



Section 1 - Identification

- 1a. Product Identifier used on Label: **Coated Steel Sheet**
1b. Use/Description: **Coated Steel Sheet for Thin-gauge Framing Products**
1c. Products: **Cold-Formed Steel Framing components and accessories for nonstructural (drywall), and Structural (curtain wall and load bearing systems)**
1e. Synonyms: **Hot Band, Cold Rolled, P&O, Galvanized**
1f. Company Identification and Emergency Contact Information: **Ram Sales, LLC dba Ram Steel Framing**

Corporate Office:

3330 NW 48 Street Phone: (305) 634-0012
Miami, Florida 33134 Fax: (305) 634-6477

<http://www.ramsteelframing.com/>

Manufacturing Locations:

Miami, FL Sanford, FL

Section 2 - Hazards Identification

2a. **EMERGENCY OVERVIEW** Coated Sheet Steel products are not hazardous per OSHA GHS 29 CFR 1910, 1915, 1926. However, individual end user processes, (such as welding, sawing, brazing, grinding, abrasive blasting, and machining) may result in the formation of fumes, dust (combustible or otherwise), and/or particulate that may present the following hazards:

OSHA Hazards:

Carcinogen
Skin Sensitizer
Target Organ Effect – Lungs

GHS Classification:

Carcinogenicity (Category 2)
Skin Sensitization (Category 1)
Specific Target Organ Toxicity-Repeated Exposure (Category 1)

Pictogram(s):



Signal Word:

Danger

Hazard Statement(s)

- H317: Dust/fumes may cause an allergic skin reaction.
H351: Dust/fumes suspected of causing cancer via inhalation.
H372: Inhalation of dust/fumes causes damage to respiratory tract through prolonged or repeated exposure

Precautionary Statement(s)

- P202: Do not handle until all safety precautions have been read and understood.
P261: Avoid breathing dust/fumes.
P281: Use personal protective equipment as required.
P308+P313: If exposed or concerned: Get medical advice/attention.

Potential Health Effects

- Eye Contact -** Dusts or particulates may cause mechanical irritation including pain, tearing, and redness. Scratching of the cornea can occur if eye is rubbed. Fumes may be irritating. Contact with the heated material may cause thermal burns.
- Skin Contact -** Dusts or particulates may cause mechanical irritation due to abrasion. Coated steel may cause skin irritation in sensitive individuals (see Section 16 for additional information.) Some components in this product are capable of causing an allergic reaction, possibly resulting in burning, itching and skin eruptions. Contact with heated material may cause thermal burns.
- Inhalation -** Dusts may cause irritation of the nose, throat, and lungs. Excessive inhalation of metallic fumes and dusts may result in metal fume fever, an influenza-like illness. It is characterized by a sweet or metallic taste in the mouth, accompanied by dryness and irritation of the throat, cough, shortness of breath, pulmonary edema, general malaise, weakness, fatigue, muscle and joint pains, blurred vision, fever and chills. Typical symptoms last from 12 to 48 hours.
- Ingestion -** Not expected to be acutely toxic via ingestion based on the physical and chemical properties of the product. Swallowing of excessive amounts of the dust may cause irritation, nausea, and diarrhea.
- Potential Fire and Explosion Hazards -** Under normal conditions, steel products do not present fire or explosion hazards, and dust generated by handling steel products is oxidized and not combustible. Processing of steel product by some individual customers may produce potentially combustible dust that may represent a fire or explosion hazard.



