SAFETY DATA SHEET

1. Identification

Product identifier Korrobond 65 Component B

Other means of identification

QNG0-Y0ES-900T-6W5E SKU#

Recommended use Not available. Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

ITW Performance Polymers Company name

Bay 150 **Address**

Shannon Industrial Estate

Co, Clare, Ireland

363(61)771500 Telephone Phone E-mail customerservice.shannon@itwpp.com

Emergency Number 44(0)1235 239 670 **Emergency phone number**

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Acute toxicity, oral Category 4

> Acute toxicity, dermal Category 3 Skin corrosion/irritation Category 1 Serious eye damage/eye irritation Category 1 Sensitization, skin Category 1 Reproductive toxicity Category 2 Specific target organ toxicity, repeated Category 1

exposure

Environmental hazards Not classified. **OSHA** defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement Harmful if swallowed. Toxic in contact with skin. Causes severe skin burns and eye damage. May

cause an allergic skin reaction. Causes serious eye damage. Suspected of damaging fertility or

the unborn child. Causes damage to organs through prolonged or repeated exposure.

Precautionary statement

Obtain special instructions before use. Do not handle until all safety precautions have been read Prevention

and understood. Do not breathe mist/vapors. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the

workplace. Wear protective gloves/protective clothing/eye protection/face protection.

Response Rinse mouth. If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off

immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. 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/doctor. If skin irritation or rash occurs: Get medical advice/attention. Take off

immediately all contaminated clothing and wash it before reuse.

Storage Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations. None known.

Supplemental information

99.86% of the mixture consists of component(s) of unknown acute inhalation toxicity. 40.16% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 40.16% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
2-PIPERAZIN-1-YLETHYLAMINE		140-31-8	30 - 60
AMINES, POLYETHYLENEPOLY-, TRIETHYLENETETRAMINE FRACTION		90640-67-8	10 - 30
DIISOPROPYLNAPHTHALENE		38640-62-9	10 - 30
Carbon Black		1333-86-4	< 1
Other components below reportable	e levels		<0.1

4. First-aid measures

Inhalation

Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash

contaminated clothing before reuse.

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

Ingestion

Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including

vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

blindness could result. Prolonged exposure may cause chronic effects.

Most important symptoms/effects, acute and

delayed

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information

Take off immediately all contaminated clothing. IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions

Move containers from fire area if you can do so without risk.

Specific methods General fire hazards

Use standard firefighting procedures and consider the hazards of other involved materials.

No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist/vapors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Material name: Korrobond 65 Component B

SDS US

Methods and materials for containment and cleaning up

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist/vapors. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. When using, do not eat, drink or smoke. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

Components	Туре	Value		
Carbon Black (CAS 1333-86-4)	PEL	3.5 mg/m3		
US. OSHA Table Z-3 Perr	nissible Exposure Limits (PEL) for Mir	neral Dusts (29 CFR 1910.1000)	
Components	Туре	Value	Form	
Carbon Black (CAS 1333-86-4)	TWA	5 mg/m3	Respirable fraction.	
		15 mg/m3	Total dust.	
		50 mppcf	Total dust.	
		15 mppcf	Respirable fraction.	
US. ACGIH Threshold Lir	nit Values (TLV)			
Components	Туре	Value	Form	
Carbon Black (CAS 1333-86-4)	TWA	3 mg/m3	Inhalable fraction.	
NIOSH. Immediately Dan	gerous to Life or Health (IDLH) Values	, as amended		
Components	Туре	Value		
Carbon Black (CAS 1333-86-4)	IDLH	1750 mg/m3		
	e to Chemical Hazards Recommended	Exposure Limits (REL)		
Components	Туре	Value		
Carbon Black (CAS 1333-86-4)	TWA	0.1 mg/m3		
ogical limit values	No biological exposure limits noted for the ingredient(s).			
ropriate engineering trols	Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.			

Chemical respirator with organic vapor cartridge and full facepiece.

Material name: Korrobond 65 Component B

Hand protection

Eye/face protection

Skin protection

Wear appropriate chemical resistant gloves.

Individual protection measures, such as personal protective equipment

Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection Chemical respirator with organic vapor cartridge and full facepiece.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Observe any medical surveillance requirements. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance Liquid.

Physical stateLiquid.FormLiquid.ColorBlack

Odor Ammoniacal.

Odor threshold Not available.
pH Not available.

Melting point/freezing point 63.68 °F (17.6 °C) estimated Initial boiling point and boiling 428 °F (220 °C) estimated

range

Flash point >212.0 °F (>100.0 °C)

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure0.06 hPa estimatedVapor densityNot available.Relative densityNot available.

Solubility(ies)

Solubility (water) Not available.

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

Other information

Density 0.98 g/cm3 estimated

Explosive properties Not explosive.

Flammability class Combustible IIIB estimated

Oxidizing properties Not oxidizing.

pH in aqueous solution 12

Specific gravity 0.98 estimated

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous Hazardous polymerization does not occur.

reactions

Conditions to avoid Contact with incompatible materials.

Incompatible materials Peroxides. Phenols.

Hazardous decomposition No hazardous dec

products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation May cause irritation to the respiratory system. Prolonged inhalation may be harmful.

Skin contact Toxic in contact with skin. Causes severe skin burns. May cause an allergic skin reaction.

