

#### I. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product Name:** Formula X UHP (Ultra High Performance) Stripper  
**Product Use:** Floor polish remover concentrate

**Product Number:** 503

**Manufacturer Address:**  
 Amano Pioneer Eclipse Corp.  
 P.O. Box 909  
 1 Eclipse Road  
 Sparta, NC 28675 USA

**Contact Information:**  
 Telephone: +1 336 372 8080  
 Internet: www.pioneer-eclipse.com  
 E-mail: msds@pioneer-eclipse.com

**For Chemical Emergency - Spill, Leak Fire, Exposure or Accident.** Call CHEMTREC Day or Night.  
 Within USA and Canada 1 800 424 9300 Outside USA and Canada: +1 703 527 3887 (collect calls accepted)

#### 2. HAZARDS IDENTIFICATION

This preparation has been classified and labeled according to 1999/45/EC.

**EU Classification:** Classified as Corrosive

**Hazard symbol:**



**Risk phrases:** R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed.  
 R35 - Causes severe burns.  
 R36/37/38 - Irritating to eyes, respiratory system and skin.

**Safety phrases:** S1/2 - Keep locked up and out of the reach of children.  
 S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
 S37/39 - Wear suitable gloves and eye/face protection.  
 S45 - In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients	EC No.	Weight %	CAS No.	Symbol	R-phrases *
ethylene glycol monobutyl ether	203-905-0	10 - 30	111-76-2	X <sub>n</sub> (Harmful) X <sub>i</sub> (Irritant)	R20/21/22 R36/38
ethanolamine	205-483-3	5 - 10	141-43-5	C (Corrosive) X <sub>n</sub> (Harmful) X <sub>i</sub> (Irritant)	R34 R20/21/22 R36/37/38
propylene glycol monobutyl ether	225-878-4	5 - 10	5131-66-8	Xi (Irritant)	R36/38

\* See section 16 for the full text of R-phrases

#### 4. FIRST AID MEASURES

##### EFFECTS AND SYMPTOMS

**Inhalation:** May be harmful if inhaled. May cause irritation and corrosive effects to nose, throat and respiratory tract.  
**Ingestion:** Harmful if swallowed. May cause burns to mouth, throat and stomach.  
**Skin contact:** Harmful in contact with skin. May cause permanent damage.  
**Eye contact:** Harmful in contact with eyes. May cause permanent damage.

##### FIRST AID MEASURES

**Inhalation:** If breathing is difficult: Remove to fresh air. Seek medical attention immediately.  
**Ingestion:** Call a physician or poison control center immediately. DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.  
**Skin contact:** Immediately wash off with plenty of water for at least 15 minutes. (Remove any contaminated clothing and shoes.) Seek medical attention immediately.  
**Eye contact:** Immediately wash out with water for at least 15 minutes. (If easy to do, remove contact lenses, if worn.) Seek medical attention immediately.

#### 5. FIRE FIGHTING MEASURES

**Extinguishing media:** Dry chemical, water spray, foam, carbon dioxide  
**Hazardous combustion products:** None  
**Unusual fire and explosion hazards:** Materials can splatter above 100°C/212°F.  
**Special fire fighting procedures:** Corrosive material (See Sections 8 and 10).

#### 6. ACCIDENTAL RELEASE MEASURES

*Put on appropriate personal protective equipment (see Section 8).*

- Small spills:** Absorb spill on inert material (e.g. sand, earth) and dispose of as waste material in accordance with national and regional provisions.
- Large spills:** Keep spectators away. Floors may be slippery; use care to avoid falling. Neutralize spill area. Dike and contain spill with inert material (e.g. sand, earth). Transfer liquid to containers for recovery or disposal and diking material to separate containers for disposal. Keep spills and cleaning runoff out of sewers and open bodies of water.

#### 7. HANDLING AND STORAGE

- Handling:** Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Use only in well-ventilated areas. Avoid breathing vapours or spray mists. Remove and wash contaminated clothing and footwear before re-use.
- Storage:** Storage temperature (Max. 60°C/140°F) (Min. 1°C/34°F). Keep from freezing, product may coagulate. Keep container sealed when not in use. Keep out of reach of children.

