

Route	ATE Value
Oral	17733.3 mg/kg

12. Ecological Information

Toxicity

Ingredient name	Result	Species	Exposure
Reaction mass on N,N'-ethane-1,2-diylbis(hexanamide);12-hydroxyN-(2-((1-oxyhexyl)amino)ethyl)octadecanamide;N,N'-ethane-1,2-diylbis(12hydroxyoctadecanamide)	EC50>1000 mg/l LC50> 1000 mg/l	Daphnia Fish	48 hours 96 hours

Persistence and Degradability

Ingredient name	Test	Result	Dose	Inoculum
Reaction mass on N,N'-ethane-1,2-diylbis(hexanamide);12-hydroxyN-(2-((1-oxyhexyl)amino)ethyl)octadecanamide;N,N'-ethane-1,2-diylbis(12hydroxyoctadecanamide)	-	70%-Not Readily-28 days	-	-

Product name	Aquatic Half-Life	Photolysis	Biodegradability
Reaction mass on N,N'-ethane-1,2-diylbis(hexanamide);12-hydroxyN-(2-((1-oxyhexyl)amino)ethyl)octadecanamide;N,N'-ethane-1,2-diylbis(12hydroxyoctadecanamide)	-	-	Not readily

Bioaccumulative Potential: No specific data

Mobility in Soil:

Soil/water partition Coefficient (Koc): Not available

Other Adverse Effects: No known significant effects or critical hazards.

13. Disposal Considerations

Disposal Methods:

The generation of waste should be avoided or minimalized 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 authority requirements. Disposal 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.

RCRA Classification: D001

14. Transport Information

	DOT Classification	TDG Classification	Mexico Classification	IMDG	IATA
UN Number	Not Regulated	Not Regulated	Not Regulated	Not Regulated	Not Regulated
UN Proper Shipping Name	-	-	-	-	-
Transport Hazard Class	-	-	-	-	-
Packing Group	-	-	-	-	-

Environmental Hazards	No	No	No	No	No

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.

15. Regulatory Information

United States

US Federal Regulations: **TCA 8(a) CDR Exempt/partial exemption:** Not determined.
United States inventory (TSCA8b): Not determined

Clean Air Act Section 112 (b) Hazardous Air Pollutants	**Ingredient Name**	**Conc. (% w/w)**
	hexane	0-0.1
	Methanol	0-0.1

SARA 302/304

Composition/Information on Ingredients: No products were found

SARA 304 RQ Not applicable

SARA 311/312

Classification CARCINOGENICITY- Category 1A

Composition/Information on Ingredients

Name	%	Classification
Titanium Dioxide	≤3	CARCINOGENICITY-Category 2
Reaction mass on N,N'-ethane-1,2-diylbis(hexanamide);12-hydroxyN-(2-((1-oxyhexyl)amino)ethyl)octadecanamide;N,N'-ethane-1,2-diylbis(12hydroxyoctadecanamide)	≤3	COMBUSTIBLE DUSTS ACUTE TOXICITY (oral)- Category 4
Crystalline silica, non-respirable	≤0.3	CARCINOGENICITY-Category 1A

State Regulations

Massachusetts The following components are listed: Calcium Carbonate; Marble Dust; Titanium Dioxide; Tin Dioxide Dust
New York None of the components listed
New Jersey The following components are listed: Calcium Carbonate; Limestone; Silica; Quartz; Quartz (SiO2); Titanium Dioxide; Titanium Oxide
Pennsylvania The following components are listed: limestone; Quartz Dust; Quartz; Titanium Oxide
Minnesota Hazardous Substances None of the components listed.

California Prop 65

WARNING! This product can expose you to chemicals including Silica, crystalline, Titanium dioxide, Carbon Black, which are known to the State of California to cause cancer and n-Hexane, Methanol, which are known to the State of California to cause birth defects or other reproductive harm. For more information go to wwwP^%warnings.ca.gov

Ingredient Name	Cancer	Reproductive	No Significant risk level	Maximum acceptable dosage level
n-hexane	No	Yes	-	-
Crystalline silica, non-respirable	Yes	No	-	-
Titanium dioxide	Yes	No	-	-
Carbon black, non-respirable	Yes	No	-	-
Methanol	No	Yes	-	Yes

Canada

Canadian Lists

Canadian NPRI	None of the components are listed
CEPA Toxic Substances	None of the components are listed

16. Other Information

Key to Abbreviations

ATE= Acute Toxicity Estimate
BCF= Bio concentration 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"=Maritime Pollution)
UN= United Nations

References Not available

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