SAFETY DATA SHEET
POLYUREA 2000 B

1. Identification

Product identifier

Product name POLYUREA 2000 B

Product number 0526 B

Recommended use of the chemical and restrictions on use

Application coating

Details of the supplier of the safety data sheet

Supplier

ITW Performance Polymers
Bay 150
Shannon Industrial Estate
Co. Clare
Ireland
V14 DF82
353(61)771500
353(61)471285
mail@itwpp.com

Emergency telephone number

Emergency telephone +44(0)1235 239 670 (24h)

2. Hazard(s) identification

Classification of the substance or mixture

Physical hazards Not Classified

Health hazards Acute Tox. 4 - H302 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 STOT RE 2 - H373

Environmental hazards Aquatic Chronic 2 - H411

Label elements

Pictogram

Signal word Danger

Hazard statements H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H373 May cause damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.

POLYUREA 2000 B

Precautionary statements

P260 Do not breathe vapor/ spray.
P261 Avoid breathing vapor/ spray.
P264 Wash contaminated skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P272 Contaminated work clothing must not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301+P310 If swallowed: Immediately call a poison center/ doctor.
P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.
P302+P352 If on skin: Wash with plenty of water.
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.
P314 Get medical advice/ attention if you feel unwell.
P321 Specific treatment (see medical advice on this label).
P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P363 Wash contaminated clothing before reuse.
P391 Collect spillage.
P405 Store locked up.
P501 Dispose of contents/ container in accordance with national regulations.

Contains

POLY(OXY(METHYL-1,2-ETHANEDIYL)),ALPHA-(2-AM OMEGA-(2-AMINOMETHYLETHOXY, DIETHYLMETHYLBENZENEDIAMINE, BIS(1,2,2,6,6-PENTAMETHYL-4-PIPERIDYL)SEBACATE

Other hazards

This product does not contain any substances classified as PBT or vPvB.

3. Composition/information on ingredients

Mixtures

POLY(OXY(METHYL-1,2-ETHANEDIYL)),ALPHA-(2-AM OMEGA-(2-AMINOMETHYLETHOXY **60-100%**

CAS number: 9046-10-0

Classification
Acute Tox. 4 - H302
Skin Corr. 1B - H314
Aquatic Chronic 3 - H412

POLYUREA 2000 B

DIETHYLMETHYLBENZENEDIAMINE	10-30%
CAS number: 68479-98-1	
M factor (Acute) = 1	M factor (Chronic) = 1

Classification
Acute Tox. 4 - H302
Acute Tox. 4 - H312
Eye Irrit. 2 - H319
STOT RE 2 - H373
Aquatic Acute 1 - H400
Aquatic Chronic 1 - H410

BIS(1,2,2,6,6-PENTAMETHYL-4-PIPERIDYL)SEBACATE	<1%
CAS number: 41556-26-7	
M factor (Acute) = 1	M factor (Chronic) = 1

Classification
Skin Sens. 1 - H317
Aquatic Acute 1 - H400
Aquatic Chronic 1 - H410

The full text for all hazard statements is displayed in Section 16.

4. First-aid measures

Description of first aid measures

General information Avoid contact with skin and eyes. Do not breathe vapour. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Inhalation Move affected person to fresh air at once. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention if any discomfort continues.

Ingestion Do not induce vomiting. Give plenty of water to drink. Never give anything by mouth to an unconscious person. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention immediately.

Skin Contact Remove affected person from source of contamination. Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.

Eye contact Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention. Get medical attention if irritation persists after washing.

Most important symptoms and effects, both acute and delayed

General information The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Indication of immediate medical attention and special treatment needed

Notes for the doctor No specific recommendations. If in doubt, get medical attention promptly.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media Extinguish with foam, carbon dioxide or dry powder.

POLYUREA 2000 B

Special hazards arising from the substance or mixture

Specific hazards Irritating gases or vapors.

Advice for firefighters

Protective actions during firefighting Avoid breathing fire gases or vapors. Keep up-wind to avoid fumes. Do not use water jet as an extinguisher, as this will spread the fire. Control run-off water by containing and keeping it out of sewers and watercourses.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Warn everybody of potential hazards and evacuate if necessary. Provide adequate ventilation. Wear protective clothing as described in Section 8 of this safety data sheet. Avoid contact with skin and eyes. Do not breathe vapour.

Environmental precautions

Environmental precautions Avoid the spillage or runoff entering drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

Methods and material for containment and cleaning up

Methods for cleaning up Absorb spillage with non-combustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely. Containers with collected spillage must be properly labeled with correct contents and hazard symbol.

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet.

7. Handling and storage

Precautions for safe handling

Usage precautions Use only in well-ventilated areas. Provide adequate ventilation. Open drum carefully as content may be under pressure. Avoid contact with skin and eyes. Avoid inhalation of vapors. Do not eat, drink or smoke when using the product. Good personal hygiene procedures should be implemented.

Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Store away from incompatible materials (see Section 10).

Specific end uses(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.

8. Exposure Controls/personal protection

Ingredient comments No exposure limits known for ingredient(s).