#### 8. EXPOSURE CONTROL/PERSONAL PROTECTION

##### Exposure limits:

Component Name:	Source / Date	Value / Units	Type
ethylene glycol monobutyl ether	US (ACGIH) / 2005	20 ppm	8 HRS / TWA
ethylene glycol monobutyl ether	US (OSHA) / 2005	50 ppm SKIN	8 HRS / PEL TWA
ethylene glycol monobutyl ether	EU (2000/39/EC) / 2000	20 ppm SKIN	8 HRS/TWA
ethanolamine	US (ACGIH) / 2005	3 ppm 7.5 mg/m3	8 HRS / TWA
ethanolamine	US (ACGIH) / 2005	6 ppm 15 mg/m3	15 min / STEL
ethanolamine	EU (2006/15/EC) / 2005	1 ppm SKIN	8 HRS/TWA
propylene glycol monobutyl ether	HSE (UK) / 2000	150 ppm 474 mg/m3	8 HRS / TWA
propylene glycol monobutyl ether	ELV (IE) / 1999	150 ppm 474 mg/m3	8 HRS / TWA

- Exposure controls:** Ensure adequate general ventilation.
- Environmental exposure controls:** No specific environmental exposure controls required.

##### PERSONAL PROTECTION

- Respiratory protection:** No specific personal protection is required.
- Hand protection:** Rubber gloves recommended
- Eye protection:** Safety glasses recommended
- Skin protection:** If major exposure is possible, wear suitable protective clothing such as rubber boots, apron, etc.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

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|--|--|
| <p><b>Appearance:</b> Thin clear liquid</p> <p><b>Odor Threshold:</b> N/E</p> <p><b>Melting Point/Freezing Point:</b> N/A</p> <p><b>Flash point:</b> 66°C</p> <p><b>Upper/Lower flammability/explosive limits:</b> N/E</p> <p><b>Vapor density:</b> Greater than air</p> <p><b>Solubility:</b> 100% soluble (dispersible) in water</p> <p><b>Auto-ignition temperature:</b> N/E</p> <p><b>Viscosity:</b> &lt; 10 centipoise @ 20°C</p> <p><b>Oxidizing properties:</b> N/A</p> | <p><b>Odor:</b> Slight citrus</p> <p><b>pH:</b> 12.2</p> <p><b>Initial boiling point/boiling range:</b> 100°C</p> <p><b>Evaporation rate:</b> Less than water</p> <p><b>Vapor pressure:</b> Greater than water</p> <p><b>Relative density:</b> 1.0 kg/L @ 20°C</p> <p><b>Partition coefficient (n-octanol/water):</b> N/E</p> <p><b>Decomposition temperature:</b> N/E</p> <p><b>Explosive properties:</b> None</p> <p><b>VOC:</b> 42% (as supplied), 8.24% (1:4), 4.57% (1:8), 2.42% (1:16)</p> |
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#### 10. STABILITY AND REACTIVITY

<b>Chemical stability:</b>	Stable under normal conditions.
<b>Hazardous Reactions:</b>	Adding water directly to the product may generate heat and cause product to splash. To avoid adverse reaction, always add product to water, do not add water to product.
<b>Conditions to avoid:</b>	Improper order of dilution
<b>Incompatible materials:</b>	Strong acids and oxidizing agents
<b>Hazardous decomposition products:</b>	None known

#### 11. TOXICOLOGICAL INFORMATION

**PREPARATION SUMMARY** - Toxicity testing has not been completed on the mixture.

##### LOCAL EFFECTS

<b>Skin contact:</b>	Corrosive. Can cause skin burns.
<b>Eye Contact:</b>	Corrosive. Can cause eye burns.
<b>Sensitization:</b>	None known
<b>Chronic effects:</b>	None known

##### SPECIFIC EFFECTS

<b>Carcinogenicity:</b>	None known
<b>Reproductive effects:</b>	None known
<b>Teratogenicity:</b>	None known
<b>Mutagenicity:</b>	None known

##### COMPONENT SUMMARY \*

ethylene glycol monobutyl ether CAS# 111-76-2

LD<sub>50</sub>: (Oral, rat) 470 mg/kg – 1746 mg/kg

##### Potential Health Effects

<b>Eye:</b>	May cause severe eye irritation.
<b>Skin:</b>	May cause slight skin irritation with local redness. Repeated exposure may cause a burn
<b>Ingestion:</b>	Moderate toxicity if swallowed. Causes irritation to the gastrointestinal tract.
<b>Inhalation:</b>	May cause irritation to upper respiratory tract (nose and throat).
<b>Chronic:</b>	Prolonged or repeated exposure can cause damage to the liver, kidneys, lymphoid system, blood and blood-forming organs.

