

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Duotack 365 Part A

1.2. Recommended use and restrictions on use

Product usage : Two-component adhesive for insulating materials

1.3. Supplier

Soprema Inc
1640 rue Haggerty
Drummondville, Québec, Qc J2C 5P8
Canada
T +1 (800) 567-1492

1.4. Emergency telephone number

Emergency number : Canutec : +1 (613) 996-6666
Chemtrec: + (800) 424-9300
Soprema: +1 (800) 567-1492

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Acute toxicity (inhalation:dust,mist) Category 4	H332	Harmful if inhaled
Skin corrosion/irritation Category 2	H315	Causes skin irritation
Serious eye damage/eye irritation Category 2B	H320	Causes eye irritation
Respiratory sensitization, Category 1	H334	May cause an allergy or asthma symptoms or breathing difficulties if inhaled
Skin sensitization, Category 1	H317	May cause an allergic skin reaction
Carcinogenicity Category 2	H351	Suspected of causing cancer (Inhalation, Dermal, oral)
Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	H335	May cause respiratory irritation
Specific target organ toxicity (repeated exposure) Category 2	H373	May cause damage to organs through prolonged or repeated exposure (Inhalation, Dermal, oral)

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) : 

Signal word (GHS US) : Danger
Hazard statements (GHS US) : H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H320 - Causes eye irritation
H332 - Harmful if inhaled
H334 - May cause an allergy or asthma symptoms or breathing difficulties if inhaled
H335 - May cause respiratory irritation
H351 - Suspected of causing cancer (Inhalation, Dermal, oral)

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Precautionary statements (GHS US)

H373 - May cause damage to organs through prolonged or repeated exposure (Inhalation, Dermal, oral)

: P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P260 - Do not breathe mist, spray, vapors.

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 - Wash thoroughly after handling.

P271 - Use only outdoors or in a well-ventilated area.

P272 - Contaminated work clothing must not be allowed out of the workplace.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P284 - [In case of inadequate ventilation] wear respiratory protection.

P302+P352 - If on skin: Wash with plenty of water.

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.

P304+P341 - If inhaled: If breathing is difficult, 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.

P308+P313 - If exposed or concerned: Get medical advice/attention.

P312 - Call a POISON CENTER, a doctor if you feel unwell.

P314 - Get medical advice/attention if you feel unwell.

P321 - Specific treatment (see supplemental first aid instruction on this label).

P332+P313 - If skin irritation occurs: Get medical advice/attention.

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P342+P311 - If experiencing respiratory symptoms: Call a POISON CENTER, a doctor.

P362+P364 - Take off contaminated clothing and wash it before reuse.

P363 - Wash contaminated clothing before reuse.

P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

P405 - Store locked up.

P501 - Dispose of contents / container by a local waste disposal company according to regional regulations.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
4,4'-methylenediphenyl diisocyanate, diphenylmethane-4,4'-diisocyanate	CAS-No.: 101-68-8	32.235045 – 53.41146	Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2B, H320 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335 STOT RE 2, H373

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Name	Product identifier	%	GHS US classification
o-(p-isocyanatobenzyl)phenyl isocyanate, diphenylmethane-2,4'-diisocyanate	CAS-No.: 5873-54-1	3.329385 – 5.964675	Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2B, H320 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335 STOT RE 2, H373
methylenediphenyl diisocyanate	CAS-No.: 26447-40-5	2.941125 – 5.88225	Acute Tox. 4 (Inhalation), H332 Acute Tox. 2 (Inhalation:dust,mist), H330 Skin Irrit. 2, H315 Eye Irrit. 2B, H320 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335 STOT RE 2, H373
2,2'-methylenediphenyl diisocyanate, diphenylmethane-2,2'-diisocyanate	CAS-No.: 2536-05-2	0.06 – 0.6	Acute Tox. 4 (Inhalation), H332 Acute Tox. 3 (Inhalation:dust,mist), H331 Skin Irrit. 2, H315 Eye Irrit. 2B, H320 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335 STOT RE 2, H373

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general

: IF exposed or concerned: Get medical advice/attention. Call a poison center/doctor/physician if you feel unwell.

First-aid measures after inhalation

: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor/physician if you feel unwell.

First-aid measures after skin contact

: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact

: 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/attention.

First-aid measures after ingestion

: Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation

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

Symptoms/effects after skin contact

: Irritation. May cause an allergic skin reaction.