Eye contact Causes serious eye damage.

Causes digestive tract burns. Harmful if swallowed. Ingestion

Symptoms related to the physical, chemical and toxicological characteristics Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including

blindness could result.

Information on toxicological effects

Toxic in contact with skin. Harmful if swallowed. **Acute toxicity**

Test Results Components **Species**

2-PIPERAZIN-1-YLETHYLAMINE (CAS 140-31-8)

Acute Dermal

LD50 Rabbit 880 mg/kg

Carbon Black (CAS 1333-86-4)

Acute Oral

LD50 Rat > 8000 mg/kg

DIISOPROPYLNAPHTHALENE (CAS 38640-62-9)

Acute **Dermal**

LD50 4.6000000000000005 g/kg Mouse

Oral

LD50 Mouse 5.1000000000000005 g/kg

Skin corrosion/irritation Causes severe skin burns and eye damage.

Serious eye damage/eye

irritation

Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization May cause an allergic skin reaction.

No data available to indicate product or any components present at greater than 0.1% are Germ cell mutagenicity

mutagenic or genotoxic.

Carcinogenicity Risk of cancer cannot be excluded with prolonged exposure.

IARC Monographs. Overall Evaluation of Carcinogenicity

Carbon Black (CAS 1333-86-4) 2B Possibly carcinogenic to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

US. National Toxicology Program (NTP) Report on Carcinogens

Carbon Black (CAS 1333-86-4) Known To Be Human Carcinogen.

Reproductive toxicity Suspected of damaging fertility or the unborn child.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Causes damage to organs through prolonged or repeated exposure.

Not an aspiration hazard. **Aspiration hazard**

Chronic effects Prolonged inhalation may be harmful. Causes damage to organs through prolonged or repeated

exposure. Prolonged exposure may cause chronic effects.

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12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability

No data is available on the degradability of any ingredients in the mixture.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

2-PIPERAZIN-1-YLETHYLAMINE -1.57

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Dispose of this material and its container to hazardous or special waste collection point. Incinerate

the material under controlled conditions in an approved incinerator. Dispose of contents/container

in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

D002: Waste Corrosive material [pH ≤2 or =>12.5, or corrosive to steel] Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some

product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Since emptied containers may retain product residue, follow label warnings even after container is Contaminated packaging

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. Transport information

DOT

UN2735 **UN number**

Amines, liquid, corrosive, n.o.s, or Polyamines, liquid, corrosive, n.o.s. **UN proper shipping name**

(2-PIPERAZIN-1-YLETHHYLAMINE, Triethylenetetramine), Limited Quantity

Transport hazard class(es)

Class 8 Subsidiary risk Label(s) 8 **Packing group** Ш **Environmental hazards**

No. Marine pollutant

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Special provisions B2, IB2, T11, TP1, TP27

Packaging exceptions 154 Packaging non bulk 202 Packaging bulk 242

ΙΔΤΔ

UN2735 **UN number**

Amines, liquid, corrosive, n.o.s. (2-PIPERAZIN-1-YLETHHYLAMINE, Triethylenetetramine), **UN proper shipping name**

Limited Quantity

Transport hazard class(es)

8 Class Subsidiary risk Ш Packing group **Environmental hazards** No. **ERG Code** 8L

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo

aircraft

Allowed with restrictions.

Allowed with restrictions. Cargo aircraft only

IMDG

UN number UN2735

Material name: Korrobond 65 Component B QNG0-Y0ES-900T-6W5E Version #: 06 Revision date: 10-03-2023 Issue date: 03-23-2022 **UN** proper shipping name AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S.

(2-PIPERAZIN-1-YLETHHYLAMINE, Triethylenetetramine), Limited Quantity

Transport hazard class(es)

Class 8 Subsidiary risk Packing group Ш

Environmental hazards

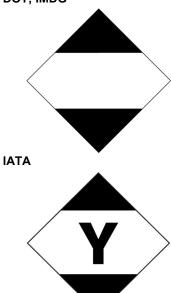
Marine pollutant No. **EmS** F-A, S-B

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and

the IBC Code

DOT: IMDG



15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not established.

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

chemical

Yes

Classified hazard

categories

Acute toxicity (any route of exposure)

Skin corrosion or irritation

Serious eye damage or eye irritation Respiratory or skin sensitization

Reproductive toxicity

Specific target organ toxicity (single or repeated exposure)

Material name: Korrobond 65 Component B

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

US state regulations

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Carbon Black (CAS 1333-86-4)

California Proposition 65



WARNING: This product can expose you to Carbon Black, which is known to the State of California to cause

cancer. For more information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

Inventory name

Carbon Black (CAS 1333-86-4) Listed: February 21, 2003

International Inventories

Country(s) or region

Australia	Australian Inventory of Industrial Chemicals (AICIS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	No

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

Toxic Substances Control Act (TSCA) Inventory

16. Other information, including date of preparation or last revision

 Issue date
 03-23-2022

 Revision date
 10-03-2023

Version # 06

United States & Puerto Rico

HMIS® ratings Health: 3*

Flammability: 1 Physical hazard: 0

NFPA ratings Health: 3

Flammability: 1 Instability: 0

Material name: Korrobond 65 Component B

On inventory (yes/no)*

Yes

Disclaimer

ITW Performance Polymers cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The 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, unless specified in the text. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release.