Section 3 - Composition/Information on Ingredients

Components	CAS No.	% Weight	Exposure Limits			
			ACGIH TLV (mg/m3)		OSHA PEL (mg/m3)	
Base Metal:						
Iron (Fe)	7439-89-6	Balance	5	Oxide Dust . Fume	10	Oxide Dust / Fume
Alloying Elements:						
Aluminum (Al)	7429-90-5	0-0.4	10	Dust	15	Dust
			5	Fume	5	Respirable fraction
Antimony (Sb)	7440-36-0	<0.9	0.5	As Antimony	0.5	As Antimony
Arsenic (As)	7440-38-2	<0.09	0.01	As Arsenic (A1 Carinogen)	0.01	As Aresenic
Beryllium (Be)	7440-41-7	<0.09	0.002	As Beryllium (A1 Carcinogen)	0.002	As Beryllium
			0.01	As Beryllium (STEL)	0.005	As Beryllium (Ceiling)
Boron (B)	7440-42-8	<0.9	10	Oxide Dust	15	Oxide Dust
Cadmium (Cd)	7440-43-9	<0.09	0.01	As Cadmium (A2 Carcinogen)	0.005	As Cadmium
			0.002	Respirable fraction	0.0025	As Cadmium (Action Level)
Calcium (Ca)	1305-78-8	<0.9	2	Oxide Dust	5	Oxide Dust
Carbon ©	7440-44-0	0.04-1.0		Not Established		Not Established
Chromium (Cr)	7440-47-3	0.01-1.5	0.5	Metal	1	Metal
Cobalt (Co)	7440-48-4	<0.09	0.02	AS Cobalt (A3 Carcinogen)	0.1	Metal/Dust/Fume
Copper (Cu)	7440-50-8	<0.9	1	Dust	1	Dust
			0.2	Fume	0.1	Fume
Lead (Pb)	7439-92-1	0.0-0.04	0.05	Dust/Fume (A3 Carcinogen)	0.05	Dust/Fume
Magnesium (Mg)	7439-95-4	<0.9		Not Established		Not Established
Magnanese (Mn)	7439-96-5	0.1-3.0	0.2	Elemental Mn and Inorganic Compounds	5	Fume (Ceiling)
Mollybdenum	7439-98-7	<0.9	10	Insoluble Compounds	15	Insoluble Compounds
Niobium (Nb)	7440-03-1	<0.9		Not Established		
Nickel (Ni)	7440-02-0	0.01-1.5	1.5	Metal	1	Metal and Insoluble Compounds
Nitrogen (N)	7727-37-9	<0.9		Simple Asphyxiant		Simple Asphyxiant
Phosphorus (P)	7723-14-0	<0.9	0.1	Phosphorus	0.1	Phosphorus
Selenium (Se)	7782-49-2	<0.9	0.2	Selenium	0.2	Selenium
Silicon (Si)	7440-21-3	0.0-3.0	10	Dust	15	Dust
Sulfur (S)	7446-09-5	<0.9	5.2	Sulfur Dioxide	13	Sulfur Dioxide Inorganic Compounds
			13	Sulfur Dioxide (STEL)		Not Established Not Established
Tin (Sn)	7440-31-5	<0.9	2	Metal,Oxide and Inorganic Compounds	2	Inorganic Compounds
Titanium (Ti)	7440-32-6	<0.9		Not Established		Not Established



Tungsten (W)	7440-33-7	<0.9	5	Insoluble Compounds as W		Not Established
			10	Insoluble Compounds as W (STEL)		
Vanadium (V)	7440-62-2	<0.9	0.05	Oxide Dust / Fume	0.5	Oxide Dust (Ceiling)
					0.1	Oxide Fume (Ceiling)
Zinc (Zn)	7440-66-6	0.0-0.01	10	Oxide Dust		
			5	Oxide Fume	5	Oxide Fume
			10	Oxide Fume (STEL)	10	Oxide Dust
Coatings and Finishing Treatments:						
Hydrochloric Acid (HCl)	7647-01-0	<3				
Petroleum, Natural or Synthetic oils	Mixture	<0.1	5	Mist	5	Mist
Anhydrous Potassium Hydroxide	1310-58-3	<0.01	2	Ceiling	2	Ceiling
Glycine,nn-1,2-ethanediybis	60-00-4	<0.01				
Polyalkylene glycol	Mixture	<0.01				
Sodium nitrite	7632-00-0	<0.01				
			10	Oxide Dust		
Zinc (galvanized)	7440-66-6	0.4-10	5	Oxide Fume	5	Oxide Fume
			10	Oxide Fume (STEL)	10	Oxide Dust

NOTE: No permissible exposure limits (PEL) or threshold limit values (TLV) exist for steel over all. The above listing is a summary of elements used in normal Nucor Steel Products.

Section 4 - First-aid Measures

4a. Description of necessary measures:

Eye Contact - In case of overexposure to dusts or fumes, immediately flush eyes with plenty of water for at least 15 minutes occasionally lifting the eye lids. Get medical attention if irritation persists. Thermal burns should be treated as medical emergencies.

