

SAFETY DATA SHEET

Enviroline 2405 Part B

Section 1. Identification

Enviroline 2405 Part B : GHS product identifier
NVA244 : Product code

Identified uses	
Professional application of coatings and inks	
Uses advised against	Reason
All Other Uses	

International Farg AB : **Supplier's details**
 Holmedalen 3
 Aspereds Industriomrade
 SE-424 22 Angered
 Sweden

Tel: +46 (0) 31 928500 Fax: +46 (0) 31 928530

+46 8 33 12 31 : **Emergency telephone number (with hours of operation)**

+966 55 388 0087 : **National advisory body/ Poison Centre (For use only by licensed medical professionals.)**

sdsfellinguk@akzonobel.com : **e-mail address of person responsible for this SDS**

Section 2. Hazards identification

ACUTE TOXICITY (oral) - Category 4 : **Classification of the substance or mixture**
 SKIN CORROSION/IRRITATION - Category 1B
 SKIN SENSITIZATION - Category 1
 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
 LONG-TERM AQUATIC HAZARD - Category 3

GHS label elements



: **Hazard pictograms**

Danger : **Signal word**
 Harmful if swallowed.
 Causes severe skin burns and eye damage.
 May cause an allergic skin reaction.
 May cause damage to organs through prolonged or repeated exposure.
 Harmful to aquatic life with long lasting effects.
 : **Hazard statements**

Precautionary statements

Section 2. Hazards identification

Wear protective gloves. Wear eye or face protection. Wear protective clothing. Avoid release to the environment. Do not breathe vapour. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. : **Prevention**

Get medical attention if you feel unwell. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a POISON CENTER or physician. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician. : **Response**

Store locked up. : **Storage**

Dispose of contents and container in accordance with all local, regional, national and international regulations. : **Disposal**

Wear appropriate respirator when ventilation is inadequate. : **Supplemental label elements**

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

Section 3. Composition/information on ingredients

Mixture : **Substance/mixture**

Classification	CAS number	% by weight	Ingredient name
Acute Tox. 4, H302 Skin Corr. 1C, H314 Skin Sens. 1, H317 STOT RE 2, H373 (oral) Aquatic Chronic 3, H412	135108-88-2	≥10 - ≤25	Formaldehyde, polymer with benzenamine, hydrogenated
Acute Tox. 4, H302 Skin Corr. 1B, H314 Skin Sens. 1, H317 STOT RE 2, H373 (oral) Aquatic Chronic 2, H411	1761-71-3	≥10 - <25	4,4'-methylenebis(cyclohexylamine)
Acute Tox. 4, H302 Skin Corr. 1B, H314	919-30-2	≤10	3-aminopropyltriethoxysilane
Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1A, H317	8007-24-7	≤5	Cashew, nutshell liq.
Skin Sens. 1, H317 Aquatic Chronic 4, H413	-	<1	1,3-bis[12-hydroxy-octadecamide-N-methylene]-benzene

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.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician.

: Eye contact

Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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. 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. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

: Inhalation

Get medical attention immediately. Call a poison center or physician. Wash with plenty of soap and 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. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

: Skin contact

Get medical attention immediately. Call a poison center or physician. 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 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. Chemical burns must be treated promptly by a physician. 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.

: Ingestion

Most important symptoms/effects, acute and delayed

Potential acute health effects

Causes serious eye damage.

: Eye contact

May give off gas, vapour or dust that is very irritating or corrosive to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

: Inhalation

Causes severe burns. May cause an allergic skin reaction.

: Skin contact

Harmful if swallowed. May cause burns to mouth, throat and stomach.

: Ingestion

Over-exposure signs/symptoms

Adverse symptoms may include the following:

pain
watering
redness

: Eye contact

No specific data.

