

SAFETY DATA SHEET

Conforms to 1907/2006/EC - (EU) 2020/878

Issued: 17-May-2024

Supersedes: 22-Sep-2016

FORMULA X™ UHP

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 PRODUCT IDENTIFIER

Product Name: Formula X UHP - Ultra High Performance Stripper Product Number: 503
UFI: FHDX-KEUV-A10J-Y7RC

1.2 RELEVANT IDENTIFIED USES OF THE MIXTURE AND USES ADVISED AGAINST

Product intended for commercial and industrial use only.
Intended Use: Floor Finish remover concentrate
Uses Advised Against: Other than per labelled instructions.

1.3 DETAILS OF THE DISTRIBUTOR

Marpól ehf
Dalbrekka 15
200 Kópavogur
Iceland
Telephone: +354 5445588
Email: marpol@marpol.is
Internet: www.marpol.is

1.4 EMERGENCY TELEPHONE NUMBER

For Chemical Emergency: Spill, Leak, Fire, Exposure or Accident. Call 112 EMERGENCY SERVICES Day or Night. 543-2222 POISON CENTRE (EITRUNARMÍÐSTÖÐ)

SECTION 2: HAZARDS IDENTIFICATION

2.1 CLASSIFICATION OF THE MIXTURE

This mixture has been classified according to EC 1272/2008.
Acute Toxicity (Inhalation) - Category 4
Eye Damage - Category 1
Skin Corrosion - Category 1B
Specific Target Organ Toxicity (Single Exposure) - Category 3

2.2 LABEL ELEMENTS

Signal Word: Danger

Hazard pictogram(s):



Hazard Statement(s):

H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.

Precautionary Statement(s):

P260 Do not breathe mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection.
P310 Immediately call a POISON CENTER/doctor if you feel unwell.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER/doctor.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3 OTHER HAZARDS

No other hazards are known to the supplier

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FORMULA X™ UHP**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.1/3.2 SUBSTANCES/MIXTURES**

Ingredient	EC No.	Weight %	CAS No.	Classification	
				Hazard Class	Hazard Statement(s)*
ethylene glycol monobutyl ether	203-905-0	10 - 30	111-76-2	Acute Tox 3 Acute Tox 4 Eye Irrit 2 Skin Irrit 2	H331 H302 H319 H315
ethanolamine	205-483-3	5 - 10	141-43-5	Acute Tox 4 Skin Corr 1B STOT SE 3	H302,H312,H332 H314 H335
propylene glycol monobutyl ether	225-878-4	5- 10	5131-66-8	Eye Irrit 2 Skin Irrit 2	H319 H315

*See section 16 for the full text of Hazard Statements

Ingredient	EC No.	CAS No.	Specific Concentration Limits ATE**
ethylene glycol monobutyl ether	203-905-0	111-76-2	ATE (oral) = 1200 mg/kg ATE (inhalation) = 3 mg/L (vapours)
ethanolamine	205-483-3	141-43-5	(5 ≤ C ≤ 100) STOT SE 3, H335

SECTION 4: FIRST AID MEASURES**4.1 DESCRIPTION OF FIRST AID MEASURES**

- Eye Contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Skin Contact:** Take off immediately all contaminated clothing. Rinse skin with water/shower. Seek medical attention.
- Inhalation:** If breathing is difficult: Remove person to fresh air and keep comfortable for breathing. Seek medical attention immediately.
- Ingestion:** Rinse mouth. Immediately call a POISON CENTER or doctor. DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

- Eye Contact:** Can cause serious eye damage. May cause permanent damage.
- Skin Contact:** Can cause severe skin burns. May cause permanent damage.
- Inhalation:** Harmful if inhaled. May cause respiratory irritation.
- Ingestion:** May cause burns to mouth, throat and stomach.

4.3 INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

No information available.

SECTION 5: FIRE FIGHTING MEASURES**5.1 EXTINGUISHING MEDIA**

In case of fire: use dry chemical, water spray, foam, carbon dioxide

5.2 SPECIAL HAZARDS ARISING FROM THE MIXTUREHazardous combustion products: CO, CO₂, Nitrogen oxides

During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include but not limited to the above mentioned substances.