Skin Contact - In case of overexposure to dusts or particulates, wash with soap and plenty of water. Get medical attention if irritation develops or persists. If thermal burn occurs, flush area with cold water and get immediate medical attention.

Inhalation - In case of overexposure to dusts or fumes, remove to fresh air. Get immediate medical attention if symptoms described in this MSDS develop.

Ingestion - Not considered an ingestion hazard. However, if excessive amounts of dust or particulates are swallowed, treat symptomatically and supportively. Get medical attention.

Notes to Physician - Inhalation of metal fume or metal oxides may produce an acute febrile state, with cough, chills, weakness, and general malaise, nausea, vomiting, muscle cramps, and remarkable leukocytosis. Treatment is symptomatic, and condition is self-limited in 24-48 hours. Chronic exposure to dusts may result in pneumoconiosis of mixed type.

4b. Most important symptoms/effects, acute and delayed (chronic):

Eye - Coated Steel Sheet as sold/shipped is not likely to present an acute or chronic health effect.

Skin - Coated Steel Sheet as sold/shipped is not likely to present an acute or chronic health effect.

Inhalation - Coated Steel Sheet as sold/shipped is not likely to present an acute or chronic health effect.

Ingestion - Coated Steel Sheet as sold/shipped is not likely to present an acute or chronic health effect.

Further processing (welding, grinding, burning, etc.) individual components may illicit an acute or chronic health effect. Refer to Section 11 - Toxicological Information.

4c. Immediate Medical Attention and Special Treatment: None Known



Section 5 - Fire-fighting Measures

- 5a. **Suitable (and unsuitable) Extinguishing Media** - Not Applicable for Coated Steel Sheet as sold/shipped. Use extinguishers appropriate for surrounding materials.
- 5b. **Flammable Limits (% volume in air)** - Not applicable
- 5c. **Autoignition Temperature** - Not applicable
- 5d. **Specific Hazards arising from the chemical** - Not Applicable for Coated Steel Sheet as sold/shipped. When burned, toxic smoke, fume and vapor may be emitted.
- 5e. **Special protective equipment and precautions for fire-fighters** - Do not use water on molten metal. Firefighters should not enter confined spaces without wearing NIOSH/MSHA approved positive pressure breathing apparatus (SCBA) with full face mask and full protective equipment
- 5f. **Unusual Fire or Explosion Hazards** - Steel products do not present fire or explosion hazards under normal conditions. Fine metal particles such as produced in grinding or sawing can burn. High concentrations of metallic fines in the air may present an explosion hazard.

Section 6 - Accidental Release Measures

- 6a. **Precautions if Material is Spilled or Released** - Emergency response is unlikely unless in the form of dust. Avoid inhalation, eye, or skin contact of dusts by using appropriate precautions outlined in this MSDS (see section 8). Fine turnings and small chips should be swept or vacuumed and placed into appropriate disposable containers. Keep fine dust or powder away from sources of ignition. Scrap should be reclaimed for recycling. Prevent materials from entering drains, sewers, or waterways.
- 6b. **Environmental Precautions** - Some grades of steel may contain reportable quantities of alloying elements. See Section 15 for additional information.
- 6c. **Waste Disposal Methods** - Dispose used or unused product in accordance with applicable Federal, State, and Local regulations.

Section 7 - Handling and Storage

- 7a. **Storage Temperatures** - Stable under normal temperatures and pressures.
- 7b. **Precautions to be taken in Handling and Storing** - Store away from strong oxidizers. Dusts or powders may form explosive mixtures with air. Avoid breathing dusts or fumes.

Section 8 - Exposure Controls / Personal Protection

Operations with potential for generating high concentrations of airborne particulates or fumes should be evaluated and controlled as necessary.