: Inhalation

Adverse symptoms may include the following:

pain or irritation
redness
blistering may occur

: Skin contact

Adverse symptoms may include the following:
stomach pains

: Ingestion

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

Section 4. First aid measures

In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. : **Notes to physician**

No specific treatment. : **Specific treatments**

No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. : **Protection of first-aiders**

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media

Use an extinguishing agent suitable for the surrounding fire. : **Suitable extinguishing media**

None known. : **Unsuitable extinguishing media**

In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain. : **Specific hazards arising from the chemical**

Decomposition products may include the following materials: : **Hazardous thermal decomposition products**
 carbon dioxide
 carbon monoxide
 nitrogen oxides
 metal oxide/oxides

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 actions 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. : **Special protective equipment for fire-fighters**

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

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 spilt material. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. : **For non-emergency personnel**

If specialised 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". : **For emergency responders**

Avoid dispersal of spilt 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). Water polluting material. May be harmful to the environment if released in large quantities. : **Environmental precautions**

Methods and material for containment and cleaning up

Section 6. Accidental release measures

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. : **Small spill**

Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spill product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal. : **Large spill**

Section 7. Handling and storage

Precautions for safe handling

Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Avoid release to the environment. 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 and can be hazardous. Do not reuse container. : **Protective measures**

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. : **Advice on general occupational hygiene**

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. 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 unlabelled containers. Use appropriate containment to avoid environmental contamination. : **Conditions for safe storage, including any incompatibilities**

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

If user operations generate dust, fumes, gas, vapour 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. : **Appropriate engineering 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. : **Environmental exposure controls**

Individual protection measures

Section 8. Exposure controls/personal protection

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. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

: **Hygiene measures**

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 and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

: **Eye/face protection**

Skin protection

Use chemical resistant gloves classified under Standard EN 374: Protective gloves against chemicals and micro-organisms. Recommended: Viton® or Nitrile gloves. When prolonged or frequently repeated contact may occur, a glove with a protection class of 6 (breakthrough time greater than 480 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 2 or higher (breakthrough time greater than 30 minutes according to EN 374) is recommended. The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment. NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier. Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

: **Hand 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.

: **Body 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.

: **Other skin protection**

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

: **Respiratory protection**

Section 9. Physical and chemical properties

Appearance

Liquid.

: **Physical state**

White.

: **Colour**

Amine-like.

: **Odour**

Not available.

: **Odour threshold**

Not applicable.

: **pH**

Not available.

: **Melting point**

Lowest known value: >220°C (>428°F)(Formaldehyde, polymer with benzenamine, hydrogenated).

: **Boiling point**

Closed cup: 101°C (213.8°F)

: **Flash point**

Not available.

: **Evaporation rate**

Not available.

: **Flammability (solid, gas)**

Not available.

: **Lower and upper explosive (flammable) limits**

Not available.

: **Vapour pressure**

Section 9. Physical and chemical properties

Not available.	: Vapour density
1.4	: Relative density
Insoluble in the following materials: cold water.	: Solubility
Not available.	: Partition coefficient: n-octanol/water
Not available.	: Auto-ignition temperature
Not available.	: Decomposition temperature
Kinematic (room temperature): 1217 mm ² /s (1217 cSt)	: Viscosity

Section 10. Stability and reactivity

No specific test data related to reactivity available for this product or its ingredients.	: Reactivity
The product is stable.	: Chemical stability
Under normal conditions of storage and use, hazardous reactions will not occur.	: Possibility of hazardous reactions
No specific data.	: Conditions to avoid
No specific data.	: Incompatible materials
Under normal conditions of storage and use, hazardous decomposition products should not be produced.	: Hazardous decomposition products

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Exposure	Dose	Species	Result	Product/ingredient name
-	4.29 g/kg	Rabbit	LD50 Dermal	3-aminopropyltriethoxysilane
-	1.57 g/kg	Rat	LD50 Oral	

Irritation/Corrosion

Observation	Exposure	Score	Species	Result	Product/ingredient name
-	24 hours 10 microliters	-	Rabbit	Eyes - Severe irritant	4,4'-methylenebis (cyclohexylamine) 3-aminopropyltriethoxysilane
-	100 milligrams	-	Rabbit	Eyes - Mild irritant	
-	24 hours 750 Micrograms	-	Rabbit	Eyes - Severe irritant	
-	24 hours 5 milligrams	-	Rabbit	Skin - Severe irritant	

Sensitisation

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Section 11. Toxicological information

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Target organs	Route of exposure	Category	Name
Not determined	Oral	Category 2	Formaldehyde, polymer with benzenamine, hydrogenated 4,4'-methylenebis(cyclohexylamine)
Not determined	Oral	Category 2	

Aspiration hazard

Not available.