5.3 ADVICE FOR FIRE FIGHTERS

As in any fire, wear self contained breathing apparatus and suitable protective clothing including gloves and eye/face protection. Fire-fighters should wear clothing conforming to EN469 for chemical incidents. Materials can splatter above 100°C/212°F. Corrosive material.

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FORMULA X™ UHP**SECTION 6: ACCIDENTAL RELEASE MEASURES****6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES**

Refer to Section 8 for appropriate personal protective equipment.

6.2 ENVIRONMENTAL PRECAUTIONS

Keep spills and cleaning runoff out of sewers and open bodies of water.

6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

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 solid diking material to separate containers for disposal.

6.4 REFERENCE TO OTHER SECTIONS: Refer to Section 8 of the SDS.**SECTION 7: HANDLING AND STORAGE****7.1 PRECAUTIONS FOR SAFE 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 reuse.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Storage temperature (Max. 60°C/140°F) (Min. 1°C/34°F). Keep from freezing. Keep container sealed when not in use. Keep out of reach of children.

7.3 SPECIFIC END USE(S): No information available**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1 CONTROL PARAMETERS**

Workplace Exposure Limits:

Ingredient	Source	TWA (8hours)		STEL (Short term)		Note(s)
		ppm	mg/m ³	ppm	mg/m ³	
ethylene glycol monobutyl ether	ACGIH TLV	20	97	-	-	BEI
	DE (TRGS 900)	-	-	10	49	H,Y, AGS
	DK - At-Vejledning Stoffer og materialier- C.0.1	20	98	-	-	EH
	EU (2000/39/EC)	20	98	50	246	Skin
	NO – Forskrift, best.nr. 704	-	-	10	50	H
	EH40	25	123	50	246	Sk, BMGV
Ingredient	Source	TWA (8hours)		STEL (Short term)		Note(s)
		ppm	mg/m ³	ppm	mg/m ³	
ethanolamine	ACGIH TLV	3	7.5	6	15	-
	DE (TRGS 900)	-	-	2	5.1	H,Y,Sh
	DK - At-Vejledning Stoffer og materialier- C.0.1	1	2.5	-	-	H
	EU (2006/15/EC)	1	2.5	3	7.6	Skin
	NO Administrative Norm	1	2.5	-	-	H
	EH40	1	2.5	3	7.6	Skin

8.2 EXPOSURE CONTROLS

Engineering Controls: Use only with adequate ventilation. Use local ventilation and other engineering controls to maintain airborne contaminants below established and recommended exposure limits. If this product contains ingredients with exposure limits, monitoring may be required to determine the effectiveness of ventilation and other control measures.

Environmental exposure controls: No specific environmental exposure controls known.

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Personal Protective Equipment (PPE)

Eye/Face Protection: Wear eye protection/face protection.

Safety glasses or goggles (EN166).

Hand Protection: Wear chemical resistant gloves. (EN374).

Protective index 6, Breakthrough time > 480 mins. (E.g. - nitrile gloves, 0.4 mm thickness)

Protective gloves should be selected according to the application and duration of use. Workplace selection should take into consideration handling requirements, physical requirements and exposure to other substances.

Skin Protection: If major exposure is possible, wear suitable protection such as rubber boots, apron, etc.

Respiratory Protection: Respiratory protection should be worn when there is a potential of inadequate ventilation. If exposure limits are exceeded or symptoms are experienced, use an approved respirator with multi-purpose combination filter. (E.g. - EN 14387- ABEK)

Hygiene Measures: Do not eat, drink or smoke when using this product.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Colour:	Clear
Odour:	slight citrus
Melting point/Freezing point:	No test data available
Boiling point/Boiling range:	No test data available
Flammability:	Does not maintain combustion.
Lower and upper explosion limits:	No test data available
Flash Point:	> 93 °C [Method: Closed cup, ASTM D 56]
Auto-ignition temperature:	No test data available
Decomposition temperature:	No test data available
pH:	12.2 (as supplied) [Method: ASTM E 70]
Kinematic viscosity:	< 5 centipoise @ 20°C [Method: Rotational viscometer, Brookfield]
Solubility:	Water, completely soluble
Partition coefficient n-octanol/water [log Pow]:	No test data available
Vapor pressure:	No
Density:	1.0 kg/L @ 20°C [Method: Pycnometer, ASTM D 1475]
Relative vapor density:	No test data available
Particle characteristics:	Not applicable to liquids

