

According to directive 1907/2006/EC, 2020/878
Version 2.0 Revision Date: 02-02-2023
Trade name: IPU 460 (PU foam 40/130) - part B

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product Identification:

Product name: IPU 460 (PU foam 40/130) - part B
UFI: 95TW-4107-TN10-WSEJ

1.2 Relevant identified uses of the substance or mixture and uses advised against

Main Use Category: Professional Use.
Use of the substance or mixture: Isocyanate component of a 2-component polyurethane system.
Uses advised against: Not suitable for "Do-it-yourself".

1.3 Details of the supplier of the safety data sheet:

Responsible distributor : ASSYST bvba / A.S.O.W. bvba
Hellegatstraat 13a
2590 Berlaar
Belgium
Tel: +32 495 50 61 14 / +32 496 83 70 27
Website: www.assyst.org / www.artsuppliesonweb.com
Email: ao@assyst.org / vera.opsommer@assyst.org

1.4 Emergency Phone Number:

For Belgium: Call the **Poison Control Center (070 245 245 - free)**, if not available: **02 264 96 30** (normal rate) or your doctor. In life-threatening situations, always call the European emergency number **112**.
NHS 24 Direct For help from a GP, visit your GP surgery's website, use an online service to contact your GP, or call the surgery. **For urgent medical help**, use the NHS 111 online service, or **call 111** if you are unable to get help online. **For life-threatening emergencies, call 999** for an ambulance. There is more information about getting medical help on the NHS website.

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture:

Classification according to Directive (EC) No 1272/2008 and its amendments.

The product is classified according to the applicable legislation.

Classification in accordance with Regulation (EC) No 1272/2008 as amended.

Health hazards

Acute toxicity (inhalation, dust, mist) Category 4 - H332
Skin corrosion/irritation, Category 2 - H315
Serious eye damage/eye irritation, Category 2 - H319
Respiratory sensitisation, Category 1 - H334
Skin sensitisation, Category 1 - H317
Carcinogenicity category 2 - H351
Specific target organ toxicity by single exposure, Category 3, Respiratory tract irritation - H335
Specific target organ toxicity by repeated exposure, Category 2 - H373
For the full text of H-phrases mentioned in this section, see section 16.

Adverse physicochemical, human health and environmental effects:

No other hazards

Adverse physicochemical, health and environmental effects

No additional information available.

2.2 Label elements:

Labelling according to Regulation (EC) No 1272/2008 [CLP/GHS]:

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Hazard pictograms:

Signal word:

Danger.

Contains

- ✓ 4,4 i -methylenediphenyl diisocyanate

Indications of danger:

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H332 Harmful by inhalation.

H334 May cause allergic or asthmatic symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.

H351 Suspected of causing cancer (by inhalation).

H373 May cause damage to organs (respiratory tract) through prolonged or repeated exposure (by inhalation).

Precautions

Prevention:

P201 Consult special instructions before use.

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

P261 Avoid inhalation of dust, spray, mist, vapour.

P264 Wash hands, forearms and face thoroughly after handling.

P280 Wear protective clothing, eye protection, face protection.

Action:

P304+P340 IF INHALED: Remove to fresh air and make sure person can breathe easily.

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

Special Provisions:

EUH204 Contains isocyanates. May produce an allergic reaction.

As from 24 August 2023 adequate training is required before industrial or professional use.

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3 Other hazards:

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information:

The substance/mixture does not contain any components believed to have endocrine disrupting properties, according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 on level 0.1% or higher.

Toxicological information:

The substance/mixture does not contain any components believed to have endocrine disrupting properties, according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 on level 0.1% or higher.

SECTION 3: Composition and information on ingredients

3.2 Mixtures:

Chemical Name	CAS No. EC No. Index No. Registration number	Layout (Regulation (EC) No 1272/008)	Concentration (%)
4,4 i - methylenediphenyl diisocyanate	9016-87-9 618-498-9 - -	Skin Irrit. 2 H315 Skin Sens. 1 H317 Eye Irrit. 2 H319 Acute Tox. 4 H332 Resp. Sens. 1 H334	>= 80%

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		<p>STOT SE 3 H335 Carc. 2 H351 STOT RE 2 H373</p> <p>Concentration limits: >= 5 %: Eye Irrit. 2, H319; >= 5 %: STOT SE 3, H335; >= 5 %: Skin Irrit. 2, H315; >= 0,1 %: Resp. Sens. 1, H334;</p>	
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For the full text of H-phrases mentioned in this section, see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures:

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do NOT induce vomiting.