- Eye Protection** - Use safety glasses. Dust resistant safety goggles are recommended under circumstances where particles could cause mechanical injury such as grinding or cutting. Face shield should be used when welding or cutting.
- Skin** - Appropriate protective gloves should be worn as necessary. Good personal hygiene practices should be followed including cleansing exposed skin several times daily with soap and water, and laundering or dry cleaning soiled work clothing.
- Respiratory Protection** - NIOSH/MSHA approved dust/fume/mist respirator should be used to avoid excessive exposure. See Section 3 for component material information exposure limits. If such concentrations are sufficiently high that this respirator is inadequate, or high enough to cause oxygen deficiency, use a positive pressure self-contained breathing apparatus (SCBA). Follow all applicable respirator use, fitting, and training standards and regulations.
- Ventilation** - Provide general and/or local exhaust ventilation to control airborne levels of dust or fumes below exposure limits.
- Exposure Guidelines** - No permissible exposure limits (PEL) or threshold limit values (TLV) exist for steel. See Section 3 for component materials. Various grades of steel will contain different combinations of these elements. Trace elements may also be present in minute amounts.

Section 9 - Physical and Chemical Properties

- | | | |
|---|--|--|
| 9a. Appearance - Metallic Gray | 9g. Flash Point - Not Applicable | 9m. Density @ 15.6 °c - 7.85 |
| 9b. Odor - Odorless | 9h. Evaporation Rate - Not Applicable | 9n. Solubility - Insoluble |
| 9c. Boiling Point - Not applicable | 9i. Flammability (solid, gas) - Non-flammable | 9o. Partition Coef. n-octanol/H₂O - Not Determinable |
| 9d. Melting Point - Approx. 2800 °F / 1510 °c | 9j. Flammability or Explosive Limits - Not Applicable | 9p. Auto-ignition Temperature - Not Applicable |
| 9e. pH - Not Applicable | 9k. Vapor Pressure - Not Applicable | 9q. Decomposition Temperature - Not Determinable |
| 9f. Initial Boiling Point/Range - Not Determinable | 9l. Vapor Density (Air = 1) - Not Applicable | 9r. Viscosity - Not Applicable |

Section 10 - Stability and Reactivity

- 10a. **Stability** - Stable
- 10b. **Conditions to Avoid** - Steel at temperatures above the melting point may liberate fumes containing oxides of iron and alloying elements. Avoid generation of airborne fume.
- 10c. **Hazardous Polymerization** - Will not occur.
- 10d. **Incompatibility (Materials to Avoid)** - Reacts with strong acids to form hydrogen gas. Do not store near strong oxidizers.
- 10e. **Hazardous Decomposition Products** - Metallic fumes may be produced during welding, burning, grinding, and possibly machining or any situation with the potential for thermal decomposition. Refer to ANSI Z49.1



Section 11 - Toxicological Information

11. The primary component of this product is iron. Long-term exposure to iron dusts or fumes can result in a condition called siderosis which is considered to be a benign pneumoconiosis. Symptoms may include chronic bronchitis, emphysema, and shortness of breath. This product may contain small amounts of nickel. Prolonged and repeated contact with nickel may cause sensitization dermatitis. Inhalation of nickel compounds has caused lung damage as well as sinus, nasal and lung cancer in laboratory animals. Nickel is a listed breath upon exertion. Penetration of iron particles in the skin or eye may cause an exogenous or ocular siderosis which may be characterized by a red-brown pigmentation of the affected area. Ingestion overexposures to iron may affect the gastrointestinal, nervous, and hematopoietic system and the liver. Iron and steel founding, but not iron or iron oxide, has been listed as potentially carcinogenic by IARC. When this product is welded, fumes are generated. Welding fumes may be different in composition from the original welding product, with the chief component being ordinary oxides of the metal being welded. Chronic health effects (including cancer) have been associated with the fumes and dusts of individual component metals (see above), and welding fumes as a general category have been listed by IARC as a carcinogen (Group 2B). There is also limited evidence that welding fumes may cause adverse reproductive and fetal effects. Evidence is stronger where welding materials contain known reproductive toxins, e.g., lead which may be present in the coating material of this product. Breathing fumes or dusts of this product may result in metal fume fever, which is an illness produced by inhaling metal oxides. These oxides are produced by heating various metals including cadmium, zinc, magnesium, copper, antimony, nickel, cobalt, manganese, tin, lead, beryllium, silver, chromium, aluminum, selenium, iron, and arsenic. The most common agents involved are zinc and copper. This product may contain small amounts of manganese. Prolonged exposure to manganese dusts or fumes is associated with "manganism", a Parkinson-like syndrome characterized by a variety of neurological symptoms including muscle spasms, gait disturbances, tremors, and psychoses. This product may contain small amounts of cadmium. Primary target organs for cadmium overexposure are the lung and the kidney. Because of its cumulative nature, chronic cadmium poisoning can cause serious disease which takes many years to develop and may continue to progress despite cessation of exposure. Progression of the disease may not reflect current exposure conditions. It is also capable of causing a painful osteomalacia called "Itai-Itai" in postmenopausal women, and has caused developmental effects and/or reproductive effects in male and female animals. Cadmium is a listed carcinogen by NTP, OSHA, and IARC (Group 1). This product may contain small amounts of chromium. Prolonged and repeated overexposure to chromium dusts or fumes may cause skin ulcers, nasal irritation and ulceration, kidney damage and cancer of the respiratory system. Chromium is skin sensitizer. Cancer is generally attributed to the hexavalent (+6) form of chromium which is listed as a carcinogen by NTP and IARC (Group 1).