9.2 OTHER INFORMATION

9.2.1 - Information with regard to physical hazard class:

Oxidising properties: Not established

Explosive properties: Not established

9.2.2 - Other safety characteristics:

Relative evaporation rate (butylacetate=1): No test data available

VOC content: 42%(as supplied), 8.2%(1:4), 4.6%(1:8), 2.4%(1:16)

SECTION 10: STABILITY AND REACTIVITY

10.1 REACTIVITY:	None expected under normal conditions. Reacts exothermically with acids: release of heat.
10.2 CHEMICAL STABILITY:	Stable under normal conditions.
10.3 POSSIBILITY OF HAZARDOUS REACTIONS:	None known under normal conditions. Reacts exothermically with acids: release of heat.
10.4 CONDITIONS TO AVOID:	None known under normal conditions.
10.5 INCOMPATIBLE MATERIALS:	Strong acids and oxidizing agents. Do not mix with other chemicals unless stated on the product label.
10.6 HAZARDOUS DECOMPOSITION PRODUCTS:	None known

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FORMULA X™ UHP**SECTION 11: TOXICOLOGICAL INFORMATION****11.1 INFORMATION ON HAZARD CLASSES AS DEFINED IN REGULATION (EC) 1272/2008**

ACUTE TOXICITY: Toxicity testing has not been completed on the mixture.
Harmful if inhaled.

ATE_{mix} (oral) - > 2000 mg/kg Based on available data, the classification criteria are not met.
ATE_{mix} (dermal) - > 2000 mg/kg Based on available data, the classification criteria are not met.
ATE_{mix} (inhalation) - > 12 mg/l (vapour) Classified as Acute Toxicity (Inhalation) - Category 4

Component	CAS #	LD50 Oral	LD50 Dermal	LC50 Inhalation
ethylene glycol monobutyl ether	111-76-2	1200 mg/kg	> 2000 mg/kg	guinea pig (1hr), >3.1 mg/l
ethanolamine	141-43-5	1515 mg/kg	2504 mg/kg	rat (4hr), > 1.3 mg/l
propylene glycol monobutyl ether	5131-66-8	5660 mg/kg	> 2000 mg/kg	rat (4hr), >3.5 mg/l

SKIN CORROSION/IRRITATION: Classified as Skin Corrosive - Category 1B
Causes severe skin burns.

SERIOUS EYE DAMAGE/IRRITATION: Classified as Eye Damage - Category 1
Causes serious eye damage.

RESPIRATORY OR SKIN SENSITIZATION: Based on available data, the classification criteria are not met.

GERM CELL MUTAGENICITY: Based on available data, the classification criteria are not met.

CARCINOGENICITY: Based on available data, the classification criteria are not met.

REPRODUCTIVE TOXICITY: Based on available data, the classification criteria are not met.

STOT-SINGLE EXPOSURE: Classified as STOT-SE - Category 3
May cause respiratory irritation.

STOT-REPEATED EXPOSURE: Based on available data, the classification criteria are not met.

ASPIRATION HAZARD: Based on available data, the classification criteria are not met.

11.2 INFORMATION ON OTHER HAZARDS

11.2.1 Endocrine disrupting properties: None known

11.2.2 Other information: Effects and symptoms related to this mixture, if any, are listed in Section 4.2.

SECTION 12: ECOLOGICAL INFORMATION

12.1 TOXICITY: Ecological testing has not been completed on the mixture.
Based on criteria 4.1.3 of (EC) 1272/2008 this product is not dangerous to the environment.

Component	CAS #	LC50 fish (96 h)	EC50 Daphnia (48 h)	EC50 algae (72 h)
ethylene glycol monobutyl ether	111-76-2	820-1490 mg/ml	835 mg/l	911 mg/l
ethanolamine	141-43-5	125-2010 mg/ml	33-93 mg/l	2.5 mg/l
propylene glycol monobutyl ether	5131-66-8	560-1000 mg/ml	>1000 mg/l	560 mg/l

12.2 PERSISTENCE AND DEGRADABILITY: Testing has not been completed on the mixture.

Component	CAS #	Biodegradation
ethylene glycol monobutyl ether	111-76-2	readily biodegradable
ethanolamine	141-43-5	readily biodegradable
propylene glycol monobutyl ether	5131-66-8	readily biodegradable

12.3 BIOACCUMULATIVE POTENTIAL: Testing has not been completed on the mixture.

Component	CAS #	Partition coefficient n-octanol/water K _{ow} (Log)	Bioconcentration factor (BCF)
ethylene glycol monobutyl ether	111-76-2	0.81	< 100
ethanolamine	141-43-5	-1.91	< 100
propylene glycol monobutyl ether	5131-66-8	1.2	< 100

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FORMULA X™ UHP**12.4 MOBILITY IN SOIL:** Testing has not been completed on the mixture.

