

Revision Date 23-Mar-2012

Revision Number 4

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Identifier

Product Description: n-Propyl isocyanate

Cat No. 131600000; 131600050; 131600250; 131601000; 131605000

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

Recommended Use Laboratory chemicals
Uses advised against No Information available

Details of the supplier of the safety data sheet

Company

Acros Organics BVBA

Janssen Pharmaceuticalaan 3a

2440 Geel, Belgium

E-mail address begel.sdsdesk@thermofisher.com

Emergency Telephone Number

For information in the US, call: 001-800-ACROS-01 For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99 Emergency Number, US: 001-201-796-7100

CHEMTREC Phone Number, US: 001-800-424-9300 CHEMTREC Phone Number, Europe: 001-703-527-3887

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture REGULATION (EC) No 1272/2008

Acute oral toxicity	Category 4
Acute Inhalation Toxicity - Vapors	Category 3
Skin Corrosion/irritation	Category 1 B
Serious Eye Damage/Eye Irritation	Category 1
Respiratory Sensitization	Category 1
Flammable liquids.	Category 2

Classification according to EU Directives 67/548/EEC or 1999/45/EC

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

Symbol(s) F - Highly flammable

T+ - Very toxic

R-phrase(s) R11 - Highly flammable

R14 - Reacts violently with water R22 - Harmful if swallowed R26 - Very toxic by inhalation

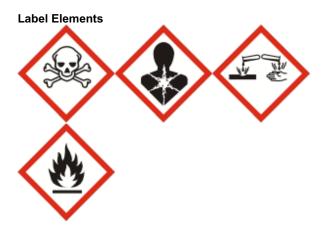
R34 - Causes burns

R42 - May cause sensitization by inhalation



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SECTION 2. HAZARDS IDENTIFICATION



Signal Word

Danger

Hazard Statements

H302 - Harmful if swallowed

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

H331 - Toxic if inhaled

H314 - Causes severe skin burns and eye damage

H225 - Highly flammable liquid and vapor

EUH014 - Reacts violently with water

Precautionary Statements - EU (§28, 1272/2008)

P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor/ physician

P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing

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

P402 + P404 - Store in a dry place. Store in a closed container

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking

P240 - Ground/Bond container and receiving equipment

Other Hazards

Lachrymator (substance which increases the flow of tears).

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS



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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS							
Component	EC-No.	Weight %	CAS-No	67/548/EEC Classification	CLP Classification - Regulation (EC) No 1272/2008	REACH No.	
n-Propyl isocyanate 110-78-1	EEC No. 203-803-6	99	110-78-1	F; R11 R14 Xn; R22 T+; R26 C; R34 R42;	Skin Corr. 1B (H314) Resp. Sens. 1 (H334) Acute Tox. 4 (H302) Acute Tox. 1 (H330) Flam Liq. 1 (H224) (EUH014)	-	

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

SECTION 4. FIRST AID MEASURES

Description of first aid measures

Eye Contact Immediate medical attention is required. Rinse immediately with plenty of water, also under the

eyelids, for at least 15 minutes.

Skin ContactWash off immediately with soap and plenty of water while removing all contaminated clothes

and shoes. Immediate medical attention is required.

Ingestion Do not induce vomiting. Call a physician immediately. Clean mouth with water.

Inhalation Remove from exposure, lie down. Move to fresh air. If breathing is difficult, give oxygen. If not

breathing, give artificial respiration. Immediate medical attention is required.

Notes to Physician Treat symptomatically

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media

Carbon dioxide (CO₂). Dry chemical. Do not use a solid water stream as it may scatter and spread fire.

Extinguishing media which must not be used for safety reasons alcohol foam.

Special hazards arising from the substance or mixture

Flammable. Contact with water liberates toxic gas. Water reactive. Vapors may travel to source of ignition and flash back. Produce flammable gases on contact with water.



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Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Environmental precautions

Prevent further leakage or spillage if safe to do so

Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Provide adequate ventilation.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Do not breathe dust. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing. Take precautionary measures against static discharges. Use only in area provided with appropriate exhaust ventilation. Use explosion-proof equipment. Use only non-sparking tools. Do not allow contact with water.

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep away from heat and sources of ignition. Corrosives area. Flammables area. Keep under nitrogen.

Specific End Uses

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits
Component
n-Propyl isocyanate

European Union	The United Kingdom	France	Belgium	Spain
	STEL: 0.07 mg/m ³ 15			
	min			
	TWA: 0.02 mg/m ³ 8 hr			

Component n-Propyl isocyanate

Austria	Denmark	Switzerland	Poland	Norway
		STEL: 0.02 mg/m ³ 15		
		Minuten		
		MAK: 0.02 mg/m ³ 8		
		Stunden		



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Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits

established by the region specific regulatory bodies.