This product may contain small amounts of nickel. Prolonged and repeated contact with nickel may cause sensitization dermatitis. Inhalation of nickel compounds has caused lung damage as well as sinus, nasal and lung cancer in laboratory animals. Nickel is a listed carcinogen by NTP and IARC (Group 1). This product may contain small amounts of vanadium. Adverse effects from dermal, inhalation or parental exposure to various vanadium compounds have been reported. The major target for vanadium pentoxide toxicity is the respiratory tract. Fumes or dust can cause severe eye and respiratory irritation, and systemic effects. Chronic bronchitis, green tongue, conjunctivitis, pharyngitis, rhinitis, rales, chronic productive cough, and tightness of the chest have been reported following overexposure. Allergic reactions resulting from skin and inhalation exposures have also been reported. A statistical association between vanadium air levels and lung cancer has been suggested, but vanadium currently is not regarded as a human carcinogen. This product may contain small amounts of lead. Lead can accumulate in the body. Consequently, exposure to fumes or dust may produce signs of polyneuritis, diminished vision and peripheral neuropathy, such as tingling and loss of feeling in fingers, arms and legs. Lead is a known reproductive and developmental toxin. It is also associated with central nervous system disorders, anemia, kidney dysfunction and neurobehavioral abnormalities. The brain is a major target organ for lead exposure. Elemental lead is listed as an IARC 2B carcinogen. The product may contain small amounts of copper. Copper dust and fume can irritate the eyes, nose and throat causing coughing, wheezing, nosebleeds, ulcers and metal fume fever. Other effects from repeated inhalation of copper fume include a metallic or sweet taste, and discoloration of skin, teeth or hair. Copper also may cause an allergic skin reaction. Overexposure to copper can affect the liver.

Section 12 - Ecological Information

12a. **Aquatic & Terrestrial Ecotoxicity** - No Data Available for Coated Steel Sheet

Individual components of the coated sheet steel when processed have been found to be toxic to the environment:

Metal Dust - May migrate into the environment and be ingested by wildlife per the following data:

Iron Oxide - LC₅₀: >1000 mg/L, 96 h-LC₀ ≥ 50,000 mg/L Fish: 48 h-EC50 > 100 mg/L

Test substance: Bayferrox 130 red (95 - 97% Fe₂O₃ < 4% SiO₂, Al₂O₃)

Hexavalent Chrome - EU RAR listed as category 1, found acute EC50 and LD50 to algae and invertebrates < 1 mg.

Nickel Oxide - IUCLID found LC50 in fish, invertebrates and algae > 100 mg/l.

12b. **Biodegradability, Oxidation, Hydrolysis** - No Data Available for Coated Steel Sheet

12c. **Bioaccumulative Potential** - No Data Available for Coated Steel Sheet

Octanol-water partition coefficient (Kow) - No Data Available for Coated Steel Sheet

Bioconcentration factor (BCF) - No Data Available for Coated Sheet Steel

12d. **Potential to move from the soil to the groundwater** - No data available for Coated Steel Sheet

Individual components of the product (examples listed in 12a.) have been found to be absorbed by plants from soil.