Symptoms/effects after eye contact

: Mild eye irritation.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

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SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes.

Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.

Incompatible materials : Water, alcohols, amines, thiols.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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No additional information available	
4,4'-methylenediphenyl diisocyanate, diphenylmethane-4,4'-diisocyanate (101-68-8)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Methylene bisphenyl isocyanate (MDI)
ACGIH OEL TWA [ppm]	0.005 ppm
Remark (ACGIH)	TLV® Basis: Resp sens
Regulatory reference	ACGIH 2022
USA - OSHA - Occupational Exposure Limits	
Local name	Methylene bisphenyl isocyanate (MDI)
OSHA PEL C	0.2 mg/m ³
OSHA PEL C [ppm]	0.02 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
methylenediphenyl diisocyanate (26447-40-5)	
No additional information available	
o-(p-isocyanatobenzyl)phenyl isocyanate, diphenylmethane-2,4'-diisocyanate (5873-54-1)	
No additional information available	
2,2'-methylenediphenyl diisocyanate, diphenylmethane-2,2'-diisocyanate (2536-05-2)	
No additional information available	

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:
Protective gloves
Eye protection:
Safety glasses
Skin and body protection:
Wear suitable protective clothing
Respiratory protection:
[In case of inadequate ventilation] wear respiratory protection.

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Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Viscous liquid.
Color	: amber
Odor	: slight
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Density	: 1.2
Solubility	: insoluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

VOC content	: 0 %
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SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Water, alcohols, amines, thiols

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10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Harmful if inhaled.

Duotack 365 Part A	
ATE US (dust, mist)	1.801 mg/l/4h
4,4'-methylenediphenyl diisocyanate, diphenylmethane-4,4'-diisocyanate (101-68-8)	
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	11 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h
methylenediphenyl diisocyanate (26447-40-5)	
LD50 oral rat	> 2000 mg/kg Source: NITE
LD50 dermal rabbit	> 10000 mg/kg Source: OECD SIDS
LC50 Inhalation - Rat	0.369 mg/kg Source: IUCLID
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	0.369 mg/l/4h
ATE US (dust, mist)	0.369 mg/l/4h
o-(p-isocyanatobenzyl)phenyl isocyanate, diphenylmethane-2,4'-diisocyanate (5873-54-1)	
LD50 oral rat	31600 mg/kg Source: ECHA
LD50 dermal rabbit	10000 mg/kg Source: ECHA
ATE US (oral)	31600 mg/kg body weight
ATE US (dermal)	10000 mg/kg body weight
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	11 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h
2,2'-methylenediphenyl diisocyanate, diphenylmethane-2,2'-diisocyanate (2536-05-2)	
LD50 oral rat	> 2000 mg/kg Source: ECHA
LD50 dermal rabbit	> 9400 mg/kg Source: ECHA
LC50 Inhalation - Rat	527 mg/m ³ Source: ECHA
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	0.527 mg/l/4h
ATE US (dust, mist)	0.527 mg/l/4h

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Causes eye irritation.

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Respiratory or skin sensitization : May cause an allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
Germ cell mutagenicity : Not classified
Carcinogenicity : Suspected of causing cancer (Inhalation, Dermal, oral).

4,4'-methylenediphenyl diisocyanate, diphenylmethane-4,4'-diisocyanate (101-68-8)	
IARC group	3 - Not classifiable

Reproductive toxicity : Not classified
STOT-single exposure : May cause respiratory irritation.

4,4'-methylenediphenyl diisocyanate, diphenylmethane-4,4'-diisocyanate (101-68-8)	
STOT-single exposure	May cause respiratory irritation.

methylenediphenyl diisocyanate (26447-40-5)	
STOT-single exposure	May cause respiratory irritation.

o-(p-isocyanatobenzyl)phenyl isocyanate, diphenylmethane-2,4'-diisocyanate (5873-54-1)	
STOT-single exposure	May cause respiratory irritation.

2,2'-methylenediphenyl diisocyanate, diphenylmethane-2,2'-diisocyanate (2536-05-2)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure (Inhalation, Dermal, oral).

4,4'-methylenediphenyl diisocyanate, diphenylmethane-4,4'-diisocyanate (101-68-8)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

methylenediphenyl diisocyanate (26447-40-5)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

o-(p-isocyanatobenzyl)phenyl isocyanate, diphenylmethane-2,4'-diisocyanate (5873-54-1)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

2,2'-methylenediphenyl diisocyanate, diphenylmethane-2,2'-diisocyanate (2536-05-2)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified
Viscosity, kinematic : No data available
Symptoms/effects after inhalation : May cause respiratory irritation. May cause an allergy or asthma symptoms or breathing difficulties if inhaled.
Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact : Mild eye irritation.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

o-(p-isocyanatobenzyl)phenyl isocyanate, diphenylmethane-2,4'-diisocyanate (5873-54-1)	
LC50 - Fish [1]	> 1000 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
NOEC (chronic)	≥ 10 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

2,2'-methylenediphenyl diisocyanate, diphenylmethane-2,2'-diisocyanate (2536-05-2)	
LC50 - Fish [1]	> 1000 mg/l Source: ECHA

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2,2'-methylenediphenyl diisocyanate, diphenylmethane-2,2'-diisocyanate (2536-05-2)	
NOEC (chronic)	≥ 10 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

methylenediphenyl diisocyanate (26447-40-5)	
Partition coefficient n-octanol/water (Log Pow)	3.212 Source: Molbase
o-(p-isocyanatobenzyl)phenyl isocyanate, diphenylmethane-2,4'-diisocyanate (5873-54-1)	
Partition coefficient n-octanol/water (Log Pow)	4.51 Source: ECHA
2,2'-methylenediphenyl diisocyanate, diphenylmethane-2,2'-diisocyanate (2536-05-2)	
Partition coefficient n-octanol/water (Log Pow)	5.22 Source: Ecological Structure Activity RelationshipsECOSAR, ECHA

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Not applicable
Proper Shipping Name (TDG) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable

14.3. Transport hazard class(es)

DOT
Transport hazard class(es) (DOT) : Not applicable

TDG
Transport hazard class(es) (TDG) : Not applicable

IMDG
Transport hazard class(es) (IMDG) : Not applicable

IATA
Transport hazard class(es) (IATA) : Not applicable

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14.4. Packing group

Packing group (DOT) : Not applicable
Packing group (TDG) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

DOT

No data available

TDG

No data available

IMDG

No data available

IATA

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
4,4'-methylenediphenyl diisocyanate, diphenylmethane-4,4'-diisocyanate	101-68-8	Present	Active	
methylenediphenyl diisocyanate	26447-40-5	Present	Active	
o-(p-isocyanatobenzyl)phenyl isocyanate, diphenylmethane-2,4'-diisocyanate	5873-54-1	Present	Active	
2,2'-methylenediphenyl diisocyanate, diphenylmethane-2,2'-diisocyanate	2536-05-2	Present	Active	

4,4'-methylenediphenyl diisocyanate, diphenylmethane-4,4'-diisocyanate (101-68-8)

Subject to reporting requirements of United States SARA Section 313
Listed on EPA Hazardous Air Pollutant (HAPS)

CERCLA RQ	5000 lb
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15.2. International regulations

CANADA

4,4'-methylenediphenyl diisocyanate, diphenylmethane-4,4'-diisocyanate (101-68-8)

Listed on the Canadian DSL (Domestic Substances List)

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methylenediphenyl diisocyanate (26447-40-5)

Listed on the Canadian DSL (Domestic Substances List)

o-(p-isocyanatobenzyl)phenyl isocyanate, diphenylmethane-2,4'-diisocyanate (5873-54-1)

Listed on the Canadian DSL (Domestic Substances List)

2,2'-methylenediphenyl diisocyanate, diphenylmethane-2,2'-diisocyanate (2536-05-2)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

4,4'-methylenediphenyl diisocyanate, diphenylmethane-4,4'-diisocyanate (101-68-8)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

methylenediphenyl diisocyanate (26447-40-5)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. US State regulations

No additional information available

SECTION 16: Other information

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Full text of H-phrases

H315	Causes skin irritation
H317	May cause an allergic skin reaction
H320	Causes eye irritation
H330	Fatal if inhaled
H331	Toxic if inhaled
H332	Harmful if inhaled
H334	May cause an allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation
H351	Suspected of causing cancer
H373	May cause damage to organs through prolonged or repeated exposure

Safety Data Sheet (SDS), USA - Toxyscan

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.