Not available.

: Information on likely routes of exposure

Potential acute health effects

Causes serious eye damage.

: Eye contact

May give off gas, vapour or dust that is very irritating or corrosive to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

: Inhalation

Causes severe burns. May cause an allergic skin reaction.

: Skin contact

Harmful if swallowed. May cause burns to mouth, throat and stomach.

: Ingestion

Symptoms related to the physical, chemical and toxicological characteristics

Adverse symptoms may include the following:

: Eye contact

pain
watering
redness

No specific data.

: Inhalation

Adverse symptoms may include the following:

: Skin contact

pain or irritation
redness
blistering may occur

Adverse symptoms may include the following:

: Ingestion

stomach pains

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

Not available.

: Potential immediate effects

Not available.

: Potential delayed effects

Long term exposure

Not available.

: Potential immediate effects

Not available.

: Potential delayed effects

Potential chronic health effects

Not available.

May cause damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

: General

No known significant effects or critical hazards.

: Carcinogenicity

Section 11. Toxicological information

No known significant effects or critical hazards.
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.

: **Mutagenicity**
 : **Teratogenicity**
 : **Developmental effects**
 : **Fertility effects**

Numerical measures of toxicity

Acute toxicity estimates

ATE value	Route
1003.6 mg/kg	Oral
23642.5 mg/kg	Dermal
32.24 mg/l	Inhalation (dusts and mists)

Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Not available.

Bioaccumulative potential

Potential	BCF	LogP _{ow}	Product/ingredient name
low	-	2.03	4,4'-methylenebis (cyclohexylamine)
low	3.4	1.7	3-aminopropyltriethoxysilane
high	-	>4.78	Cashew, nutshell liq.

Mobility in soil

Not available.

: **Soil/water partition
coefficient (K_{oc})**

No known significant effects or critical hazards.

: **Other adverse effects**




Section 13. Disposal considerations

The generation of waste should be avoided or minimised 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.

: **Disposal methods**

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 spilt material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

IATA	IMDG	UN	
UN3066	UN3066	UN3066	UN number
PAINT	PAINT	PAINT	UN proper shipping name
8 	8 	8 	Transport hazard class(es)
II	II	II	Packing group
No.	No.	No.	Environmental hazards
-	-	-	Additional information

Not applicable.

: IMDG Code Segregation group

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.

: Special precautions for user

Not available.

: Transport in bulk according to Annex II of Marpol and the IBC Code

Section 15. Regulatory information

No known specific national and/or regional regulations applicable to this product (including its ingredients).

: Safety, health and environmental regulations specific for the product

Section 16. Other information

Justification

Justification	Classification
Calculation method	Acute Tox. 4, H302
Calculation method	Skin Corr. 1B, H314
Calculation method	Skin Sens. 1, H317
Calculation method	STOT RE 2, H373
Calculation method	Aquatic Chronic 3, H412

History

23/03/2018

: Date of printing

23/03/2018

: Date of issue/Date of revision

No previous validation

: Date of previous issue

1

: Version

Section 16. Other information

ATE = Acute Toxicity Estimate

: Key to abbreviations

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)

UN = United Nations

Not available.

: References

Indicates information that has changed from previously issued version.

Notice to reader

IMPORTANT NOTE: the information contained in this data sheet (as may be amended from time to time) is not intended to be exhaustive and is presented in good faith and believed to be correct as of the date on which it is prepared. It is the user's responsibility to verify that this data sheet is current prior to using the product to which it relates.

Persons using the information must make their own determinations as to the suitability of the relevant product for their purposes prior to use. Where those purposes are other than as specifically recommended in this safety data sheet, then the user uses the product at their own risk.

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