Exposure controls

Protective equipment

POLYUREA 2000 B

Appropriate engineering controls	Provide adequate general and local exhaust ventilation.
Eye/face protection	The following protection should be worn: Chemical splash goggles or face shield. Personal protective equipment for eye and face protection should comply with OSHA 1910.133.
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. To protect hands from chemicals, gloves should comply with OSHA 1910.138 and be demonstrated to be impervious to the chemical and resist degradation. The selected gloves should have a breakthrough time of at least 8 hours.
Other skin and body protection	Wear apron or protective clothing in case of contact.
Hygiene measures	Provide eyewash station and safety shower. Keep away from food, drink and animal feeding stuffs. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Do not eat, drink or smoke when using the product. Change work clothing daily before leaving workplace.
Respiratory protection	If ventilation is inadequate, suitable respiratory protection must be worn. Respirator selection must be based on exposure levels, the hazards of the product and the safe working limits of the selected respirator. Check that the respirator fits tightly and the filter is changed regularly. Wear a respirator fitted with the following cartridge: Gas filter, type A2. Half mask and quarter mask respirators with replaceable filter cartridges should comply with OSHA 1910.134.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance	Liquid.
Color	Colorless to pale yellow.
Odor	Ammonia.
pH	pH (concentrated solution): 8.5-10.5 @ 20 ºC
Melting point	n/a°C
Flash point	>185°C
Vapor pressure	<1.2 mmHg @ °C
Relative density	1.01 @ 20 ºC°C
Solubility(ies)	Slightly soluble in water.
Other information	Not available.

10. Stability and reactivity

Reactivity	Acids.
Stability	Stable at normal ambient temperatures and when used as recommended.
Possibility of hazardous reactions	Not available.

POLYUREA 2000 B

Conditions to avoid	Heating may generate the following products: Toxic and corrosive gases or vapors. Avoid heat, flames and other sources of ignition. Avoid excessive heat for prolonged periods of time. Avoid exposure to high temperatures or direct sunlight.
Materials to avoid	Avoid contact with acids.
Hazardous decomposition products	Fire or high temperatures create: Nitrous gases (NOx). Oxides of the following substances: Carbon monoxide (CO). Carbon dioxide (CO2). Vapours/gases/fumes of: Ammonia or amines.

11. Toxicological information

Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg)	524.28

Acute toxicity - dermal

ATE dermal (mg/kg)	4,782.61

Inhalation	This product is corrosive.
Ingestion	Harmful if swallowed. Harmful: danger of serious damage to health by prolonged exposure if swallowed. Corrosive. Small amounts may cause serious damage.
Skin Contact	Causes burns. Corrosive. Prolonged contact causes serious tissue damage.
Eye contact	Causes burns. Risk of serious damage to eyes.
Acute and chronic health hazards	This product is corrosive. This product is corrosive. This product may cause skin and eye irritation. Prolonged contact may cause burns.
Route of entry	Inhalation Skin absorption Ingestion.
Target Organs	Eyes Kidneys Liver Skin

12. Ecological Information

Ecotoxicity	Avoid releasing into the environment. The product contains substances which are toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.
Toxicity	Very toxic to aquatic organisms.
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 15 mg/l, Daphnia magna

Persistence and degradability

Persistence and degradability	There are no data on the degradability of this product.

Bioaccumulative potential

Bio-Accumulative Potential	LC50/96h/rainbow trout = >100 mg/L. LC50/48h/daphnia = 15 mg/L

Mobility in soil

Mobility	Do not discharge into drains or watercourses or onto the ground.

Other adverse effects

Other adverse effects	Not available.

POLYUREA 2000 B

13. Disposal considerations

Waste treatment methods

General information When handling waste, the safety precautions applying to handling of the product should be considered.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Waste class 08 04 99

14. Transport information

UN Number

UN No. (TDG) 2735

UN No. (IMDG) 2735

UN No. (ICAO) 2735

UN No. (DOT) 2735

UN proper shipping name

Proper shipping name (TDG) AMINES, LIQUID, CORROSIVE, N.O.S. (POLY(OXY(METHYL-1,2-ETHANEDIYL)),ALPHA-(2-AM OMEGA-(2-AMINOMETHYLETHOXY, DIETHYLMETHYLBENZENEDIAMINE)

Proper shipping name (IMDG) AMINES, LIQUID, CORROSIVE, N.O.S. (POLY(OXY(METHYL-1,2-ETHANEDIYL)),ALPHA-(2-AM OMEGA-(2-AMINOMETHYLETHOXY, DIETHYLMETHYLBENZENEDIAMINE)

Proper shipping name (ICAO) AMINES, LIQUID, CORROSIVE, N.O.S. (POLY(OXY(METHYL-1,2-ETHANEDIYL)),ALPHA-(2-AM OMEGA-(2-AMINOMETHYLETHOXY, DIETHYLMETHYLBENZENEDIAMINE)

Proper shipping name (DOT) AMINES, LIQUID, CORROSIVE, N.O.S. (POLY(OXY(METHYL-1,2-ETHANEDIYL)),ALPHA-(2-AM OMEGA-(2-AMINOMETHYLETHOXY, DIETHYLMETHYLBENZENEDIAMINE)

Transport hazard class(es)

TDG class 8

TDG label(s) 8

IMDG Class 8

ICAO class/division 8

Transport labels

Packing group

TDG Packing Group III

IMDG packing group III

ICAO packing group III

DOT packing group III

Environmental hazards

POLYUREA 2000 B

Environmentally Hazardous Substance

Special precautions for user

EmS F-A, S-B

15. Regulatory information

16. Other information

Revision date 4/4/2018

Revision 9

Supersedes date 4/29/2016

Hazard statements in full

H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.