

Safety data sheet
Complying with Israeli Safety at Work Regulations (Safety Data Sheet, Classification, Packaging, Labelling and Marking of Packaging) - 1998 and SI 2302

Printing date 31.05.2022

Version number 1

Revision: 31.05.2022

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

- **1.1 Product identifier**
- **Trade name:** HARDNER FOR P.U FOR JETAIRCRAFT MIL -PRF 85285
- **Article number:** 392-803
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
 No further relevant information available.
- **Application of the substance / the mixture** Industrial Coating
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
 TAMBOUR LTD.
 Meir Ariel st. 6
 Netanya 42504, Israel
 Phone: +972-9-8925555
 www.tambour.co.il
- **Further information obtainable from:**
 Phone: +972(4)985-3795
 e-mail: motiA@tambour.co.il
- **1.4 Emergency telephone number:** Tambour call center: +972-74-7545688 or *6477

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



GHS07

Skin Sens. 1 H317 May cause an allergic skin reaction.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
 The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms** GHS02, GHS07
- **Signal word** Danger
- **Hazard-determining components of labelling:**
 hexamethylene -1,6-diisocyanate homopolymer
 4-isocyanatosulphonyltoluene

(Contd. on page 2)

Safety data sheet
Complying with Israeli Safety at Work Regulations (Safety Data Sheet, Classification, Packaging, Labelling and Marking of Packaging) - 1998 and SI 2302

Printing date 31.05.2022

Version number 1

Revision: 31.05.2022

Trade name: HARDNER FOR P.U FOR JETAIRCRAFT MIL -PRF 85285

(Contd. of page 1)

hexamethylene-di-isocyanate

· Hazard statements

H225 Highly flammable liquid and vapour.

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

· Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read carefully and follow all instructions.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P241 Use explosion-proof [electrical/ventilating/lighting] equipment.

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

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

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· 2.3 Other hazards
· Results of PBT and vPvB assessment

 · **PBT:** Not applicable.

 · **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

· 3.2 Chemical characterisation: Mixtures

 · **Description:** Mixture of substances listed below with nonhazardous additions.

· Dangerous components:

CAS: 28182-81-2	hexamthylene -1,6-diisocyanate homopolymer ⚠ Skin Sens. 1, H317	50-75%
CAS: 540-88-5 EINECS: 208-760-7	tert-butyl acetate ⚠ Flam. Liq. 2, H225	25-50%
CAS: 123-86-4 EINECS: 204-658-1	n-butyl acetate ⚠ Flam. Liq. 3, H226; ⚠ STOT SE 3, H336	2.5-10%
CAS: 64742-95-6 EC number: 918-668-5	Solvent naphtha (petroleum), light arom. ⚠ Flam. Liq. 3, H226; ⚠ Asp. Tox. 1, H304; ⚠ Aquatic Chronic 2, H411; ⚠ Skin Irrit. 2, H315; STOT SE 3, H335-H336	2.5-10%
CAS: 4083-64-1 EINECS: 223-810-8	4-isocyanatosulphonyltoluene ⚠ Resp. Sens. 1, H334; ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	<1%

(Contd. on page 3)

Safety data sheet
Complying with Israeli Safety at Work Regulations (Safety Data Sheet, Classification, Packaging, Labelling and Marking of Packaging) - 1998 and SI 2302

Printing date 31.05.2022

Version number 1

Revision: 31.05.2022

Trade name: HARDNER FOR P.U FOR JETAIRCRAFT MIL -PRF 85285

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

(Contd. of page 2)

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
Immediately rinse with water.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Prevent seepage into sewage system, workpits and cellars.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.

(Contd. on page 4)

Safety data sheet
Complying with Israeli Safety at Work Regulations (Safety Data Sheet, Classification, Packaging, Labelling and Marking of Packaging) - 1998 and SI 2302

Printing date 31.05.2022

Version number 1

Revision: 31.05.2022

Trade name: HARDNER FOR P.U FOR JETAIRCRAFT MIL -PRF 85285

(Contd. of page 3)

See Section 8 for information on personal protection equipment.
 See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
 Ensure good ventilation/exhaustion at the workplace.
 Prevent formation of aerosols.
- **Information about fire - and explosion protection:**
 Keep ignition sources away - Do not smoke.
 Protect against electrostatic charges.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
 Keep container tightly sealed.
 Store in cool, dry conditions in well sealed receptacles.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Additional information about design of technical facilities:** No further data; see item 7.