12e. **Other adverse effects** - None Known

Section 13 - Disposal Considerations

13a. Steel scrap recycling is widely available and should be recycled whenever possible.

13b. Recovery and reuse, rather than disposal, should be the ultimate goal of handling efforts. Dispose in accordance with federal, state, and local health and environmental regulations. Prevent materials from entering drains, sewers, or waterways.

Section 14 - Transport Information

14a. **DOT Proper Shipping Name** - Not regulated

14b. **DOT Hazard Classification** - Not regulated

14c. **UN/NA Number** - Not applicable

14d. **DOT Packing Group** - Not applicable

14e. **Labeling Requirements** - Not applicable

14f. **Placards** - Not applicable

14g. **DOT Hazardous Substance** - Not applicable

14h. **DOT Marine Pollutant** - Not applicable



Section 15 - Regulatory Information

15a. This product is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200. However, dusts and fumes from this product may be hazardous.

15b. CALIFORNIA PROPOSITION 65

This product contains chemicals (antimony [oxide], arsenic, beryllium, chromium [hexavalent], cobalt, cadmium, lead, nickel) known to the State of California to cause cancer and chemicals (cadmium, lead) known to the State of California to cause birth defects or other reproductive harm.

15c. Regulatory Lists

Some components of this product may be specifically listed by individual states; other product-specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements, you should contact the appropriate agency in your state.

15d. **Toxic Substances Control Act (TSCA)** - Components of this product are listed on the TSCA Inventory.

15e. Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)

Steel is not reportable, however, it contains hazardous substances that may be reportable if released in pieces with diameters less than or equal to 0.004 inches (RQ marked with a “*”).

<u>Chemical Name</u>	<u>Reportable Quantity (in lb)</u>
Antimony	5000 *
Arsenic	1 *
Beryllium	10*
Cadmium	10*
Chromium	5000 *
Copper	5000 *
Lead	10 *
Nickel	100 *
Phosphorus	1
Selenium	100*
Zinc	1000*

15f. Superfund Amendments and Reauthorization Act of 1986 (SARA), Title III

SECTION 311/312 HAZARD CATEGORIES: Immediate Health Effect, Delayed Health Effect This product contains the following EPCRA Section 313 chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right – To – Know Act of 1986 (40 CFR 372):

SECTION 313 REPORTABLE INGREDIENTS:

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Concentration (% by weight)</u>	<u>Reportable</u>
Aluminum	7429-90-5	0.0-0.01 Some grades upto 0.4%	No – Less than 1%
Antimony	7440-36-0	<0.9	No – Less than 1%
Arsenic	7440-38-2	<0.09	No – Less than 0.1%
Beryllium	7440-43-9	<0.09	No – Less than 0.1%
Cadmium	7440-43-9	<0.09	No – Less than 0.1%
Chromium	7440-47-3	0.01-1.0 Some grades upto 1.5%	Yes – Greater than 0.1%
Cobalt	7440-48-4	<0.09	No – Less than 0.1%
Copper	7440-50-8	<0.9	No – Less than 1%
Lead	7439-92-1	0.0-0.04	Yes
Manganese	7439-96-5	0.2-2 Some grades up to 3.0%	Yes – Greater than 1%
Nickel	7440-02-0	0.01-0.1Some grades up to 1.5%	Yes – Greater than 0.1%
Phosphorus	7723-14-0	<0.9	No – Less than 1%
Selenium	7782-49-2	<0.9	No – Less than 1%
Vanadium	7440-62-2	<0.9	No – Less than 1%
Zinc	7440-66-6	<0.9	No – Less than 1%

Concentrations based on analytical data and process knowledge of typical products distributed by the facility.

Section 16 - Other Information

16a. This product may be coated with a variety of materials, including oils, paints, galvanization, etc. that are not included in this SDS. During welding precautions should be taken for airborne contaminants that may originate from components of the welding rod. Arc or spark generated when welding or burning could be a source of ignition or combustible and flammable materials. The information in this Safety Data Sheet (SDS) was obtained from sources which we believe are reliable; however, the information is provided without any representation of warranty, expressed or implied, regarding the accuracy or correctness. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with the handling, storage, use, or disposal of this product.