Derived No Effect Level (DNEL)
Predicted No Effect Concentration

(PNEC)

No information available. No information available.

Exposure controls

Engineering Measures Ensure adequate ventilation, especially in confined areas Ensure that eyewash stations and

safety showers are close to the workstation location

Personal protective equipment

Eye Protection Hand Protection

Skin and body protection Respiratory Protection

Protective gloves
Wear appropriate protective gloves and clothing to prevent skin exposure

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits

are exceeded or if irritation or other symptoms are experienced

Hygiene Measures

Environmental exposure controls

Handle in accordance with good industrial hygiene and safety practice

No information available.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical StateLiquidAppearanceYellowodorpungent

odorpungentpHNo information available.

 Vapor Pressure
 69 mbar @ 20 °C

 Boiling Point/Range
 83 - 84°C / 181.4 - 183.2°F@ 760 mmHg

Melting Point/Range <-30°C / -22°F Flash Point -1°C / 30.2°F

Autoignition TemperatureNo information available.Water Solubilityreacts vigorously

Goggles

Specific Gravity 0.895
Molecular Formula C4 H7 N O
Molecular Weight 85.11

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Chemical Stability

Moisture sensitive. Contact with water liberates toxic gas.

Possibility of Hazardous Reactions

Hazardous Polymerization Hazardous polymerization may occur.

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Hazardous Reactions . No information available.

Conditions to Avoid

Burning produces obnoxious and toxic fumes, Keep away from open flames, hot surfaces and sources of ignition, Excess heat, Incompatible products, Exposure to moist air or water.

Incompatible Materials

Acids, Strong oxidizing agents, Strong bases, Alcohols, Amines.

Hazardous Decomposition Products

Nitrogen oxides (NOx). Carbon monoxide (CO). Carbon dioxide (CO₂). Hydrogen cyanide (hydrocyanic acid).

SECTION 11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Acute Toxicity

Product InformationNo acute toxicity information is available for this product

Component Information

Chronic Toxicity

Carcinogenicity There are no known carcinogenic chemicals in this product

Sensitization May cause sensitization by inhalation

Mutagenic EffectsNo information availableReproductive EffectsNo information available.Developmental EffectsNo information available.Target OrgansNo information available.

Other Adverse Effects The toxicological properties have not been fully investigated. See actual entry in RTECS for

complete information

Endocrine Disruptor Information None known

SECTION 12. ECOLOGICAL INFORMATION

Toxicity

Ecotoxicity effectsContains no substances known to be hazardous to the environment or that are not degradable

in waste water treatment plants



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Persistence and degradability

No information available

Bioaccumulative potential

No information available.

Mobility in soil

No information available.

Results of PBT and vPvB assessment

Other adverse effects

No information available

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from Residues / Unused

Products

Dispose of in accordance with local regulations

Contaminated Packaging Empty containers should be taken to local recyclers for disposal

SECTION 14. TRANSPORT INFORMATION

IMDG/IMO

UN-No UN2482 Hazard Class 6.1 Subsidiary Hazard Class 3 Packing Group I

Proper Shipping Name N-PROPYL ISOCYANATE

ADR

UN-No UN2482 Hazard Class 6.1 Subsidiary Hazard Class 3 Packing Group I

Proper Shipping Name n-PROPYL ISOCYANATE

<u>IATA</u>

UN-No UN2482 Hazard Class 6.1 Subsidiary Hazard Class 3 Packing Group I

Proper Shipping Name n-PROPYL ISOCYANATE, FORBIDDEN FOR IATA TRANSPORT



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SECTION 14. TRANSPORT INFORMATION

SECTION 15. REGULATORY INFORMATION

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

International Inventories

Component	EINECS ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
n-Propyl isocyanate	203-803-6 -		Χ	Χ	-	Χ	Χ	-		X

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

CHINA - China Inventory of Existing Chemical Substances

AICS - Inventory of Chemical Substances

KECL - Existing and Evaluated Chemical Substances

Chemical Safety Assessment

SECTION 16. OTHER INFORMATION

Full text of R-phrases referred to under sections 2 and 3

R11 - Highly flammable

R14 - Reacts violently with water

R22 - Harmful if swallowed

R26 - Very toxic by inhalation

R34 - Causes burns

R42 - May cause sensitization by inhalation

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Revision Summary

Reason for revision (M)SDS sections updated, 14.

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006



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SECTION 16. OTHER INFORMATION

Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet
