

Section 1. Identification

Product identifier : NEVASTANE XS 320

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

Identified uses

Extreme pressure
Grease for incidental food contact
Lubricating grease

Supplier's details :

TotalEnergies Marketing Asia-Pacific Middle East Pte. Ltd.
182 Cecil Street
#27-01 Frasers Tower
Singapore 069547
Tel: +65 6879 2200
ms.ap-sds@totalenergies.com
See section 16 to have the contact details of the local supplier

Emergency telephone number (with hours of operation) :

Asia-Pacific: +65 3158 1074

Section 2. Hazards identification

Classification of the substance or mixture : SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A

GHS label elements, including precautionary statements

Hazard pictograms :



Signal word : Warning

Hazard statements : Causes serious eye irritation.

Precautionary statements

Prevention : Wear eye or face protection. Wash thoroughly after handling.

Response : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

Storage : Not applicable.

Disposal : Not applicable.

Other hazards which do not result in classification : None known.

**Section 3. Composition/information on ingredients**

Substance/mixture : Mixture

Ingredient name	% (w/w)	CAS number
Benzenesulfonic acid, dodecyl-, calcium salt	<3	1335202-81-7
ALKYL NAPHTHALENE SULFONIC ACID, CALCIUM SALT	≤3	-
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	≤1	68411-46-1

Additional information : The product is made from synthetic base oils

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.

Chemical formula : Not applicable.

Section 4. First aid measuresDescription of necessary first aid measures

- 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 for at least 10 minutes. Get medical attention.
- 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 adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick 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 low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayedPotential acute health effects

- Eye contact** : Causes serious eye irritation.
- 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.

Over-exposure signs/symptoms



Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: No specific data.
Skin contact	: <input checked="" type="checkbox"/> No specific data.
Ingestion	: No specific data.

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

Notes to physician	: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.

Specific hazards arising from the chemical : No specific fire or explosion hazard.

Hazardous thermal decomposition products	: carbon monoxide carbon dioxide nitrogen oxides sulfur oxides Hydrogen sulfide Mercaptans
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Special protective actions for fire-fighters : 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.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 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.
For emergency responders	: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-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 materials for containment and cleaning up

- Small spill** : Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, 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.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. 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 and 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 wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. 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.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	ACGIH TLV (United States). TWA: 3 mg/m ³ Form: Respirable dust TWA: 10 mg/m ³ Form: Total dust

Occupational exposure limits Philippines

Product/substance	Exposure limit values
White mineral oil (petroleum)	TLV = Threshold Limit Value (Philippines, 4/2016). [Oil mist (mineral)] TLV: 5 mg/m ³ 8 hours.

Advisory OEL : No known significant effects or critical hazards.

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.



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 acceptable levels.

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.

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: chemical splash goggles.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the 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.
Hydrocarbon-proof gloves
Fluorinated rubber
nitrile rubber
Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

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.

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.

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature (20°C / 68°F) and pressure (1013 hPa) unless otherwise indicated

Appearance

Physical state : Solid. [grease]
Color : Brown.
Odor : Characteristic.
Odor threshold : Not available.
pH : Not applicable.
Melting point/freezing point : >300°C (>572°F) [EN ISO 3016]
Boiling point : Not applicable.




Flash point	: Not applicable.
Evaporation rate	: Not available.
Flammability (solid, gas)	: Yes.
Lower and upper explosive (flammable) limits	: Not applicable.
Vapor pressure	: Not applicable.
Vapor density	: Not applicable.
Relative density	: 0.9 [ASTM D 4052]
Density	: 0.9 g/cm ³ [20°C] [ASTM D 4052]
Solubility(ies)	:

Media	Result
water	Not soluble

Miscible with water	: No.
Partition coefficient: n-octanol/water	: >3.5
Auto-ignition temperature	: Not applicable.
Decomposition temperature	: >300°C (>572°F)
Viscosity	: Kinematic (40°C (104°F)): Not applicable.
Flow time (ISO 2431)	: Not available.
<u>Particle characteristics</u>	
Median particle size	: Not available.

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: Stable under recommended storage and handling conditions (see Section 7).
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	:  Strong oxidizing agents
Hazardous decomposition products	: carbon monoxide carbon dioxide nitrogen oxides sulfur oxides Hydrogen sulfide Mercaptans
SADT	: Not available.

**Section 11. Toxicological information****Information on toxicological effects****Acute toxicity**

Product/substance	Result	Species	Dose	Exposure	Test
Benzenesulfonic acid, C10-13-alkyl derivs., Ca Salt	LD50 Dermal	Rat - Male, Female	>2000 mg/kg	-	OECD 402 Read across
ALKYL NAPHTHALENE SULFONIC ACID, CALCIUM SALT	LD50 Oral	Rat - Female	4445 mg/kg	-	-
	LD50 Oral	Rat	>2000 mg/kg	-	-
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	LD50 Oral	Rat	>5000 mg/kg	-	-

Conclusion/Summary : Based on available data, the classification criteria are not met.

Irritation/Corrosion

Product/substance	Result	Species	Score	Exposure	Test
Benzenesulfonic acid, C10-13-alkyl derivs., Ca Salt	Eyes - Irritant	Rabbit	1	-	OECD 405
	Skin - Erythema/Eschar	Rabbit	2.7	4 hours	OECD 404

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

Eyes : Based on available data, the classification criteria are met.

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

Sensitization

Product/substance	Route of exposure	Species	Result
Benzenesulfonic acid, C10-13-alkyl derivs., Ca Salt	skin	Guinea pig	Not sensitizing

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

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

Mutagenicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Carcinogenicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Reproductive toxicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Teratogenicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

Not available.