Component	CAS #	Soil Organic Carbon-Water Partitioning Coefficient (K _{oc})
ethylene glycol monobutyl ether	111-76-2	67
ethanolamine	141-43-5	1.17
propylene glycol monobutyl ether	5131-66-8	1.3 - 6

12.5 RESULTS OF PBT AND vPvB ASSESSMENT: Not applicable**12.6 ENDOCRINE DISRUPTING PROPERTIES:** None known**12.7 OTHER ADVERSE EFFECTS:** No additional information available.**SECTION 13: DISPOSAL CONSIDERATIONS****13.1 WASTE TREATMENT METHODS**

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

EU Waste Catalogue: 20 01 15* - Alkalines

SECTION 14: TRANSPORT INFORMATION**14.1 UN NUMBER:** UN1760**14.2 UN PROPER SHIPPING NAME:** Corrosive liquid, n.o.s. (ethanolamine)**14.3 TRANSPORT HAZARD CLASSES:** 8**14.4 PACKING GROUP:** III**14.5 ENVIRONMENTAL HAZARDS:** N/A**14.6 SPECIAL PRECAUTIONS FOR USER:**

Package volumes < 5 L are shipped as Limited Quantity; as permitted by hazard class and quantity limits.

IMDG

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

Stowage and Segregation: Category B. Clear of living quarters.

Marine Pollutant: None

ADR/RID

Class: 8

Item Number: 80

Classification Code: C9

14.7 MARITIME TRANSPORT IN BULK ACCORDING TO IMO INSTRUMENTS: Product is not transported in bulk.**SECTION 15: REGULATORY INFORMATION****15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE MIXTURE**

Does not contain substances or labelled product uses subject to REACH Annex XVII restriction.

See Annex XVII of Regulation (EC) 1907/2006 for Designation of the substances and Conditions of restriction.

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to EU 649/2012

Contains no substance subject to EU 2019/1021

15.2 CHEMICAL SAFETY ASSESSMENT: No information available.**SECTION 16: OTHER INFORMATION****REVISION INFORMATION:**

17-May-2024 - Revisions § 1, 3, 4, 8, 9, 10, 11, 12, 14, 15 & 16

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FORMULA X™ UHP**ABBREVIATIONS:**

ACGIH	American Conference of Governmental Industrial Hygienists
ATE	Acute Toxicity Estimate
CAS No.	Chemical Abstract Service Number
CLP	Classification Labeling Packaging Regulation (EC) 1272/2008
EC50	Median Effective Concentration.
EC No.	European Union Identification Number
IMO	International Maritime Organization
LC50	Median Lethal Concentration
LD50	Median Lethal Dose
PBT	Persistent Bioaccumulative Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation, (EC) 1907/2006
SDS	Safety Data Sheet
STEL	Short-Term Exposure Limit
TWA	Time Weighted Average
UFI	Unique Formula Identifier
UN	United Nations
VOC	Volatile Organic Compound
vPvB	Very Persistent and Very Bioaccumulative

CLASSIFICATION ACCORDING TO EC 1272/2008:

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008:		
Skin Corrosion - Category 1	H314	Calculation method
Eye Damage - Category 1	H318	Calculation method
Acute Toxicity - Category 4 (Inhalation)	H332	Calculation method
Specific Target Organ Toxicity (Single Exposure) - Category 3	H335	Calculation method

FULL TEXT OF HAZARD STATEMENTS:

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.

FULL TEXT OF PRECAUTIONARY STATEMENTS:

P261	Avoid breathing mist/vapours/spray.
P264	Wash thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P312	Call a POISON CENTRE/doctor if you feel unwell.
P321	Specific treatment (see ... on this label).
P363	Wash contaminated clothing before reuse.
P403+P233	Store in well ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

ISSUED BY:

Chemical/R&D Department
Amano Pioneer Eclipse Corporation

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