

Safety Data Sheet per OSHA HazCom 2012

1	Identification	
	Product identifier Product name: trans-4-n-Propyl-4'-(4-n-propylcyclohexyl)biphenyl	
	Stock number: H56414	
	CAS Number: 122957-72-6 Relevant identified uses of the substance or mixture and uses advised against.	
	Relevant identified uses of the substance or mixture and uses advised against. Identified use: SU24 Scientific research and development Details of the supplier of the safety data sheet	
	Manufacturer/Supplier: Alfa Aesar	
	Thermo Fisher Scientific Chemicals, Inc. 30 Bond Street	
	Ward Hill, MA 01835-8099 Tel: 800-343-0660 Fax: 800-32 <u>2</u> -4757	
	Email: tech@alfa.com www.alfa.com	
	Information Department: Health, Safety and Environmental Department Emergency telephone number: During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660. After normal business hours, call Carechem 24 at (866) 928-0	1789
2	Hazard(s) identification	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
-	Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS) The substance is not classified according to the Globally Harmonized System (GHS). Hazards not otherwise classified No information known.	
	Label elements GHS label elements Not applicable	
	Hazard pictograms Not applicable Signal word Not applicable Hazard statements Not applicable	
	WHMIS classification Not controlled Classification system	
	HMIS ratings (scale 0-4) (Hazardous Materials Identification System)	
	Health 1 FRE 1 FREACTIVITY 1 Physical Hazard = 1	
	Other hazards Results of PBT and vPvB assessment	
	PBT: Not applicable. vPvB: Not applicable.	
3	Composition/information on ingredients	
	Chemical characterization: Substances CAS# Description: 122957-72-6 trans-4-n-Propyl-4'-(4-n-propylcyclohexyl)biphenyl	
4	First-aid measures	
	Description of first aid measures After inhalation	
	Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice.	
	After skin contact Immediately wash with water and soap and rinse thoroughly. Seek immediate medical advice.	
	After eye contact Rinse opened eye for several minutes under running water. Then consult a doctor. After swallowing Seek medical treatment.	
	Information for doctor Most important symptoms and effects, both acute and delayed No further relevant information available. Indication of any immediate medical attention and special treatment needed No further relevant information available.	
5	Fire-fighting measures	
J	Extinguishing media	
	Suitable extinguishing agents Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Special hazards arising from the substance or mixture If this product is involved in a fire, the following can be released:	
	Carbon monoxide and carbon dioxide Advice for firefighters	
	Protective equipment: Wear self-contained respirator. Wear fully protective impervious suit.	
6	Accidental release measures	
-	Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away.	
	Ensure adequate ventilation Environmental precautions: Do not allow product to reach sewage system or any water course.	
	Methods and material for containment and cleaning up: Pick up mechanically. Prevention of secondary hazards: No special measures required. Reference to other sections	
	See Section 7 for information on safe handling See Section 8 for information on personal protection equipment.	(0)
		(Contd. on page 2)

Product name: trans-4-n-PropyI-4'-(4-n-propyIcyclohexyI)biphenyI

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See Section 13 for disposal information.

See Section 13 for disposal information.					
7 Handling and storage Handling					
Precautions for safe handling Keep container tightly sealed. Store in cool, dry place in tightly closed containers.					
Information about protection against Conditions for safe storage, including	explosions and fires: No information known. a any incompatibilities				
Storage	ns and receptacles: No special requirements.				
Information about storage in one com Further information about storage co	mon storage facility: Store away from oxidizing agents.				
Keep container tightly sealed. Store in cool, dry conditions in well sealed containers.					
Specific end use(s) No further relevant information available.					
8 Exposure controls/personal protection					
Additional information about design of technical systems: Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.					
Control parameters Components with limit values that require monitoring at the workplace: The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace. Additional information: No data					
Exposure controls					
Personal protective equipment General protective and hygienic measures					
The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Pergue all optimized externing immediately.					
Remove all soiled and contaminated clothing immediately. Wash hands before breaks and at the end of work. Maintain an erronomically apprainte working environment					
Maintain an ergonomically appropriate working environment. Breathing equipment: Use suitable respirator when high concentrations are present. Recommended filter device for short term use:					
Use a respirator with type N95 (USA) or PE (EN 143) cartridges as a backup to engineering controls. Risk assessment should be performed to determine if air- purifying respirators are appropriate. Only use equipment tested and approved under appropriate government standards. Protection of hands:					
Impervious gloves Check protective gloves prior to each use for their proper condition.					
The selection of suitable gloves not only Eye protection: Safety glasses Body protection: Protective work clothi	The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer. Eye protection: Safety glasses				
9 Physical and chemical properties					
Information on basic physical and chemical properties					
General Information Appearance:	On antelling				
Form: Color:	Crystalline White				
Odor: Odor threshold:	Not determined Not determined.				
pH-value:	Not applicable.				
Change in condition Melting point/Melting range:	Not determined				
Boiling point/Boiling range: _Sublimation_temperature / start:	Not determined Not determined				
Flammability (solid, gaseous) Ignition temperature:	Not determined. Not determined				
Decomposition temperature: Auto igniting:	Not determined Not determined.				
Danger of explosion: Explosion limits:	Not determined.				
Lower: Upper:	Not determined Not determined				
Vapor pressure:	Not determined Not determined				
Density: Relative density	Not determined.				
Vapor density Evaporation rate	Not applicable. Not applicable.				
Solubility in / Miscibility with _ Water:	Not determined				
Partition coefficient (n-octanol/water) Viscosity:					
dynamic: kinematic:	Not applicable. Not applicable.				
Other information	No further relevant information available.				
10 Stability and reactivity					
Reactivity No information known.	mandad stars a conditions				
Chemical stability Stable under recommended storage conditions. Thermal decomposition / conditions to be avoided: Decomposition will not occur if used and stored according to specifications.					