**Carcinogenicity:** Not listed as a carcinogen.

ethanolamine CAS# 141-43-5

LD<sub>50</sub>: (Oral, rat) 1090 mg/kg – 3320 mg/kg

##### Potential Health Effects

<b>Eye:</b>	May cause severe irritation.
<b>Skin:</b>	May cause skin burns.
<b>Ingestion:</b>	Low toxicity if swallowed. May result in gastrointestinal irritation or ulceration.
<b>Inhalation:</b>	Excessive exposure may cause irritation to upper respiratory tract (nose and throat).
<b>Chronic:</b>	May cause liver and kidney damage.

**Carcinogenicity:** Not listed as a carcinogen.

propylene glycol monobutyl ether CAS# 5131-66-8

LD<sub>50</sub>: (Oral, rat) 5660 mg/kg

##### Potential Health Effects

<b>Eye:</b>	May cause moderate eye irritation.
<b>Skin:</b>	May cause moderate skin irritation with local redness.
<b>Ingestion:</b>	Low toxicity if swallowed in small amounts.
<b>Inhalation:</b>	Brief exposure is not likely to cause adverse effects.
<b>Chronic:</b>	No known effect.

**Carcinogenicity:** Not listed as a carcinogen.

\*Component data recorded from available sources pertaining to individual component CAS number.

#### 12. ECOLOGICAL INFORMATION

**PREPARATION SUMMARY** - Ecological testing has not been completed on the mixture.

##### COMPONENT SUMMARY \*

ethylene glycol monobutyl ether CAS# 111-76-2

96 hour LC<sub>50</sub>, bluegill (*Lepomis macrochirus*) 820 – 1490 mg/l

LC<sub>50</sub>, water flea (*Daphnia magna*) 835 mg/l

Environmental Fate: Material is readily biodegradable. Bioconcentration potential is low.

ethanolamine CAS# 141-43-5

96 hour LC50, fathead minnow (*Pimephales promelas*) 125 - 2070 mg/l

LC50, water flea (*Daphnia magna*) 33 - 93 mg/l

Environmental Fate: Material is readily biodegradable. Bioconcentration potential is low.

propylene glycol monobutyl ether CAS# 5131-66-8

96 hour LC50, guppy (*poecilia reticulata*) 560 – 1000 mg/l

LC50, water flea (*Daphnia magna*) >1000 mg/l

Environmental Fate: Material is readily biodegradable. Bioconcentration potential is low.

\*Component data recorded from available sources pertaining to individual component CAS number.

#### 13. DISPOSAL CONSIDERATIONS

Disposal of this material should be in accordance with local, regional and national regulations.

#### 14. TRANSPORT INFORMATION

##### INTERNATIONAL TRANSPORTATION REGULATIONS:

UN number: UN1760

Packing group: III

##### LAND-ROAD/RAILWAY

Proper shipping name: Corrosive liquid, n.o.s. (mixture contains ethanolamine)

ADR/RID class: 8

ADR/RID item number: 80°C

##### SEA

Proper shipping name: Corrosive liquid, n.o.s. (mixture contains ethanolamine)

IMDG class: 8

Medical First Aid Guide (MFAG): 730

Emergency Schedules (EmS): Fire F-A, Spillage S-B

Marine Pollutant: none

\*\*Package volumes <5L each are shipped Limited Quantity Exemption; as permitted by Hazard Class and Quantity Limits. \*\*

#### 15. REGULATORY INFORMATION

EINECS Status: Ingredients are included in the EINECS/ELINCS/NLP inventories.

NATIONAL REGULATIONS: No additional national regulations are known to the supplier.

#### 16. OTHER INFORMATION

Product intended for commercial and industrial use only.

##### R phrases:

R20/21/22-Harmful by inhalation, in contact with skin and if swallowed.

R34-Causes burns.

R35 - Causes severe burns.

R36/37/38-Irritating to eyes, respiratory system and skin

##### Safety phrases:

S1/2- Keep locked up and out of the reach of children.

S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.

S45-In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).

S46- If swallowed, seek medical advice immediately and show this container or label.

##### Revised by:

Chemical/R&D Department

Amano Pioneer Eclipse Corporation

##### Revision Information:

08/23/2011 - Section 9 (odor, pH, density, VOC), Section 15 (Ltd. Qty.), Section 16 (usage statement)

04/01/2011 - revisions conforming to 1907/2006/EC amendment 453/2010

01/11/2010 - revisions conforming to 1999/45/EC, 1907/2006/EC