Ingredients with limit values that require monitoring at the workplace:

540-88-5 tert-butyl acetate

WEL (Great Britain)	Short-term value: 1210 mg/m ³ , 250 ppm
	Long-term value: 966 mg/m ³ , 200 ppm

123-86-4 n-butyl acetate

WEL (Great Britain)	Short-term value: 966 mg/m ³ , 200 ppm
	Long-term value: 724 mg/m ³ , 150 ppm
OELV (Israel)	Long-term value: 150 ppm

4083-64-1 4-isocyanatosulphonyltoluene

WEL (Great Britain)	Short-term value: 0.07 mg/m ³
	Long-term value: 0.02 mg/m ³
Sen; as -NCO	

- **Additional information:** The lists valid during the making were used as basis.

(Contd. on page 5)

Safety data sheet
Complying with Israeli Safety at Work Regulations (Safety Data Sheet, Classification, Packaging, Labelling and Marking of Packaging) - 1998 and SI 2302

Printing date 31.05.2022

Version number 1

Revision: 31.05.2022

Trade name: HARDNER FOR P.U FOR JETAIRCRAFT MIL -PRF 85285

(Contd. of page 4)

· **8.2 Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

*Immediately remove all soiled and contaminated clothing
 Wash hands before breaks and at the end of work.*

· **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: *Fluid*

Colour: *According to product specification*

· **Odour:** *Characteristic*

· **Odour threshold:** *Not determined.*

(Contd. on page 6)

Safety data sheet
Complying with Israeli Safety at Work Regulations (Safety Data Sheet, Classification, Packaging, Labelling and Marking of Packaging) - 1998 and SI 2302

Printing date 31.05.2022

Version number 1

Revision: 31.05.2022

Trade name: HARDNER FOR P.U FOR JETAIRCRAFT MIL -PRF 85285

(Contd. of page 5)

· pH-value:	<i>Not determined.</i>
· Change in condition Melting point/freezing point: Initial boiling point and boiling range:	<i>Undetermined.</i> <i>79-80.5 °C</i>
· Flash point:	<i>-4 °C</i>
· Flammability (solid, gas):	<i>Not applicable.</i>
· Ignition temperature:	<i>514 °C</i>
· Decomposition temperature:	<i>Not determined.</i>
· Auto-ignition temperature:	<i>Product is not selfigniting.</i>
· Explosive properties:	<i>Product is not explosive. However, formation of explosive air/vapour mixtures are possible.</i>
· Explosion limits: Lower: Upper:	<i>Not determined.</i> <i>Not determined.</i>
· Vapour pressure at 20 °C:	<i>41 hPa</i>
· Density: · Relative density · Vapour density · Evaporation rate	<i>Not determined.</i> <i>Not determined.</i> <i>Not determined.</i> <i>Not determined.</i>
· Solubility in / Miscibility with water:	<i>Not miscible or difficult to mix.</i>
· Partition coefficient: n-octanol/water:	<i>Not determined.</i>
· Viscosity: Dynamic: Kinematic:	<i>Not determined.</i> <i>Not determined.</i>
· Solvent content: Organic solvents:	<i>40.8 %</i>
Solids content:	<i>0.4 %</i>
· 9.2 Other information	<i>No further relevant information available.</i>

SECTION 10: Stability and reactivity

- **10.1 Reactivity** *No further relevant information available.*
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** *No decomposition if used according to specifications.*

(Contd. on page 7)

Safety data sheet
Complying with Israeli Safety at Work Regulations (Safety Data Sheet, Classification, Packaging, Labelling and Marking of Packaging) - 1998 and SI 2302

Printing date 31.05.2022

Version number 1

Revision: 31.05.2022

Trade name: HARDNER FOR P.U FOR JETAIRCRAFT MIL -PRF 85285

(Contd. of page 6)

- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation**
May cause an allergic skin reaction.
- **Additional toxicological information:**
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

* SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Harmful to fish
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Harmful to aquatic organisms
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

(Contd. on page 8)

Safety data sheet
Complying with Israeli Safety at Work Regulations (Safety Data Sheet, Classification, Packaging, Labelling and Marking of Packaging) - 1998 and SI 2302

Printing date 31.05.2022

Version number 1

Revision: 31.05.2022

Trade name: HARDNER FOR P.U FOR JETAIRCRAFT MIL -PRF 85285


· 12.6 Other adverse effects No further relevant information available.

(Contd. of page 7)

SECTION 13: Disposal considerations

- 13.1 Waste treatment methods
- Recommendation
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

· 14.1 UN-Number	UN1993
· ADR, IMDG, IATA	
· 14.2 UN proper shipping name	1993 FLAMMABLE LIQUID, N.O.S. (vapour pressure at 50°C not more than 110 kPa) (BUTYL ACETATES)
· ADR	
· IMDG, IATA	FLAMMABLE LIQUID, N.O.S. (BUTYL ACETATES)
· 14.3 Transport hazard class(es)	
· ADR, IMDG, IATA	
	
· Class	3 Flammable liquids.
· Label	3
· 14.4 Packing group	
· ADR, IMDG, IATA	II
· 14.5 Environmental hazards:	
· Marine pollutant:	No
· 14.6 Special precautions for user	Warning: Flammable liquids.
· Hazard identification number (Kemler code):	33
· EMS Number:	F-E,S-E
· Stowage Category	B
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.

