



SAFETY DATA SHEET

1. Identification

Product identifier	Tgard 300
Other means of identification	None.
Recommended use	Thermal interface material.
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/Distributor information	
Manufacturer	Laird
Address	4707 Detroit Ave Cleveland, Ohio 44102 USA
Telephone number	+1-216-939-2300
Email	clv-customerservice@lairdtech.com
Manufacturer	Laird
Address	C3&C4 Building, HongTai Industry Park, NO.87 Tai Feng Road, TEDA, Tianjin, China
Telephone number	+86(0)22-66298160
Corporate Office	Laird PLC
Address	100 Pall Mall, London, SW1Y 5NQ United Kingdom
Telephone number	+44 (0)20 7468 4040
Emergency telephone number	Within USA and Canada: 1-800-424-9300 (Chemtrec). Other Countries: +1-703-527-3887.
Telephone hours	24 hours per day, 7 days per week. Collect calls accepted.

2. Hazard(s) identification

Physical hazards	Not classified.
Health hazards	Not classified.
OSHA defined hazards	Not classified.
Label elements	
Hazard symbol	None.
Signal word	None.
Hazard statement	The product is an article and therefore the classification requirements do not apply.
Precautionary statement	
Prevention	Observe good industrial hygiene practices.
Response	Wash hands after handling.
Storage	Store away from incompatible materials.
Disposal	Dispose of waste and residues in accordance with local authority requirements.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

The manufacturer lists no ingredients as hazardous to health according to OSHA 29 CFR 1910.1200.

Composition comments The ingredients in this product are fully encapsulated in silicone binder in its finished state, therefore no exposure to these materials is expected during normal use/handling of this product.

4. First-aid measures

Inhalation	Not relevant, due to the form of the product.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Not likely, due to the form of the product.
Most important symptoms/effects, acute and delayed	Under normal conditions of intended use, this product is not expected to be a health risk.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed. This material may generate formaldehyde at temperatures greater than 150°C (300°F).
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Use water spray to cool unopened containers.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	Contains one or more components that will burn if involved in a fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Stop the flow of material, if this is without risk. Pick up and arrange disposal. Recover and recycle, if practical. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	No special precautions are necessary beyond normal good hygiene practices. See Section 8 of the SDS for additional personal protection advice when handling this product. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store in original packaging. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	General ventilation normally adequate.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Not normally needed. If contact is likely, safety glasses with side shields are recommended.
Skin protection	
Hand protection	Not normally needed. For prolonged or repeated skin contact, use suitable protective gloves. Nitrile gloves are recommended.
Other	No skin protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid skin contact.
Respiratory protection	Respiratory protection not required.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties**Appearance**

Physical state Solid.

Form Pad.

Color Yellow

Odor Odorless

Odor threshold Not available.

pH Not applicable.

Melting point/freezing point Not available.

Initial boiling point and boiling range Not applicable.

Flash point > 400.0 °F (> 204.4 °C) Pensky-Martens Closed Cup

Evaporation rate Not applicable.

Flammability (solid, gas) Contains one or more components that will burn if involved in a fire.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Vapor pressure Not applicable.

Vapor density Not applicable.

Relative density Not available.

Solubility(ies)

Solubility (water) Insoluble in water.

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not applicable.

Other information

Density 2.71 g/cm³ (77 °F (25 °C))

Explosive properties Not explosive.

Oxidizing properties Not oxidizing.

Percent volatile < 1 % v/v

10. Stability and reactivity

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

Chemical stability Material is stable under normal conditions.

Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.

Conditions to avoid Contact with incompatible materials.

Incompatible materials Strong oxidizing agents. Strong acids. Strong alkalis.

Hazardous decomposition products Thermal decomposition or combustion may produce: Carbon oxides. Hydrocarbons. Fumes of metal oxides. Silicon oxide fumes. Hydrogen gas. Phenols. Cyanides. This material may generate formaldehyde at temperatures greater than 150°C (300°F).

11. Toxicological information**Information on likely routes of exposure**

Inhalation Due to the physical form of the product, the ingredients are not expected to present a hazard by inhalation.

Skin contact No adverse effects due to skin contact are expected.

Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	Not likely, due to the form of the product.
Symptoms related to the physical, chemical and toxicological characteristics	Under normal conditions of intended use, this product is not expected to be a health risk.
Information on toxicological effects	
Acute toxicity	Not expected to be acutely toxic.
Skin corrosion/irritation	No adverse effects due to skin contact are expected.
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.
Respiratory or skin sensitization	
Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	Not classifiable as to carcinogenicity to humans.
IARC Monographs. Overall Evaluation of Carcinogenicity	
Not listed.	
NTP Report on Carcinogens	
Not listed.	
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)	
Not listed.	

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not relevant, due to the form of the product.

12. Ecological information

Ecotoxicity Not relevant, due to the form of the product in its manufactured and shipped state.

Persistence and degradability The product contains inorganic compounds which are not biodegradable.

Bioaccumulative potential No data available on bioaccumulation.

Mobility in soil The product is insoluble in water.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

US federal regulations This product is an article pursuant to 29 CFR 1910.1200 and, as such, is not subject to the OSHA Hazard Communication Standard.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Toxic Substances Control Act (TSCA)

This product is considered an article and is not subject to TSCA requirements.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations

US. Massachusetts RTK - Substance List

Not regulated.

US. New Jersey Worker and Community Right-to-Know Act

Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law

Not listed.

US. Rhode Island RTK

Not regulated.

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No

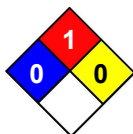
Country(s) or region	Inventory name	On inventory (yes/no)*
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	04-May-2018
Revision date	08-January-2020
Version #	02
NFPA ratings	



References	EPA: AQUIRE database IARC Monographs. Overall Evaluation of Carcinogenicity NLM: Hazardous Substances Data Base
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Disclaimer	Laird cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.
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