Thermal decomposition / conditions to be avoided: Decomposition will not occur if used and stored according to specifications. Possibility of hazardous reactions Reacts with strong oxidizing agents Conditions to avoid No further relevant information available. Incompatible materials: Oxidizing agents Hazardous decomposition products: Carbon monoxide and carbon dioxide

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Product name: trans-4-n-PropyI-4'-(4-n-propyIcyclohexyI)biphenyI

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11 Toxicological information	· · · · · · · · · · · · · · · · · · ·			
Information on toxicological effects				
Acute toxicity: No effects known. LD/LC50 values that are relevant for classification: No data				
Skin irritation or corrosion: May cause irritation				
Eye irritation or corrosion: Maý cause irritation Sensitization: No sensitizing effects known.				
Germ cell mutagenicity: No effects known. Carcinogenicity: No classification data on carcinogenic properties of this material i	is susiable from the EDA IADO NITO OSHA or AOGIH			
Reproductive toxicity: No effects known.	IS AVAIIADIE ITUITI LITE EFA, IANO, INTE, USITA ULAUGITA.			
Specific target organ system toxicity - repeated exposure: No effects known. Specific target organ system toxicity - single exposure: No effects known.				
Aspiration hazard: No effects known. Subacute to chronic toxicity: No effects known.				
Additional toxicological information: To the best of our knowledge the acute and	Additional toxicological information: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.			
12 Ecological information				
Toxicity				
Aquatic toxicity: No further relevant information available. Persistence and degradability No further relevant information available.				
Bioaccumulative potential No further relevant information available. Mobility in soil No further relevant information available.				
Additional ecological information: General notes:				
Do not allow undiluted product or large quantities to reach ground water, water cour	rse or sewage system.			
Avoid transfer into the environment. Results of PBT and vPvB assessment				
PBT: Not applicable. vPvB: Not applicable.				
Other adverse effects No further relevant information available.				
13 Disposal considerations				
Waste treatment methods Recommendation Consult state, local or national regulations to ensure proper disp				
Uncleaned packagings:	Josai.			
Recommendation: Disposal must be made according to official regulations.				
14 Transport information				
UN-Number DOT, ADN, IMDG, IATA No	ot applicable			
UN proper shipping name				
Transport hazard class(es)	ot applicable			
DOT. ADR. ADN. IMDG. IATA				
	ot applicable			
Packing group DOT, IMDG, IATA No	ot applicable			
	ot applicable.			
	ot applicable.			
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code No Transport/Additional information:	ot applicable.			
DOT				
Marine Pollutant (DOT): No	0			
UN "Model Regulation": -				
15 Regulatory information				
Safety, health and environmental regulations/legislation specific for the subst	tance or mixture			
GHS label elements Not applicable Hazard pictograms Not applicable				
Signal word Not applicable Hazard statements Not applicable				
National regulations				
This product is not listed in the U.S. Environmental Protection Agency Toxic Substate to research and development only. This product must be used by or directly under t	the supervision of a technically qualified individual as defined by TSCA. This			
product must not be used for commercial purposes or in formulations for commercia This product is not listed on the Canadian Domestic Substances List (DSL) or the C	al purposes. Consider Non-Domestic Substances List (NDSL)			
SARA Section 313 (specific toxic chemical listings) Substance is not listed. California Proposition 65				
Prop 65 - Chemicals known to cause cancer Substance is not listed.				
Prop 65 - Developmental toxicity Substance is not listed. Prop 65 - Developmental toxicity, female Substance is not listed				
Prop G5 - Developmental toxicity, male Substance is not listed. Information about limitation of use: For use only by technically qualified individuals.				
Other regulations, limitations and prohibitive regulations				
Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006. Substance is not listed. The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the				
market and use must be observed. Substance is not listed.				
Annex XIV of the REACH Regulations (requiring Authorisation for use) Substance is not listed.				

Annex XIV of the REACH Regulations (requiring Authorisation for use) Substance is not listed. Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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Product name: trans-4-n-Propyl-4'-(4-n-propylcyclohexyl)biphenyl

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16 Other information Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user. conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the use Department issuing SDS: Global Marketing Department Date of preparation / last revision 11/24/2015 / - Abbreviations and accoryms: ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) DOT: US Department of Transportation CAS: Chemical Abstracts Service (division of the American Chemical Society) HMIS: Hazardous Materials Identification System (USA) WHMIS: Workplace Hazardous Materials Information System (Canada) LC50: Lethal concentration, 50 percent LD50: Lethal concentration, 50 percent LD50: Lethal concentration of Governmental Industrial Hygienists (USA) OSHA: Occupational Safety and Health Administration (USA) NTP: National Toxicology Program (USA) IARC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USA)

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