In case of Inhalation:

If breathing is irregular or stopped, administer artificial respiration.

In case of inhalation, consult a doctor immediately and show him packing or label.

4.2 Most important symptoms and effects, both acute and delayed:

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed:

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

None

SECTION 5: Fire-fighting measures

5.1 Extinguishing media:

Suitable extinguishing media:

Water | Foam | Carbon dioxide (CO2) | Dry powder.

Unsuitable extinguishing media:

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture:

Nature of decomposition products not known.

Combustible.

Development of hazardous combustion gases or vapours possible in the event of fire.

5.3 Advice for firefighters:

Stay in danger area only with self-contained breathing apparatus.

Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 Further information

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Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures for the substance or mixture

6.1 Personal precautions, protective equipment and emergency procedures:

Advice for non-emergency personnel:

Do not breathe vapors, aerosols.

Avoid substance contact.

Ensure adequate ventilation.

Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

6.2 Environmental precautions:

Do not allow to enter into soil/subsoil.

Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand.

6.3 Methods and material for containment and cleaning up:

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand.

Wash with plenty of water.

6.4 Reference to other sections:

See section 8: Exposure controls and personal protection.

For waste disposal after cleaning, see section 13.

SECTION 7: Handling and storage:

7.1 Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Exercise the greatest care when handling or opening the container.

Use localized ventilation system.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

See also section 8 for recommended protective equipment.

Advice on general occupational hygiene:

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

7.2 Conditions for safe storage, including any incompatibilities:

Store in original containers, dry, tightly closed, in a cool and well-ventilated area.

Avoid contact with skin, eyes and clothing.

Keep away from open flames, sparks and heat sources.

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3 Specific end use:

None in particular.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters:

4,4'-methylenediphenyl diisocyanate - CAS: 9016-87-9

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TLV TWA - 0.005 ppm - 0.051 mg/m³

DNEL Exposure Limit Values

N.A.

PNEC Exposure Limit Values

N.A.

8.2 Exposure controls:

Eye protection:

Wear protective goggles (ref. Standard EN 166).

Protection for skin:

Wear work clothes with long sleeves and safety footwear for professional use of category I (REF. Dir. 89/686/EEC and EN 344).

Safety shoes.

Protection for hands:

Protect your hands with work gloves (ref. Directive 89/686 / EEC and its amendments and EN 374/2003)

Respiratory protection:

Use adequate protective respiratory equipment. (Ref. Dir. 89/686 / EEC, as amended – UNI PROTECTED / 1998 - UNI EN 529/2006)

Thermal Hazards:

None

Environmental exposure controls:

Prevent from entering sewers, basements or any place where its accumulation can be dangerous.

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Physical state:	liquid
Colour:	Brown
Odor:	Characteristic
Melting point/freezing point:	Not Relevant
Boiling point or initial boiling point and boiling range:	> 300°C a 1.013 hPa
Flammability:	Not Relevant
Lower and upper explosion limit:	Not Relevant
Flash point:	> 200°C
Auto-ignition temperature:	Not Relevant
Decomposition temperature:	Not Relevant
pH:	Not Relevant
Kinematic viscosity:	Not Relevant
Solubility in water:	Insoluble
Solubility in oil:	Not Relevant
Partition coefficient n-octanol/water (log value):	Not Relevant
Vapour pressure:	Not Relevant
Density and/or relative density:	1.24 g/cm ³ @ 20 °C
Relative vapour density:	Not Relevant
Particle characteristics:	
Particle size:	Not Relevant

9.2 Other information

No additional information available.

SECTION 10: Stability and reactivity

10.1 Reactivity:

There are no particular risks of reaction with other substances in normal conditions of use.

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10.2 Chemical Stability:

The product is stable in normal conditions of use and storage.

10.3 Potential Hazardous Reactions:

None.

10.4 Conditions to Avoid:

Stable under normal conditions.

10.5 Chemically Interacting Materials:

None in particular.

10.6 Hazardous Decomposition Products:

None.

SECTION 11: Toxicological information

11.1 Information on toxicological effects:

Toxicological information of the product:

N.A.

Toxicological information of the main substances found in the product:

4,4 i -methylenediphenyl diisocyanate - CAS: 9016-87-9

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 49.000 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit = 9.400 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat = 0.493

If not differently specified, the information required in Regulation (EU)2020/878 listed below must be considered as N.A.:

- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration $\geq 0.1\%$

SECTION 12: Ecological information

12.1 Toxicity:

Adopt good working practices, so that the product is not released into the environment.

12.2 Persistence and Degradability:

IPU 460

Biodegradability:

No data available.

4,4 i -methylenediphenyl diisocyanate - CAS: 9016-87-9

Biodegradability:

Not easily biodegradable

12.3 Bioaccumulation:

IPU 460

Bioaccumulation:

Information not available

4,4 i -methylenediphenyl diisocyanate - CAS: 9016-87-9

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Bioaccumulation:

Information not available

12.4 Mobility in Soil:

IPU 460

Mobility in soil:

No data available

4,4'-methylenediphenyl diisocyanate - CAS: 9016-87-9

Mobility in soil:

No data available

12.5 Results of PBT and vPvB assessment

vPvB Substances:

None

PBT Substances:

None

12.6. Endocrine disrupting properties

No endocrine disruptor substances present in concentration $\geq 0.1\%$

12.7. Other adverse effects

None

SECTION 13: Instructions for disposal

13.1 Waste treatment methods:

Recover, if possible.

Send to authorised disposal plants or for incineration under controlled conditions.

In so doing, comply with the local and national regulations currently in force.

SECTION 14: Information relating to carriage

14.1 UN number

Not classified as dangerous in the meaning of transport regulations.

14.2 Proper load name according to UN Model Regulations

Not applicable.

14.3 Transport hazard class(es)

Not applicable.

14.4 Packing group

Not applicable.

14.5 Environmental hazards

Not applicable.

14.6 Special precautions for the user

Not applicable.

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

Not applicable for product as delivered.

SECTION 15: Legally required information

15.1 Safety, health and environmental regulations and legislation specific for the substance or mixture:

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 2020/878

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

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Regulation (EU) n. 944/2013 (ATP 5 CLP)
 Regulation (EU) n. 605/2014 (ATP 6 CLP)
 Regulation (EU) n. 2015/1221 (ATP 7 CLP)
 Regulation (EU) n. 2016/918 (ATP 8 CLP)
 Regulation (EU) n. 2016/1179 (ATP 9 CLP)
 Regulation (EU) n. 2017/776 (ATP 10 CLP)
 Regulation (EU) n. 2018/669 (ATP 11 CLP)
 Regulation (EU) n. 2018/1480 (ATP 13 CLP)
 Regulation (EU) n. 2019/521 (ATP 12 CLP)
 Regulation (EU) n. 2020/217 (ATP 14 CLP)
 Regulation (EU) n. 2020/1182 (ATP 15 CLP)
 Regulation (EU) n. 2021/643 (ATP 16 CLP)
 Regulation (EU) n. 2021/849 (ATP 17 CLP)
 Regulation (EU) n. 2022/692 (ATP 18 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

None

Where applicable, refer to the following regulatory provisions :

- ✓ Directive 2012/18/EU (Seveso III)
- ✓ Regulation (EC) nr 648/2004 (detergents).
- ✓ Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1:

None

15.2 Chemical Safety Assessment:

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Full text of the H statements

H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H319 Causes serious eye irritation.
 H332 Harmful if inhaled.
 H334 May cause 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.

Full text of other abbreviations

Hazard class and hazard category	Code	Description
Acute Tox. 4	3.1/4/Inhal	Acute toxicity (inhalation), Category 4
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
Resp. Sens. 1	3.4.1/1	Respiratory Sensitisation, Category 1
Skin Sens. 1	3.4.2/1	Skin Sensitisation, Category 1
Carc. 2	3.6/2	Carcinogenicity, Category 2
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3
STOT RE 2	3.9/2	Specific target organ toxicity – repeated exposure, Category 2

This safety data sheet has been completely updated in compliance to Regulation 2020/878.

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Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008

Acute Tox. 4	H332
Skin Irrit. 2	H315
Eye Irrit. 2	H319
Resp. Sens. 1	H334
Skin Sens. 1	H317
Carc. 2	H351
STOT SE 3	H335
STOT RE 2	H373

Classification procedure

Calculation method

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition – Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.