(Contd. on page 9)

Safety data sheet
Complying with Israeli Safety at Work Regulations (Safety Data Sheet, Classification, Packaging, Labelling and Marking of Packaging) - 1998 and SI 2302

Printing date 31.05.2022

Version number 1

Revision: 31.05.2022

Trade name: HARDNER FOR P.U FOR JETAIRCRAFT MIL -PRF 85285

(Contd. of page 8)

· **Transport/Additional information:**

· **ADR**

- **Limited quantities (LQ)**
- **Excepted quantities (EQ)**

1L
 Code: E2
 Maximum net quantity per inner packaging: 30 ml
 Maximum net quantity per outer packaging: 500 ml

- **Transport category**
- **Tunnel restriction code**

2
 D/E

· **IMDG**

- **Limited quantities (LQ)**
- **Excepted quantities (EQ)**

1L
 Code: E2
 Maximum net quantity per inner packaging: 30 ml
 Maximum net quantity per outer packaging: 500 ml

· **UN "Model Regulation":**

UN 1993 FLAMMABLE LIQUID, N.O.S. (VAPOUR PRESSURE AT 50°C NOT MORE THAN 110 KPA) (BUTYL ACETATES), 3, II

SECTION 15: Regulatory information

· **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

· **Hazard pictograms** GHS02, GHS07

· **Signal word** Danger

· **Hazard-determining components of labelling:**

hexamethylene -1,6-diisocyanate homopolymer

4-isocyanatosulphonyltoluene

hexamethylene-di-isocyanate

· **Hazard statements**

H225 Highly flammable liquid and vapour.

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

· **Precautionary statements**

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read carefully and follow all instructions.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P241 Use explosion-proof [electrical/ventilating/lighting] equipment.

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

(Contd. on page 10)

Safety data sheet
Complying with Israeli Safety at Work Regulations (Safety Data Sheet, Classification, Packaging, Labelling and Marking of Packaging) - 1998 and SI 2302

Printing date 31.05.2022

Version number 1

Revision: 31.05.2022

Trade name: HARDNER FOR P.U FOR JETAIRCRAFT MIL -PRF 85285

(Contd. of page 9)

P280 *Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.*

P303+P361+P353 *IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].*

P501 *Dispose of contents/container in accordance with local/regional/national/international regulations.*

- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category P5c FLAMMABLE LIQUIDS**
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 5,000 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 50,000 t
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3

· **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

None of the ingredients is listed.

· **REGULATION (EU) 2019/1148**

· **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**

None of the ingredients is listed.

· **Annex II - REPORTABLE EXPLOSIVES PRECURSORS**

None of the ingredients is listed.

· **Regulation (EC) No 273/2004 on drug precursors**

None of the ingredients is listed.

· **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**

None of the ingredients is listed.

· **National regulations:**

· **Technical instructions (air):**

Class	Share in %
I	0.6
NK	40.8

· **Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

(Contd. on page 11)

Safety data sheet
Complying with Israeli Safety at Work Regulations (Safety Data Sheet, Classification, Packaging, Labelling and Marking of Packaging) - 1998 and SI 2302

Printing date 31.05.2022

Version number 1

Revision: 31.05.2022

Trade name: HARDNER FOR P.U FOR JETAIRCRAFT MIL -PRF 85285

(Contd. of page 10)

· Relevant phrases

- H225 Highly flammable liquid and vapour.
- H226 Flammable liquid and vapour.
- H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.
- H411 Toxic to aquatic life with long lasting effects.

· Department issuing SDS: Tambour Ltd.- Health & Safety Department.**· Contact:**

Moti Adler

Phone: +972(4)985-3795

e-mail: motiA@tambour.co.il

· Abbreviations and acronyms:

- ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- Flam. Liq. 2: Flammable liquids – Category 2
- Flam. Liq. 3: Flammable liquids – Category 3
- Skin Irrit. 2: Skin corrosion/irritation – Category 2
- Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
- Resp. Sens. 1: Respiratory sensitisation – Category 1
- Skin Sens. 1: Skin sensitisation – Category 1
- STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
- Asp. Tox. 1: Aspiration hazard – Category 1
- Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
- Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

· * Data compared to the previous version altered.

IL