

SAFETY DATA SHEET

POLIBRID 705E PART B

Section 1. Identification

POLIBRID 705E PART B : GHS product identifier
PEA046 : 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 Industriområde
 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 (inhalation) - Category 4 : **Classification of the substance or mixture**
 SKIN CORROSION/IRRITATION - Category 2
 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
 RESPIRATORY SENSITIZATION - Category 1
 SKIN SENSITIZATION - Category 1
 CARCINOGENICITY - Category 2
 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

GHS label elements



: **Hazard pictograms**

Danger : **Signal word**

Section 2. Hazards identification

Harmful if inhaled. : **Hazard statements**
 Causes serious eye irritation.
 Causes skin irritation.
 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 May cause an allergic skin reaction.
 Suspected of causing cancer.
 May cause respiratory irritation.
 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

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 respiratory protection. Use only outdoors or in a well-ventilated area. Do not breathe vapour. 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 exposed or concerned: Get medical attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. If experiencing respiratory symptoms: 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. If eye irritation persists: Get medical attention. : **Response**

Store locked up. : **Storage**

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

Use an approved, properly-fitted, powered air-purifying respirator or a respirator of equivalent or greater protection. : **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, H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 2, H351 (inhalation) STOT SE 3, H335 STOT RE 2, H373 (inhalation)	9016-87-9	≥90	Isocyanic acid, polymethylenepolyphenylene ester

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

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.	: Eye contact
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. Get medical attention. If necessary, call a poison center or physician. 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 the event of any complaints or symptoms, avoid further exposure.	: Inhalation
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. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.	: Skin contact
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. Get medical attention. 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 irritation.	: Eye contact
Harmful if inhaled. May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.	: Inhalation
Causes skin irritation. May cause an allergic skin reaction.	: Skin contact
Irritating to mouth, throat and stomach.	: Ingestion

Over-exposure signs/symptoms

Adverse symptoms may include the following: pain or irritation watering redness	: Eye contact
Based on the properties of the isocyanate components and considering toxicological data on similar mixtures, this mixture may cause acute irritation and/or sensitisation of the respiratory system, leading to an asthmatic condition, wheezing and tightness of the chest. Sensitised persons may subsequently show asthmatic symptoms when exposed to atmospheric concentrations well below the OEL. Adverse symptoms may include the following: Repeated exposure may lead to permanent respiratory disability. respiratory tract irritation coughing wheezing and breathing difficulties asthma	: Inhalation
Adverse symptoms may include the following: irritation redness	: Skin contact
No specific data.	: Ingestion

Section 4. First aid measures

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

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.	: 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.	: Specific hazards arising from the chemical
No specific data.	: Hazardous thermal decomposition products
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. Avoid breathing 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).	: Environmental precautions

Methods and material for containment and cleaning up

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
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Section 6. Accidental release measures

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 spilt 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 sensitisation problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. 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 breathe vapour or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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. Dry sanding, flame cutting and/or welding of the dry paint film will give rise to dust and/or hazardous fumes. Wet sanding/flattening should be used wherever possible. If exposure cannot be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment should be used.

: 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. When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits. See also Section 8 for additional information on hygiene measures.

: Advice on general occupational hygiene

Store between the following temperatures: 10 to 30°C (50 to 86°F). 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.

Use only with adequate ventilation. 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.

: 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

Brown.

: Colour

Faint odour.

: Odour

Not available.

: Odour threshold

Not available.

: pH

Not available.

: Melting point

Lowest known value: 199.85°C (391.7°F) (Isocyanic acid, polymethylenepolyphenylene ester).

: Boiling point

Closed cup: 201°C (393.8°F)

: Flash point

Not available.

: Evaporation rate

Not available.

: Flammability (solid, gas)

Not available.

: Lower and upper explosive (flammable) limits

Not available.

: Vapour pressure

Not available.

: Vapour density

Section 9. Physical and chemical properties

1.2	: 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): 200 mm ² /s (200 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 hours	490 mg/m ³	Rat	LC50 Inhalation Vapour	Isocyanic acid, polymethylenepolyphenylene ester
-	>9400 mg/kg	Rabbit	LD50 Dermal	
-	49 g/kg	Rat	LD50 Oral	

Irritation/Corrosion

Observation	Exposure	Score	Species	Result	Product/ingredient name
-	100 milligrams	-	Rabbit	Eyes - Mild irritant	Isocyanic acid, polymethylenepolyphenylene ester

Sensitisation

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Section 11. Toxicological information

Specific target organ toxicity (single exposure)

Target organs	Route of exposure	Category	Name
Respiratory tract irritation	Not applicable.	Category 3	Isocyanic acid, polymethylenepolyphenylene ester

Specific target organ toxicity (repeated exposure)

Target organs	Route of exposure	Category	Name
Not determined	Inhalation	Category 2	Isocyanic acid, polymethylenepolyphenylene ester

Aspiration hazard

Not available.

Not available.

: Information on likely routes of exposure

Potential acute health effects

Causes serious eye irritation.

: Eye contact

Harmful if inhaled. May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

: Inhalation

Causes skin irritation. May cause an allergic skin reaction.

: Skin contact

Irritating to mouth, throat and stomach.

: Ingestion

Symptoms related to the physical, chemical and toxicological characteristics

Adverse symptoms may include the following:

pain or irritation
watering
redness

: Eye contact

Based on the properties of the isocyanate components and considering toxicological data on similar mixtures, this mixture may cause acute irritation and/or sensitisation of the respiratory system, leading to an asthmatic condition, wheezing and tightness of the chest.

: Inhalation

Sensitised persons may subsequently show asthmatic symptoms when exposed to atmospheric concentrations well below the OEL.

Adverse symptoms may include the following:

Repeated exposure may lead to permanent respiratory disability.

respiratory tract irritation

coughing

wheezing and breathing difficulties

asthma

: Skin contact

Adverse symptoms may include the following:

irritation

redness

No specific data.

: Ingestion

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

Section 11. Toxicological information

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**

Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

: **Carcinogenicity**

No known significant effects or critical hazards.

: **Mutagenicity**

No known significant effects or critical hazards.

: **Teratogenicity**

No known significant effects or critical hazards.

: **Developmental effects**

No known significant effects or critical hazards.

: **Fertility effects**

Numerical measures of toxicity

Acute toxicity estimates

ATE value	Route
11 mg/l	Inhalation (vapours)

Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

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	
Not regulated.	Not regulated.	Not regulated.	UN number
-	-	-	UN proper shipping name
-	-	-	Transport hazard class(es)
-	-	-	Packing group
No.	No.	No.	Environmental hazards
-	-	-	Additional information

: 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, H332
Calculation method	Skin Irrit. 2, H315
Calculation method	Eye Irrit. 2A, H319
Calculation method	Resp. Sens. 1, H334
Calculation method	Skin Sens. 1, H317
Calculation method	Carc. 2, H351
Calculation method	STOT SE 3, H335
Calculation method	STOT RE 2, H373

History

31/05/2017

: Date of printing

31/05/2017

: Date of issue/Date of revision

10/06/2016

: Date of previous issue

3

: Version

Section 16. Other information

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)

UN = United Nations

Not available.

: Key to abbreviations

: 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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