Conclusion/Summary : Based on available data, the classification criteria are not met.

Specific target organ toxicity (repeated exposure)

Not available.

Conclusion/Summary : Based on available data, the classification criteria are not met.

Aspiration hazard



Not available.

Conclusion/Summary : Based on available data, the classification criteria are not met.

Information on the likely routes of exposure : Not available.

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- 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** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- 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 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

Not available.

- General** : No known significant effects or critical hazards.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Reproductive toxicity** : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product/substance	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
<input checked="" type="checkbox"/> Benzenesulfonic acid, C10-13-alkyl derivs., Ca Salt	4445	N/A	N/A	N/A	N/A

Other information :



Not available.

Section 12. Ecological information**Toxicity**

Product/substance	Result	Species	Exposure	Test
Benzenesulfonic acid, C10-13-alkyl derivs., Ca Salt	Acute EC50 29 mg/l	Algae - Pseudokirchneriella subcapitata	96 hours	STDMETH, ASTM and USEPA 201
	Acute EC50 2.9 mg/l	Crustaceans - Daphnia magna	48 hours	OECD 202
	Acute LC50 1.67 mg/l	Fish - Lepomis macrochirus	96 hours	STDMETH, ASTM and USEPA
	Chronic NOEC 0.5 mg/l	Algae - Pseudokirchneriella subcapitata	96 hours	STDMETH, ASTM and USEPA 201
	Chronic NOEC 0.379 mg/l	Daphnia	48 hours	OECD 211

Persistence/degradability

Product/substance	Test	Result	Dose	Inoculum
Benzenesulfonic acid, C10-13-alkyl derivs., Ca Salt	OECD 301B	>90 % - Readily - 28 days	-	Activated sludge

Product/substance	Aquatic half-life	Photolysis	Biodegradability
Benzenesulfonic acid, C10-13-alkyl derivs., Ca Salt	-	-	Readily
ALKYL NAPHTHALENE SULFONIC ACID, CALCIUM SALT	-	-	Readily
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	-	-	Not readily

Bioaccumulative potential

Product/substance	LogK _{ow}	BCF	Potential
NEVASTANE XS 320	>3.5	-	low
Benzenesulfonic acid, C10-13-alkyl derivs., Ca Salt	2.89	-	low
ALKYL NAPHTHALENE SULFONIC ACID, CALCIUM SALT	6.6	-	high
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	5.1	1730	high

Mobility in soilSoil/water partition coefficient (K_{oc}) : Not available.

Mobility in soil : Given its physical and chemical characteristics, the product has no soil mobility. The product is insoluble and floats on water. Loss by evaporation is limited.

Other adverse effects : No known significant effects or critical hazards.

**Section 13. Disposal considerations**

Disposal methods : The generation of waste should be avoided or minimized 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 local authority requirements. Dispose 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.

Section 14. Transport information

	UN	IMDG	ICAO/IATA	ADR/RID	ADN
UN/ID No	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-	-
Transport hazard class (es)	-	-	-	-	-
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.

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information**Singapore - hazardous chemicals under government control**

None.

National regulations

This Safety Data Sheet (SDS) has been prepared according to Singapore Standard SS 586 on "Specification for Hazard Communication for Hazardous Chemicals and Dangerous Goods"

Workplace Safety and Health (General Provision) Regulations

Philippines**National regulations**

This Safety Data Sheet (SDS) has been prepared according to EMB Memorandum Circular on "Guidance Manual for Department Administrative Order 2015-09, Rules and Procedures for the Implementation of GHS in Preparation of SDS and Labelling Requirements of Toxic Chemical Substances"

**International regulations****Chemical Weapon Convention List Schedules I, II & III Chemicals**

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia inventory (AIIIC)	: All components are listed or exempted.
Canada inventory (DSL/NDSL)	: <input checked="" type="checkbox"/> At least one component is not listed in DSL but all such components are listed in NDSL.
China inventory (IECSC)	: All components are listed, exempted, or notified.
Europe inventory (EC)	: All components are listed or exempted.
Japan inventory	: Japan inventory (CSCL) : Not determined. Japan inventory (ISHL) : At least one component is not listed.
New Zealand Inventory of Chemicals (NZIoC)	: All components are listed or exempted.
Philippines inventory (PICCS)	: At least one component is not listed.
Korea inventory (KECI)	: All components are listed or exempted.
Taiwan Chemical Substances Inventory (TCSI)	: All components are listed, exempted, or notified.
Thailand inventory	: Not determined.
Turkey inventory	: At least one component is not listed.
United States inventory (TSCA 8b)	: All components are listed or exempted.
Vietnam inventory	: Not determined.

The information stated in this section relates solely to the conformity of the chemical product with the countries Inventories. The information used to confirm the inventory status of this product may be based on additional data to the chemical composition shown in Section 3. Other regulations may apply for importation or marketing authorizations.

Section 16. Other information**History****Date of revision** : 2023/04/26**previous revision date** : 2022/10/25**Version** : 1.02**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 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available



TotalEnergies

NEVASTANE XS 320

SDS # : 081733

SGG = Segregation Group
UN = United Nations

Procedure used to derive the classification

Classification	Justification
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A	Calculation method

Additional details on the supplier of the product

Total (Philippines) Corporation
7th Floor, 11th Corporate Center
11th Avenue, corner Triangle Drive,
North Bonifacio, Bonifacio Global
City
1634 Taguig City
Philippines
Tel : +63 2 88490888
Fax : +63 2 88490889

References : Not available.

✔ Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.